2006 Louisiana Health Report Card

Submitted to the Governor and Louisiana Legislature 2007

As required by R.S. 40:1300.71

Kathleen B. Blanco
Governor

Frederick P. Cerise, MD, MPH
Secretary
Department of Health and Hospitals

2006 LOUISIANA HEALTH REPORT CARD

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Kathleen Babineaux Blanco
Governor

Frederick P. Cerise, MD, MPH
Secretary, Department of Health and Hospitals

Submitted to the Governor and the Louisiana Legislature
June, 2007

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This report is the result of contributions from many individuals and programs. The Louisiana State Center for Health Statistics would like to acknowledge their efforts and extend thanks to all who assisted in the publication of this document.

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STATE OF LOUISIANA
DEPARTMENT OF HEALTH AND HOSPITALS

Kathleen Babineaux Blanco
GOVERNOR

Frederick P. Cerise, M.D., M.P.H.
SECRETARY

April 10, 2007

Dear Governor Blanco and Legislators:

The Department of Health and Hospitals, Office of Public Health (DHH/OPH) is pleased to present this *2006 Louisiana Health Report Card* as required by state law. This publication is the result of a highly cooperative effort between state, regional, and parish-level sources that collect data, link current health assessments with prevention initiatives, present comparisons of morbidity and mortality, and make recommendations to improve individual and community health status. Charts, tables, narrative summaries and statistical descriptions are provided.

The need for continuous evaluation, planning, and promotion of health policy and services is greater than ever, as we work to continue rebuilding this State's healthcare systems. I hope that this document will serve as a tool to assist with our efforts to rebuild and strengthen the public health and healthcare infrastructure of the state.

The *2006 Louisiana Health Report Card* is available in hard copy from the DHH/OPH Center for Health Statistics (CHS) and may also be accessed in electronic format through the CHS website at www.oph.dhh.louisiana.gov/ . We welcome feedback from you and your respective communities and hope this report continues to prompt discussion and meet informational needs as we all work together to improve health status in Louisiana.

Sincerely,

Frederick P. Cerise, M.D., M.P.H.
Secretary

FPC:

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Executive Summary

Monitoring the health status of a population is an essential step in evaluating the effectiveness of various health programs and in developing programmatic policy for the future. Monitoring the status of a population relative to certain health indicators over a number of years is an especially effective tool for health planning. Act 985 of the 1995 Louisiana Regular Legislative Session, enacting R.S. 40:1300.71, requires that the Louisiana Department of Health and Hospitals annually prepare a report card relative to health and health-related issues.

The following pages comprise the ninth annual Health Report Card. This document reports on the overall state of health in Louisiana, addressing the following issues:

- Health findings of major diseases
- Teenage pregnancy and birth rates
- Rates of low birthweight babies
- Suicide rates
- Sexually transmitted diseases
- Incidence of drug addictions
- Violent deaths
- Morbidity rates
- Health assessment programs and results
- Results of preventive health outreach programs
- Assessment of the state health care delivery system

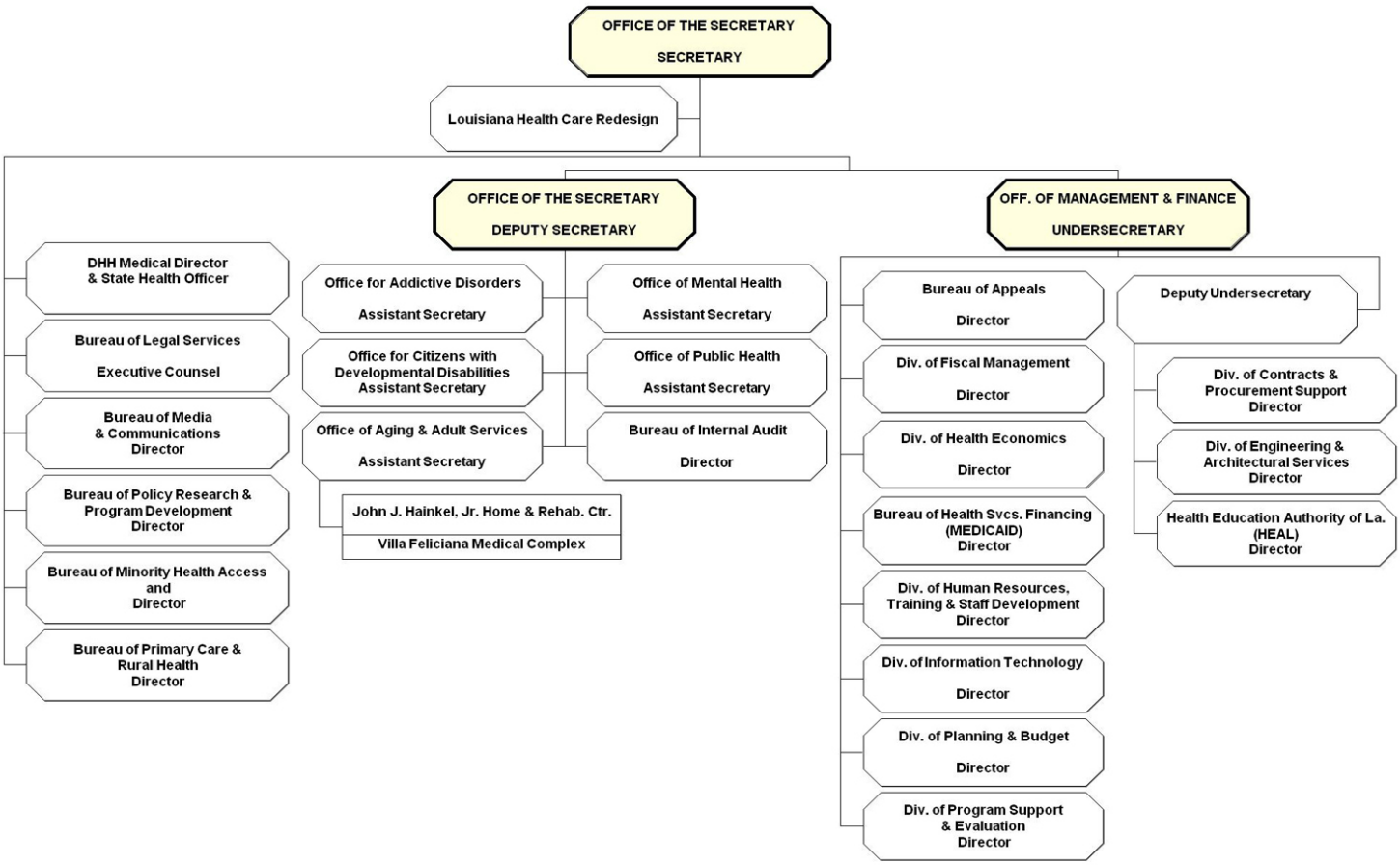
The report card is divided into six major sections. The first three sections are “Population and Vital Statistics,” “Morbidity,” and “Health Assessment Programs.” These contain data relative to the health status indicators listed above for the state as a whole and for the parishes within the state. There are comparisons with prior years and with other states. In some cases, variations among different segments of the state’s population are reported.

The last three sections address current health care initiatives, the state’s health care delivery system, and future measures for health status improvement. These sections are: “Preventive Health Outreach and Service Programs,” “Louisiana State Health Care System,” and “Recommendations for Improving Health Status.”

This report is the result of efforts by individuals throughout the Department of Health and Hospitals. To contact the individual programs that contributed to this document, please refer to the listing of Program Office telephone numbers and web addresses in the “Contact Information” table in the back of the book. Many of the programs have reports available through their individual program websites.

Contents

LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS
December 2006




7
8
6
2
9
5
1
4
3
Claiborne
Union
Morehouse
W. Carroll
E. Carroll
Bossier
Webster
Lincoln
Ouachita
Caddo
Richland
Madison
Bienville
Jackson
Red River
DeSoto
Caldwell
Tensas
Winn
Franklin
Natchitoches
LaSalle
Sabine
Grant
Catahoula
Concordia
E. Feliciana
Ascension
Rapides
Vernon
Avoyelles
W. Feliciana
St. Helena
Washington
Tangipahoa
Pointe Coupee
West B.R.
Living-ston
St. Tammany
St. John the Baptist
Beau-regard
Allen
Evan-geline
Landry
East B.R.
Jeffer-son Davis
Acadia
St. Iberville
Calcasieu
Lafay-ette
St. Martin
Orleans
Cameron
Vermilion
Iberia
Assump-tion
St. Charles
St. Bernard
St. Mary
Lafourche
Plaquemines
Terrebone
St. James
Jefferson

I. POPULATION AND VITAL STATISTICS

A. POPULATION

This chapter on Louisiana's population presents information from Bridged-Race Population Estimate 2004 by the U.S. Bureau of the Census and National Center for Health Statistics (NCHS). According to these estimates, Louisiana's resident population was 4,515,770 as of July 1, 2004. The state's subgroup estimate counts for 2004 are given in the following table:

Louisiana Population, 2004 *

Gender	Race	Age Group (Years) <5	5-19	20-44	45-64	65-84	85 & +	All*
Male	White	92,164	288,508	516,253	371,757	153,325	13,208	1,435,215
	Black	69,875	202,363	252,369	138,877	42,329	4,305	710,118
	Other	3,310	11,312	20,788	10,307	2,692	241	48,650
Female	White	87,760	273,130	505,881	380,168	200,728	32,132	1,479,799
	Black	67,678	196,855	286,369	167,891	65,122	10,107	794,022
	Other	3,204	10,604	19,668	11,035	3,127	328	47,966
All*	Total	323,991	982,772	1,601,328	1,080,035	467,323	60,321	4,515,770

Source: * Bridged-Race Population Estimate 2004, U.S. Census Bureau & NCHS (Released in September 2005)

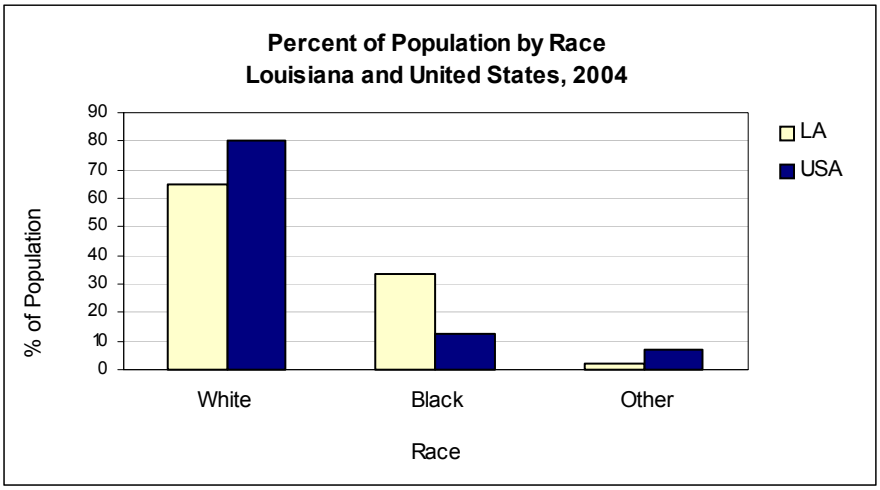
A comparison of the year 2004 national and state population estimates shows that Louisiana and the United States have very similar age distributions.

Percent of Total Population by Age Group
Louisiana and United States, 2004

	Age Group (Years) <5	5-19	20-44	45-64	65-84	85 & +	All Ages
Louisiana	7.2	22.1	35.6	23.4	10.3	1.4	100.0
United States	6.8	20.9	35.8	24.1	10.7	1.7	100.0

Source: Calculation based on Bridged-Race Population Estimate 2004, U.S. Census Bureau & NCHS

Estimates of the population distribution by race, however, show the percentage of blacks in Louisiana is more than twice the national average. Blacks comprise 33.3% of the state's population, versus 12.8% nationally.

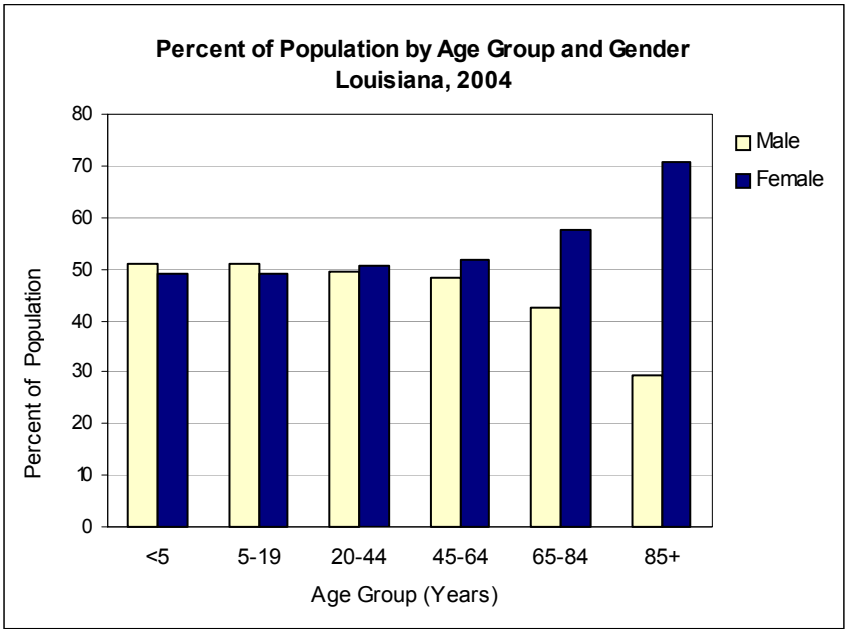


Source: Calculation based on Bridged-Race Population Estimate 2004, U.S. Census Bureau & NCHS

Percent of Total Population by Race Louisiana and United States, 2004				
	Race			
Location	White	Black	Other	Total
Louisiana	64.6	33.3	2.1	100.0
United States	80.4	12.8	6.8	100.0

Source: Calculation based on Bridged-Race Population Estimate 2004, U.S. Census Bureau & NCHS (Released on September 2005)

As in the rest of the nation, an increase in the proportion of women to men is seen in older age categories.

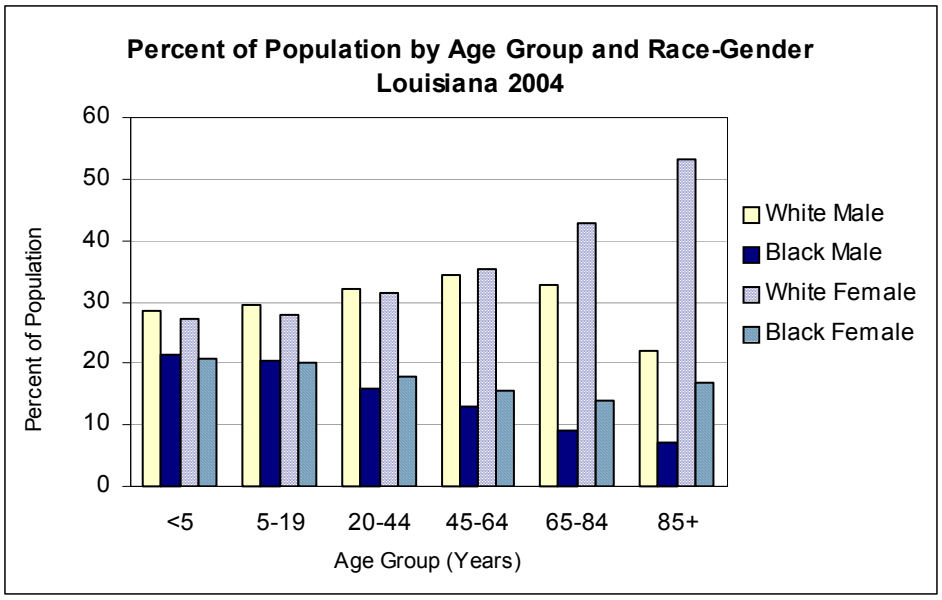


Source: Calculation based on Bridged-Race Population Estimate 2004, U.S. Census Bureau & NCHS

Percent of Population by Gender, Race and Age Group Louisiana, 2004							
		Age Group (Years)					
Gender	Race	<5	5-19	20-44	45-64	65-84	85 & +
Male	White	28.4	29.4	32.2	34.4	32.8	21.9
	Black	21.6	20.6	15.8	12.9	9.1	7.1
	Other	1.0	1.2	1.3	1.0	0.6	0.4
	Total	51.0	51.1	49.3	48.2	42.4	29.4
Female	White	27.1	27.8	31.6	35.2	43.0	53.3
	Black	20.9	20.0	17.9	15.5	13.9	16.8
	Other	1.0	1.1	1.2	1.0	0.7	0.5
	Total	49.0	48.9	50.7	51.8	57.6	70.6

Source: Calculation based on Bridged-Race Population Estimate 2004, U.S. Census Bureau & NCHS
Note: Percentages may not add up to 100% due to rounding.

Within individual age groups, the race/sex proportions in Louisiana change with advancing age.



Source: Calculation based on Bridged-Race Population Estimate 2004, U.S. Census Bureau & NCHS

The U.S. Bureau of the Census has also provided the estimated parish-level population data for 2004. The changes in Louisiana's mid-year parish populations by 2000 census and the 2004 estimates are presented in the table below:

Louisiana 2004 Population by Parish				
	7/1/2000	7/1/2004	% Change	7/1/2004
Parish	Census	Estimates	2000-2004	% as Total of State Pop.
State Total	4,468,976	4,515,770	1.0	100.4
Acadia	58,861	59,168	0.5	1.3
Allen	25,440	25,407	-0.1	0.6
Ascension	76,627	87,164	13.8	1.9
Assumption	23,388	23,234	-0.7	0.5
Avoyelles	41,481	41,981	1.2	0.9
Beauregard	32,986	34,094	3.4	0.8
Bienville	15,752	15,361	-2.5	0.3
Bossier	98,310	104,080	5.9	2.3
Caddo	252,161	251,506	-0.3	5.6
Calcasieu	183,577	184,961	0.8	4.1
Caldwell	10,560	10,837	2.6	0.2
Cameron	9,991	9,681	-3.1	0.2
Catahoula	10,920	10,627	-2.7	0.2
Claiborne	16,851	16,471	-2.3	0.4
Concordia	20,247	19,724	-2.6	0.4
DeSoto	25,494	26,231	2.9	0.6
E. Baton Rouge	412,852	412,633	-0.1	9.2
E. Carroll	9,421	8,954	-5.0	0.2
E. Feliciana	21,360	20,950	-1.9	0.5
Evangeline	35,434	35,451	0.0	0.8
Franklin	21,263	20,812	-2.1	0.5
Grant	18,698	19,139	2.4	0.4
Iberia	73,266	74,449	1.6	1.7
Iberville	33,320	32,497	-2.5	0.7

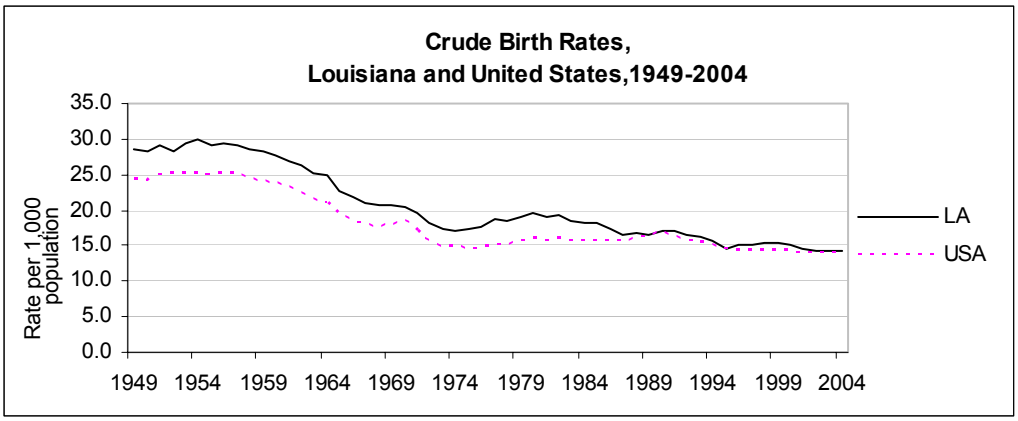
Louisiana 2004 Population by Parish				
	7/1/2000	7/1/2004	% Change	7/1/2004
Parish	Census	Estimates	2000-2004	% as Total of State Pop.
Jackson	15,397	15,278	-0.8	0.3
Jefferson	455,466	453,590	-0.4	10.1
Jefferson Davis	31,435	31,235	-0.6	0.7
Lafayette	190,503	195,707	2.7	4.4
Lafourche	89,974	92,157	2.4	2.0
LaSalle	14,282	14,161	-0.8	0.3
Lincoln	42,509	42,382	-0.3	0.9
Livingston	91,814	105,653	15.1	2.3
Madison	13,728	12,996	-5.3	0.3
Morehouse	31,021	30,551	-1.5	0.7
Natchitoches	39,080	38,741	-0.9	0.9
Orleans	484,674	462,269	-4.6	10.3
Ouachita	147,250	148,355	0.8	3.3
Plaquemines	26,757	28,969	8.3	0.6
Pointe Coupee	22,763	22,537	-1.0	0.5
Rapides	126,337	128,013	1.3	2.8
Red River	9,622	9,606	-0.2	0.2
Richland	20,981	20,485	-2.4	0.5
Sabine	23,459	23,616	0.7	0.5
St. Bernard	67,229	65,554	-2.5	1.5
St. Charles	48,072	50,073	4.2	1.1
St. Helena	10,525	10,309	-2.1	0.2
St. James	21,216	21,146	-0.3	0.5
St. John	43,044	45,581	5.9	1.0
St. Landry	87,700	89,635	2.2	2.0
St. Martin	48,583	50,453	3.8	1.1
St. Mary	53,500	52,189	-2.5	1.2
St. Tammany	191,268	213,553	11.7	4.7
Tangipahoa	100,588	105,158	4.5	2.3
Tensas	6,618	6,176	-6.7	0.1
Terrebonne	104,503	106,523	1.9	2.4
Union	22,803	22,894	0.4	0.5
Vermilion	53,807	54,751	1.8	1.2
Vernon	52,531	49,545	-5.7	1.1
Washington	43,926	44,161	0.5	1.0
Webster	41,831	41,254	-1.4	0.9
W. Baton Rouge	21,601	21,880	1.3	0.5
W. Carroll	12,314	11,963	-2.9	0.3
W. Feliciana	15,111	15,108	0.0	0.3
Winn	16,894	16,151	-4.4	0.4

Source: United States Census Bureau, 2000 Census and Bridged-Race Population Estimate 2004, U.S. Census Bureau & NCHS

B. BIRTHS

Number of Live Births and Birth Rates

In the year 2004, there were 64,956 births to Louisiana residents. This marked a 0.4% increase from the number of Louisiana births in 2003, and a little less than the 0.5% decrease observed in the United States as a whole, from 2003 to 2004. Louisiana's 2004 crude birth rate was 14.4 live births per 1,000 population. Because the crude birth rate represents the number of live births to the total population in an area, without regard to the age or sex distribution of the population, it is useful as a measure of the contribution of births to the growth of the population of the area.[1] Louisiana's crude birth rate remained steady at 14.4 per 1,000 population as in 2003.



Source: Louisiana State Center for Health Statistics
National Center for Health Statistics, Births: Final Data for 2004

In the table below, Louisiana's crude birth rates are furnished to compare to the rates of its four neighboring states. Louisiana continues to rank relatively high in terms of birth rate as its 2004 ranking is the 15th highest in the nation. Among neighboring states, Louisiana's birth rate is the third highest.

Crude Birth Rates
Louisiana, Neighboring States, and United States, 2004

State	*Birth Rate*	*National Ranking*
Alabama	13.1	32
Arkansas	14.0	19
Louisiana	14.4*	15
Mississippi	14.7	12
Texas	17.1	2
United States	14.0	-

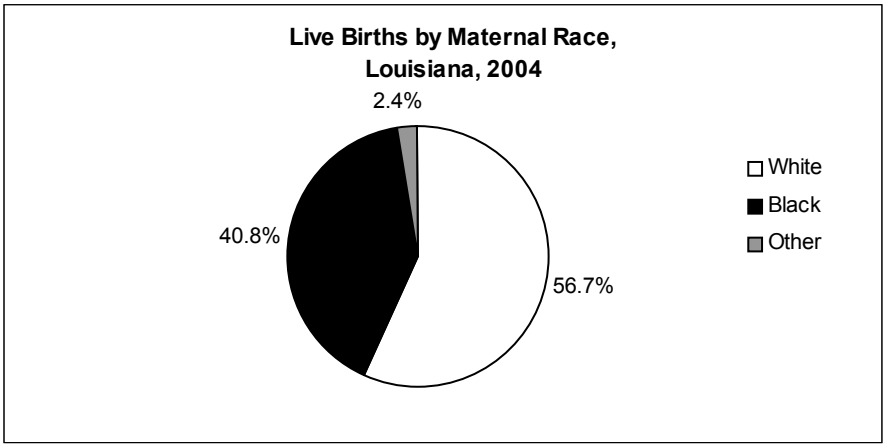
Source: Morgan, K.O. and Morgan, S (Editors) 2006. Health Care State Rankings 2006: Health Care in the 50 United States. (14th Ed.): Morgan Quitno Press, Lawrence, KS.
* Louisiana State Center for Health Statistics

Although black women aged 15-44 years represent 36.3% of the female population of Louisiana belonging to that same age group, 40.8% of the state's live births in the year 2004 were to black mothers. The birth rate is 12.6 for whites and 17.6 for blacks. In 2004, the race-specific birth rates peaked at 150.3

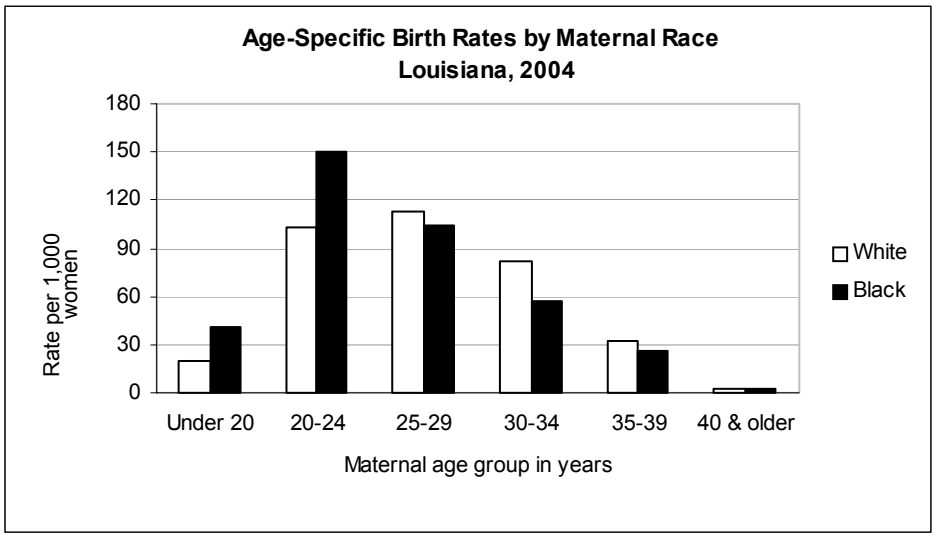
[1] Clarke SC and Ventura SJ. *Birth and Fertility for States: United States*, 1990.National Center for Health Statistics. Vital Health Statistics 21(52), 1994.

for black mothers age 20-24, and at 112.9 for white mothers at age 25-29. The second highest birth rate for black mothers was 104.6 at age 25-29, and, for white mothers, 102.4 at age 20-24. The third highest birth rates were 78.8 for black mothers age 15-19 and 81.5 for white mothers age 30-34.

In 2004, both Vernon and Ascension Parish had the highest birth rate at 16.9 births per 1,000 population, and West Feliciana parish had the lowest birth rate at 7.4 births per 1,000 population.



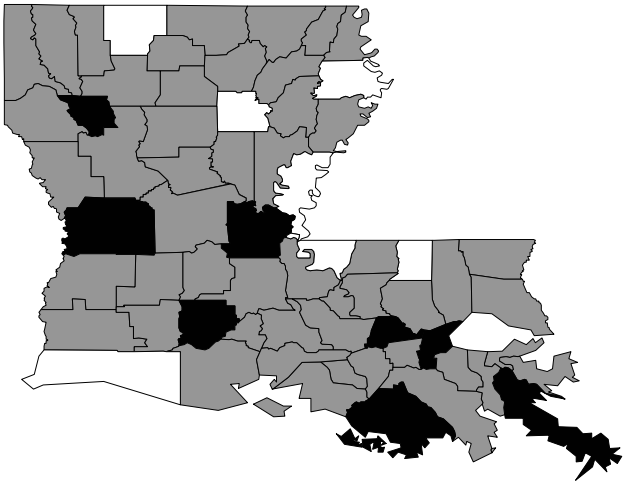
Source: Louisiana State Center for Health Statistics



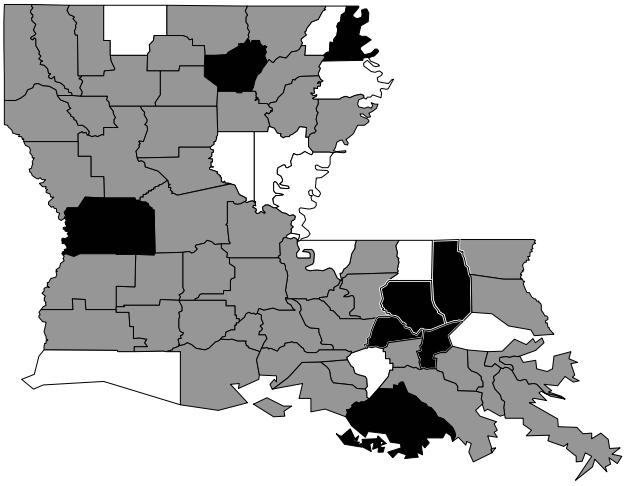
Source: Louisiana State Center for Health Statistics

Live Birth Rate Per 1,000 Population
Louisiana, 2003 & 2004

YEAR 2003



YEAR 2004



	7.4 - 11.4
	11.5 - 15.5
	15.6 - 19.6

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2004

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
STATE	65573	64956	14.4	ALL	187	9369	21614	17083	10911	4718	1024	49	****
	37399	36848		WHITE	39	3788	10895	10624	7618	3200	649	35	0
	26573	26522		BLACK	148	5438	10386	5982	2880	1341	333	13	****
	1601	1586		OTHER	0	143	333	477	413	177	42	****	0
ACADIA	563	916	15.4	ALL	****	150	345	244	125	42	7	0	0
	409	699		WHITE	0	101	241	204	113	35	5	0	0
	152	212		BLACK	****	49	103	38	11	6	****	0	0
	****	5		OTHER	0	0	****	****	****	****	0	0	0
ALLEN	****	344	13.5	ALL	****	54	134	101	38	14	****	0	0
	0	248		WHITE	0	36	97	77	29	8	****	0	0
	0	70		BLACK	****	16	24	20	6	****	0	0	0
	****	26		OTHER	0	****	13	****	****	****	****	0	0
ASCENSION	****	1470	16.9	ALL	****	132	415	451	319	131	19	0	0
	****	1110		WHITE	****	72	280	365	272	107	13	0	0
	****	349		BLACK	****	60	133	82	44	22	6	0	0
	0	11		OTHER	0	0	****	****	****	****	0	0	0
ASSUMPTION	0	266	11.4	ALL	****	49	80	73	42	18	****	0	0
	0	133		WHITE	****	19	38	37	28	9	****	0	0
	0	131		BLACK	0	30	42	35	14	9	****	0	0
	0	****		OTHER	0	0	0	****	0	0	****	0	0
AVOYELLES	****	593	14.0	ALL	****	122	210	148	73	31	6	0	0
	0	356		WHITE	****	56	126	106	46	18	****	0	0
	****	227		BLACK	****	63	79	41	26	13	****	0	0
	0	10		OTHER	0	****	5	****	****	0	0	0	0
BEAUREGARD	393	458	13.7	ALL	****	71	150	134	59	39	****	****	0
	322	391		WHITE	****	62	124	115	54	33	****	0	0
	59	54		BLACK	0	7	21	16	****	6	0	****	0
	12	13		OTHER	0	****	5	****	****	0	****	0	0
BIENVILLE	0	192	12.3	ALL	****	29	76	42	32	9	****	0	0
	0	103		WHITE	****	13	40	32	11	****	****	0	0
	0	89		BLACK	0	16	36	10	21	5	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
BOSSIER	809	1617	15.5	ALL	****	201	544	461	283	98	24	****	0
	611	1163		WHITE	****	114	364	350	249	72	11	****	0
	179	420		BLACK	****	86	170	98	29	24	10	0	0
	19	34		OTHER	0	****	10	13	5	****	****	0	0
CADDO	5872	3684	14.4	ALL	19	639	1289	922	554	222	38	****	0
	2970	1552		WHITE	****	156	461	473	331	111	16	****	0
	2784	2067		BLACK	16	479	818	424	209	100	21	0	0
	118	65		OTHER	0	****	10	25	14	11	****	0	0
CALCASIEU	3191	2705	14.6	ALL	****	390	969	759	393	153	37	****	0
	2287	1849		WHITE	****	220	644	551	298	111	22	0	0
	862	818		BLACK	0	166	322	193	83	39	14	****	0
	42	38		OTHER	0	****	****	15	12	****	****	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 2004

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
CALDWELL	0	139	13.0	ALL	****	20	53	34	24	6	****	0	0
	0	119		WHITE	****	15	46	28	22	6	****	0	0
	0	19		BLACK	0	5	7	6	****	0	0	0	0
	0	****		OTHER	0	0	0	0	****	0	0	0	0
CAMERON	0	94	9.7	ALL	0	13	33	28	13	5	****	0	0
	0	89		WHITE	0	12	30	28	13	****	****	0	0
	0	5		BLACK	0	****	****	0	0	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
CATAHOULA	0	112	10.6	ALL	0	18	49	33	8	****	****	0	0
	0	76		WHITE	0	9	33	25	5	****	****	0	0
	0	36		BLACK	0	9	16	8	****	0	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
CLAIBORNE	28	167	10.3	ALL	****	30	76	34	19	****	****	0	0
	14	75		WHITE	0	6	35	20	13	0	****	0	0
	14	91		BLACK	****	24	41	13	6	****	****	0	0
	0	****		OTHER	0	0	0	****	0	0	0	0	0
CONCORDIA	323	178	9.2	ALL	****	34	81	45	13	****	****	0	0
	71	71		WHITE	0	8	29	22	9	****	****	0	0
	250	106		BLACK	****	26	52	23	****	0	****	0	0
	****	****		OTHER	0	0	0	0	****	0	0	0	0
DESOTO	****	366	14.2	ALL	****	55	146	79	63	20	****	0	0
	****	202		WHITE	0	25	74	48	39	16	0	0	0
	****	160		BLACK	****	29	71	30	23	****	****	0	0
	0	****		OTHER	0	****	****	****	****	0	0	0	0
E BATON ROUGE	9969	5716	13.7	ALL	18	703	1749	1518	1102	529	90	7	0
	5660	2370		WHITE	****	149	494	686	680	307	47	5	0
	4090	3152		BLACK	16	546	1225	772	359	193	39	****	0
	219	194		OTHER	0	8	30	60	63	29	****	0	0
EAST CARROLL	6	144	16.1	ALL	****	19	58	33	22	9	****	0	0
	****	32		WHITE	0	****	12	7	8	****	0	0	0
	5	112		BLACK	****	15	46	26	14	8	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
E FELICIANA	****	255	12.2	ALL	0	49	88	52	39	17	10	0	0
	****	134		WHITE	0	23	46	29	23	7	6	0	0
	0	118		BLACK	0	26	41	23	15	10	****	0	0
	0	****		OTHER	0	0	****	0	****	0	****	0	0
EVANGELINE	539	536	15.1	ALL	0	101	218	138	49	22	8	0	0
	288	352		WHITE	0	57	139	100	39	12	5	0	0
	239	181		BLACK	0	44	78	36	10	10	****	0	0
	12	****		OTHER	0	0	****	****	0	0	0	0	0
FRANKLIN	9	295	14.4	ALL	0	72	111	67	34	7	****	0	0
	****	158		WHITE	0	28	59	40	26	****	****	0	0
	5	136		BLACK	0	44	52	26	8	****	****	0	0
	0	****		OTHER	0	0	0	****	0	0	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2004

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
GRANT	0	234	12.6	ALL	0	42	98	52	26	11	5	0	0
	0	203		WHITE	0	35	83	45	26	10	****	0	0
	0	29		BLACK	0	6	14	7	0	****	****	0	0
	0	****		OTHER	0	****	****	0	0	0	0	0	0
IBERIA	939	1109	15.0	ALL	****	199	391	256	174	70	14	****	0
	479	598		WHITE	0	74	211	149	109	43	11	****	0
	434	481		BLACK	****	121	174	97	59	24	****	0	0
	26	30		OTHER	0	****	6	10	6	****	****	0	0
IBERVILLE	364	458	14.1	ALL	****	77	167	106	73	28	5	0	0
	44	183		WHITE	****	15	53	56	35	20	****	0	0
	317	272		BLACK	****	61	113	50	37	8	****	0	0
	****	****		OTHER	0	****	****	0	****	0	0	0	0
JACKSON	****	189	12.1	ALL	0	29	70	51	29	8	****	0	****
	0	133		WHITE	0	21	48	36	21	7	0	0	0
	****	54		BLACK	0	8	21	14	8	****	****	0	****
	0	****		OTHER	0	0	****	****	0	0	0	0	0
JEFFERSON	8131	6278	13.7	ALL	12	743	1743	1744	1324	564	144	****	0
	4847	3729		WHITE	5	315	874	1071	944	407	110	****	0
	2952	2246		BLACK	7	412	822	590	283	107	24	****	0
	332	303		OTHER	0	16	47	83	97	50	10	0	0
JEFF DAVIS	384	462	14.9	ALL	****	54	158	138	74	26	7	****	0
	305	368		WHITE	****	39	125	114	61	21	7	0	0
	70	91		BLACK	****	15	33	22	13	****	0	****	0
	9	****		OTHER	0	0	0	****	0	****	0	0	0
LAFAYETTE	4991	2972	15.2	ALL	****	312	887	838	617	270	40	****	0
	3393	1958		WHITE	****	129	506	603	483	200	32	****	0
	1489	944		BLACK	****	177	376	211	112	59	6	0	0
	109	70		OTHER	0	6	5	24	22	11	****	0	0
LAFOURCHE	895	1203	13.1	ALL	****	167	384	337	211	85	16	****	0
	775	919		WHITE	0	106	279	274	178	68	12	****	0
	101	240		BLACK	****	52	89	50	30	15	****	0	0
	19	44		OTHER	0	9	16	13	****	****	****	0	0
LASALLE	0	162	11.4	ALL	0	24	70	49	10	8	****	0	0
	0	142		WHITE	0	17	62	44	10	8	****	0	0
	0	16		BLACK	0	5	7	****	0	0	0	0	0
	0	****		OTHER	0	****	****	****	0	0	0	0	0
LINCOLN	750	534	12.3	ALL	0	80	177	146	80	38	12	****	0
	382	282		WHITE	0	28	72	90	56	28	7	****	0
	364	239		BLACK	0	51	104	51	18	10	5	0	0
	****	13		OTHER	0	****	****	5	6	0	0	0	0
LIVINGSTON	****	1625	16.0	ALL	****	202	506	499	296	98	19	****	0
	****	1537		WHITE	****	187	473	476	286	93	18	****	0
	0	81		BLACK	****	15	30	21	8	5	****	0	0
	0	7		OTHER	0	0	****	****	****	0	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 2004

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
MADISON	0	111	8.5	ALL	****	27	35	24	17	5	****	0	0
	0	33		WHITE	0	****	9	11	7	****	0	0	0
	0	77		BLACK	****	25	26	12	10	****	****	0	0
	0	****		OTHER	0	0	0	****	0	0	0	0	0
MOREHOUSE	362	415	13.7	ALL	****	72	156	111	46	22	6	0	0
	207	177		WHITE	0	23	66	51	28	9	0	0	0
	153	236		BLACK	****	48	90	59	18	13	6	0	0
	****	****		OTHER	0	****	0	****	0	0	0	0	0
NATCHITOCHES	610	581	14.8	ALL	****	106	218	146	75	25	7	****	0
	257	271		WHITE	****	38	86	80	47	14	****	****	0
	344	306		BLACK	****	68	130	65	27	11	****	0	0
	9	****		OTHER	0	0	****	****	****	0	0	0	0
ORLEANS	8107	6838	14.8	ALL	24	1150	2185	1588	1147	576	159	9	0
	2336	1334		WHITE	0	40	200	284	454	280	70	6	0
	5540	5319		BLACK	24	1105	1968	1239	617	281	82	****	0
	231	185		OTHER	0	5	17	65	76	15	7	0	0
OUACHITA	3534	2336	15.7	ALL	13	326	803	649	361	158	25	****	0
	1996	1238		WHITE	0	113	357	389	256	108	14	****	0
	1483	1061		BLACK	13	211	442	246	97	42	10	0	0
	55	37		OTHER	0	****	****	14	8	8	****	0	0
PLAQUEMINES	****	441	15.2	ALL	****	40	141	147	50	48	13	****	0
	****	298		WHITE	****	26	96	102	39	25	9	0	0
	****	111		BLACK	0	14	43	32	6	13	****	0	0
	****	32		OTHER	0	0	****	13	5	10	****	****	0
POINTE COUPEE	****	297	13.4	ALL	****	57	94	75	45	19	6	0	0
	0	150		WHITE	0	15	43	50	24	13	5	0	0
	****	147		BLACK	****	42	51	25	21	6	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
RAPIDES	3053	1878	14.7	ALL	****	302	721	445	265	117	26	0	0
	1955	1081		WHITE	0	139	372	292	184	75	19	0	0
	1049	767		BLACK	****	161	340	148	70	39	7	0	0
	49	30		OTHER	0	****	9	5	11	****	0	0	0
RED RIVER	****	139	14.1	ALL	0	23	56	37	16	6	****	0	0
	0	58		WHITE	0	10	23	16	7	****	0	0	0
	****	79		BLACK	0	13	32	20	9	****	****	0	0
	0	****		OTHER	0	0	****	****	0	0	0	0	0
RICHLAND	****	289	14.1	ALL	****	46	105	80	36	14	5	0	0
	0	151		WHITE	****	17	53	44	25	10	****	0	0
	****	134		BLACK	****	28	51	35	11	****	****	0	0
	0	****		OTHER	0	****	****	****	0	****	0	0	0
SABINE	****	336	14.1	ALL	0	53	119	92	46	19	7	0	0
	****	221		WHITE	0	27	71	69	34	16	****	0	0
	0	88		BLACK	0	20	36	19	8	****	****	0	0
	0	27		OTHER	0	6	12	****	****	0	****	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2004

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
ST BERNARD	****	886	13.2	ALL	0	136	260	246	169	57	18	0	0
	****	709		WHITE	0	99	196	206	140	50	18	0	0
	****	154		BLACK	0	35	59	33	23	****	0	0	0
	0	23		OTHER	0	****	5	7	6	****	0	0	0
ST CHARLES	****	719	14.9	ALL	****	98	197	190	143	71	17	****	0
	0	459		WHITE	0	45	105	125	114	57	13	0	0
	****	253		BLACK	****	52	89	64	27	14	****	****	0
	0	7		OTHER	0	****	****	****	****	0	0	0	0
ST HELENA	0	100	9.9	ALL	0	19	37	26	13	5	0	0	0
	0	36		WHITE	0	7	8	10	9	****	0	0	0
	0	64		BLACK	0	12	29	16	****	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
ST JAMES	****	309	14.9	ALL	****	49	87	83	63	21	5	0	0
	****	122		WHITE	0	10	27	40	32	11	****	0	0
	****	187		BLACK	****	39	60	43	31	10	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
ST JOHN	329	712	16.1	ALL	****	116	234	175	126	53	6	0	0
	148	323		WHITE	0	31	83	94	77	35	****	0	0
	177	381		BLACK	****	84	149	79	46	18	****	0	0
	****	8		OTHER	0	****	****	****	****	0	0	0	0
ST LANDRY	1625	1379	15.4	ALL	****	277	498	328	167	90	13	****	0
	918	665		WHITE	****	101	222	184	99	52	****	****	0
	698	710		BLACK	****	176	275	142	68	37	9	****	0
	9	****		OTHER	0	0	****	****	0	****	0	0	0
ST MARTIN	****	701	14.1	ALL	****	101	283	170	96	38	9	0	0
	****	405		WHITE	0	50	151	113	66	19	6	0	0
	****	283		BLACK	****	50	129	52	27	18	****	0	0
	0	13		OTHER	0	****	****	5	****	****	0	0	0
ST MARY	452	758	14.5	ALL	5	133	299	199	78	35	9	0	0
	230	441		WHITE	****	66	168	122	53	26	5	0	0
	210	291		BLACK	****	65	118	72	20	8	****	0	0
	12	26		OTHER	0	****	13	5	5	****	0	0	0
ST TAMMANY	3848	2953	14.0	ALL	****	274	741	798	708	353	74	****	0
	3081	2450		WHITE	****	196	577	669	618	325	62	****	0
	711	453		BLACK	****	72	151	116	79	24	9	0	0
	56	50		OTHER	0	6	13	13	11	****	****	0	0
TANGIPAHOA	1442	1607	15.7	ALL	7	240	601	435	233	80	10	****	0
	788	938		WHITE	****	96	298	310	166	57	9	****	0
	643	658		BLACK	6	144	299	123	63	22	****	0	0
	11	11		OTHER	0	0	****	****	****	****	0	0	0
TENSAS	0	82	13.5	ALL	0	11	40	16	9	****	****	0	0
	0	23		WHITE	0	****	10	6	****	****	****	0	0
	0	58		BLACK	0	10	30	10	5	****	0	0	0
	0	****		OTHER	0	0	0	0	****	0	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2004

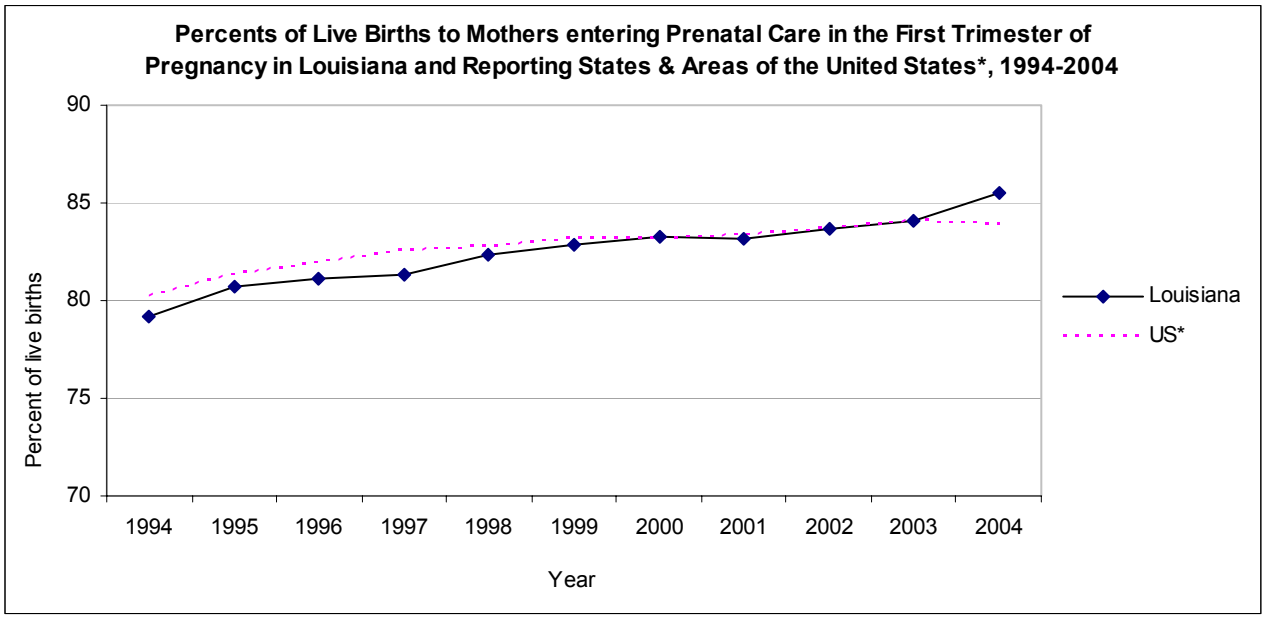
Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
TERREBONNE	2400	1716	16.0	ALL	****	265	635	432	240	114	25	****	0
	1611	1235		WHITE	****	152	448	323	196	92	21	****	0
	604	323		BLACK	****	71	137	69	28	14	****	****	0
	185	158		OTHER	0	42	50	40	16	8	****	0	0
UNION	0	317	14.2	ALL	****	53	116	90	33	17	****	0	0
	0	203		WHITE	****	26	72	65	27	10	****	0	0
	0	112		BLACK	****	27	44	24	5	7	****	0	0
	0	****		OTHER	0	0	0	****	****	0	0	0	0
VERMILION	153	806	14.8	ALL	****	106	307	208	119	52	12	****	0
	71	618		WHITE	****	64	225	178	96	43	10	****	0
	77	172		BLACK	0	42	77	26	17	8	****	0	0
	5	16		OTHER	0	0	5	****	6	****	0	0	0
VERNON	733	885	16.9	ALL	****	94	400	223	123	37	7	0	0
	513	675		WHITE	****	74	299	175	92	29	5	0	0
	179	169		BLACK	0	16	81	36	27	7	****	0	0
	41	41		OTHER	0	****	20	12	****	****	0	0	0
WASHINGTON	****	607	13.7	ALL	****	124	228	152	71	24	6	0	0
	****	382		WHITE	0	71	142	100	51	15	****	0	0
	****	222		BLACK	****	52	85	51	20	9	****	0	0
	0	****		OTHER	0	****	****	****	0	0	0	0	0
WEBSTER	731	508	12.3	ALL	****	100	210	104	65	20	6	****	0
	409	329		WHITE	0	55	130	79	51	12	****	0	0
	320	177		BLACK	****	45	80	24	14	7	****	****	0
	****	****		OTHER	0	0	0	****	0	****	0	0	0
W BATON ROUGE	****	331	15.1	ALL	****	44	104	83	57	31	10	0	0
	****	198		WHITE	0	22	50	53	43	22	8	0	0
	0	131		BLACK	****	22	53	29	14	9	****	0	0
	0	****		OTHER	0	0	****	****	0	0	0	0	0
WEST CARROLL	0	130	10.9	ALL	0	8	58	38	21	5	0	0	0
	0	109		WHITE	0	7	47	31	20	****	0	0	0
	0	21		BLACK	0	****	11	7	****	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
W FELICIANA	0	113	7.4	ALL	0	10	41	26	27	7	****	0	0
	0	57		WHITE	0	****	12	15	21	****	****	0	0
	0	56		BLACK	0	6	29	11	6	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
WINN	0	203	12.3	ALL	****	29	80	55	28	8	****	0	0
	0	125		WHITE	0	10	51	37	22	****	****	0	0
	0	76		BLACK	****	18	29	18	5	****	****	0	0
	0	****		OTHER	0	****	0	0	****	0	0	0	0
OUT OF STATE	312	929		ALL	****	81	244	278	205	86	26	6	0
	185	736		WHITE	****	46	191	227	170	74	22	****	0
	123	174		BLACK	****	35	48	44	29	11	****	****	0
	****	19		OTHER	0	0	5	7	6	****	0	0	0

+Rate per 1,000 population.
****Counts less than 5 but greater than 0.
Source: Louisiana State Center for Health Statistics. Denominators for population based rates are derived from the Research Division, College of Administration and Business of Louisiana Technological University (July 1, 2004).

Prenatal Care

Prenatal care is recognized as an important means of providing medical, nutritional, and educational interventions to reduce the risk of adverse pregnancy outcomes and to identify women at high risk for these outcomes. Women in prenatal care routinely receive tests for complete blood count and blood type, diabetes, syphilis, and other conditions. Newborn children are routinely tested for errors of inborn metabolism and other problems. Although these outcomes are rare, a positive test result triggers interventions that benefit both mother and child. Screening and testing undertaken as part of prenatal care has been responsible for substantial improvements in health and wellbeing.[2] Beyond the positive effect on birth outcomes, prenatal care is a vital part of women's health care, as many women (particularly adolescents, minorities, and women of low socio-economic status) start wellbeing checkups only as a consequence of pregnancy.[3]

Prenatal care is most effective when it begins during the early stages of pregnancy. At the national level, the percentage of live births to mothers entering prenatal care in the first trimester of pregnancy has been steadily increasing. While consistently below the national percentage, Louisiana has shown similar improvement.



* Total Reporting States and Areas that Include 41 states, New York City, and the District of Columbia.

Excludes data for Florida, Idaho, Kentucky, New Hampshire, New York (excluding New York City), Pennsylvania, South Carolina, Tennessee, and Washington, which implemented the 2003 Revision of the U.S. Certificate of Live Birth; Prenatal care based on the 2003 Revision of the U.S. Certificate of Live Birth are not compatible with those based on the 1989 Revision of the U.S. Certificate of Live Birth.

"Technical Notes" on "Prenatal care" at the National Vital Statistics Report, Vol. 55, No.1, page 93, September 29, 2006 states that "Substantive changes in both question wording and the sources for this information have resulted in the data that are not comparable among revisions. The wording of the prenatal care item was modified to "Date of first prenatal visit" from "Month prenatal care began". In addition, the 2003 revision process resulted in recommendations that the prenatal care information be gathered from the prenatal care or medical records, whereas the 1989 revision did not recommend a source for these data". See National Vital Statistics Report, Vol. 55, No.1, September 29, 2006, pages 93 and 88 for more information.

[2] Stoto et al. (1999)" Public Health Screening Programs" in: Reducing the Odds: Preventing Perinatal Transmission of HIV in the United States (pp.21-35) Washington, DC: National Academy Press.

[3] Fiscella, K. (1995). "Does Prenatal Care Improve Birth Outcomes? A Critical Review." Obstetrics & Gynecology 85, 468-79.

In the following table, percentages of live births to mothers utilizing prenatal care are furnished to allow a comparison of Louisiana to its neighboring states. In the year 2004, 85.5% of Louisiana mothers who gave birth entered prenatal care in the first trimester, compared to 83.9% of mothers in the reporting states and areas. Among neighboring states, Louisiana ranked first for the highest percentage of mothers receiving prenatal care in the first trimester.

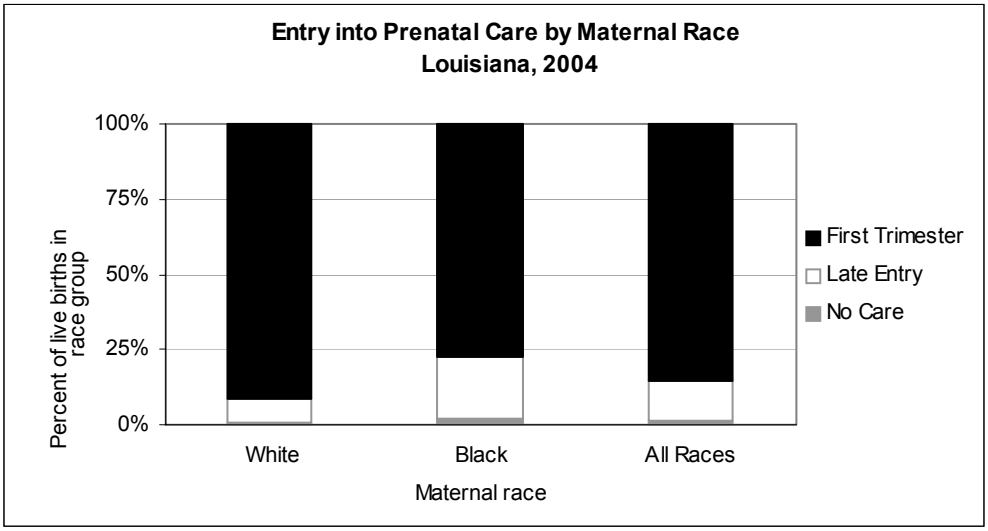
Percentage of Live Births to Mothers Receiving Prenatal Care in the First Trimester of Pregnancy, Louisiana, Neighboring States and Reporting States and Areas*, 2004

State	Percentage of Mothers	National Ranking
Alabama	84.0	22
Arkansas	82.3	27
Louisiana	85.5	17
Mississippi	84.4	21
Texas	81.8	30
*Total Reporting States and Areas**	83.9	-

Source: Morgan, K.O. and Morgan, S (Editors) 2007. Health Care State Rankings 2007: Health Care in the 50 United States. (15th Ed.): Morgan Quitno Press, Lawrence, KS

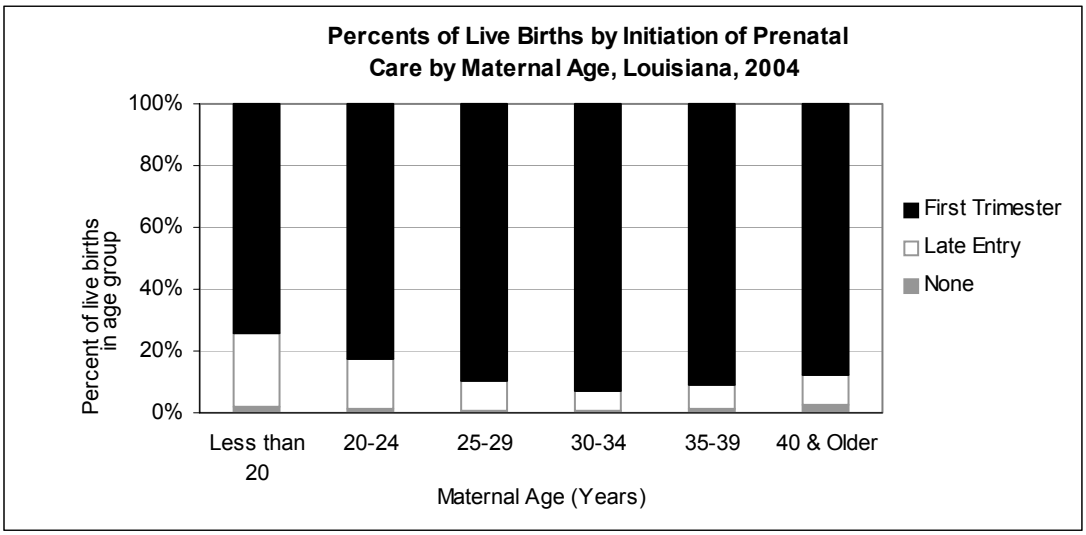
** See footnote on previous page*

Only 77.5% of black mothers had their first prenatal visit in the first trimester, compared to 91.2% of white mothers. Also, 2.2% of black mothers received no prenatal care, as compared to 0.5% of white mothers.



Source: Louisiana State Center for Health Statistics
Note: Late Entry, refers to women who started prenatal care in the second trimester or later.

A little more than a quarter (28%) of mothers under the age of 20 years started prenatal care after the first trimester of pregnancy, while 1.9% of women in this age group never received any prenatal care. However, entry into care improved with age before leveling off in the mid-thirties age group.



Source: Louisiana State Center for Health Statistics
Note: Late Entry, refers to women who started prenatal care in the second trimester or later

In Louisiana, adequacy of prenatal care is measured by a modified Kessner index, which defines prenatal care as adequate if the first prenatal visit occurred in the first trimester of pregnancy and if the total number of visits was appropriate to the gestational age of the baby at birth. It should be noted, however, that these measures assess neither the quality nor the content of prenatal care and, therefore, are most likely overestimates of the adequacy of care. Of the 64,956 Louisiana residents who gave birth in 2004, 80.1% received adequate care according to the Kessner index.

Percent of Mothers Receiving Adequate+ Prenatal Care by Parish Louisiana, 2000-2004

Parish	*2000*	*2001*	*2002*	*2003*	*2004*
State Total	77.96	77.77	78.91	80.06	80.98
Acadia	66.81	61.50	61.20	65.67	65.52
Allen	79.19	81.63	85.50	82.43	85.88
Ascension	81.85	81.82	83.53	83.99	84.65
Assumption	76.33	77.00	70.11	66.92	74.43
Avoyelles	71.27	76.31	76.70	83.13	82.50
Beauregard	80.00	77.69	75.91	74.58	70.04
Bienville	74.07	78.02	80.00	77.89	83.87
Bossier	80.45	79.81	80.09	81.59	80.71
Caddo	71.09	71.64	72.61	73.90	76.16
Calcasieu	85.30	86.54	88.26	85.96	90.89
Caldwell	85.21	86.40	88.31	83.50	86.96
Cameron	84.75	93.14	95.70	89.25	91.40
Catahoula	72.41	56.45	72.66	74.80	72.48
Claiborne	62.13	79.38	84.15	71.95	78.92
Concordia	65.02	54.51	58.45	55.19	63.28
DeSoto	68.72	73.10	69.60	72.89	75.41
East Baton Rouge	76.91	78.29	79.68	80.86	80.05
East Carroll	61.25	66.90	71.01	67.44	61.70
East Feliciana	78.83	73.99	76.32	75.77	86.85
Evangeline	75.72	76.80	80.66	75.64	83.99
Franklin	67.73	60.87	66.67	64.52	68.73

Percent of Mothers Receiving Adequate+ Prenatal Care by Parish Louisiana, 2000-2004					
Parish	2000	2001	2002	2003	2004
Grant	80.31	82.95	84.85	86.45	88.70
Iberia	65.20	57.32	69.90	67.03	66.42
Iberville	65.81	70.26	71.88	75.00	72.31
Jackson	74.60	71.62	75.76	79.33	81.62
Jefferson	78.93	77.60	78.04	82.56	84.78
Jefferson Davis	63.70	68.97	72.35	70.13	73.39
Lafayette	88.71	87.15	91.36	88.93	85.76
Lafourche	84.06	83.89	84.29	73.72	80.62
LaSalle	83.15	83.84	79.49	89.14	90.68
Lincoln	61.63	69.66	68.98	75.84	78.37
Livingston	84.64	88.90	86.17	85.73	87.40
Madison	64.26	71.29	72.86	70.54	70.27
Morehouse	75.05	73.46	75.06	78.50	78.54
Natchitoches	72.20	75.39	79.41	77.02	74.91
Orleans	76.22	76.90	74.69	76.89	78.19
Ouachita	81.69	82.11	82.28	82.52	80.38
Plaquemines	82.80	78.63	81.27	80.82	83.52
Pointe Coupee	74.72	69.61	70.00	81.05	77.13
Rapides	78.21	79.42	82.78	87.71	88.48
Red River	71.94	61.42	71.01	72.50	73.72
Richland	81.25	82.31	80.94	78.91	81.47
Sabine	71.30	81.61	77.22	76.88	76.52
St. Bernard	83.14	82.10	79.88	88.28	88.77
St. Charles	77.58	75.67	76.72	83.44	82.53
St. Helena	85.60	82.54	73.08	82.65	72.45
St. James	66.03	67.33	68.65	62.81	73.93
St. John	62.96	64.63	69.90	74.23	78.92
St. Landry	70.93	68.00	69.91	75.34	71.63
St. Martin	81.35	80.60	85.59	86.23	78.58
St. Mary	79.06	68.96	69.09	73.52	78.43
St. Tammany	85.27	84.80	85.37	87.14	87.29
Tangipahoa	89.66	81.41	77.97	80.49	79.97
Tensas	60.00	49.43	55.68	47.50	60.00
Terrebonne	79.91	78.67	81.82	76.71	84.54
Union	70.64	71.52	76.61	82.12	78.78
Vermilion	87.75	82.98	88.85	88.23	86.58
Vernon	83.68	81.07	82.05	76.52	69.21
Washington	75.50	77.48	78.02	81.82	83.33
Webster	79.47	82.02	84.02	81.42	81.51
West Baton Rouge	76.85	78.99	79.87	79.17	81.85
West Carroll	73.38	79.53	77.70	83.33	89.06
West Feliciana	78.74	78.63	79.65	87.20	87.27
Winn	69.61	73.60	80.21	82.35	80.20

+According to modified Kessner index.

Source: Louisiana State Center for Health Statistics.

Low Birthweight

A low birthweight infant is defined as an infant weighing less than 2500 grams (5 pounds, 8 ounces) at birth. Preterm infants who have a lower than normal birth weight are at higher risk of experiencing neurological problems, respiratory and gastrointestinal disorders, developmental problems and slowed growth[4]. Low birthweight infants who survive are more likely than normal weight infants to have brain damage, lung and liver disease, subnormal growth, developmental problems, and other adverse health conditions. The effects of low birthweight follow these infants throughout life, through a greater likelihood of physical, intellectual and behavioral difficulties[5]. In the long run, higher proportions of low birthweight infants are enrolled in special education classes relative to their normal birthweight counterparts.[6]

In the year 2004, 7,128 of the 64,956 infants born to Louisiana residents were low birthweight babies. This represents 10.9% of Louisiana's live births for the year, compared to 8.1% born at low birthweight in the United States as a whole. Both Louisiana and the United States have seen an increase in the percentage of infants with low birthweight in recent years.

According to the National Center for Health Statistics, Louisiana had the second highest percentage of low birthweight babies in the nation in the year 2004, outranked only by Mississippi.

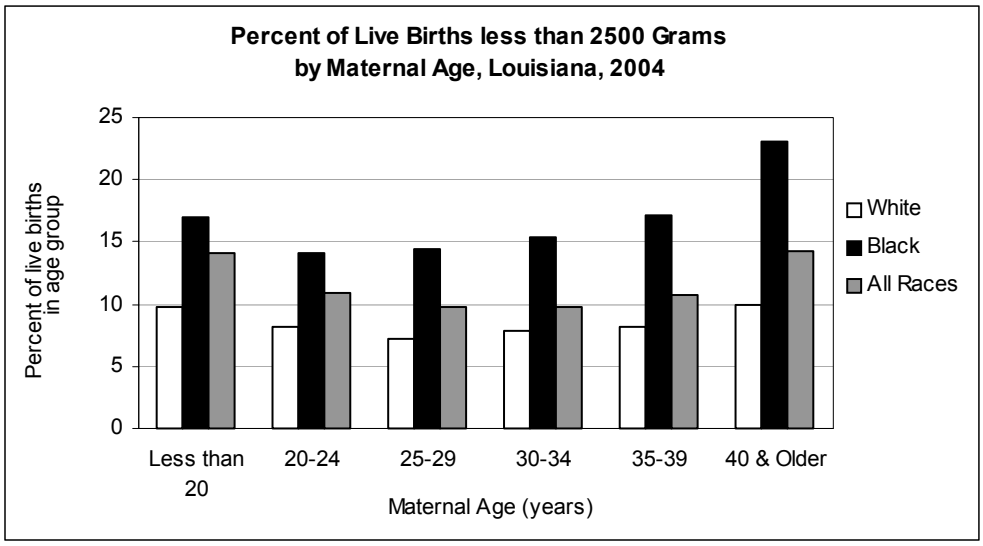
Percent of Live Births Less Than 2500 Grams
Louisiana, Neighboring States, and United States, 2004

State	Percent of Live Births	National Ranking
Alabama	10.4	3
Arkansas	9.3	5
Louisiana	10.9	2
Mississippi	11.6	1
Texas	8.0	25
United States	8.1	-

Source: Morgan, K.O. and Morgan, S (Editors) 2006. Health Care State Rankings 2006: Health Care in the 50 United States. (14th Ed.): Morgan Quitno Press, Lawrence, KS.

Black women in the state gave birth to infants of low birthweight about twice as frequently as white women did, at 15.2% compared to 8.0% of live births, respectively. Black teenagers under 15 were more likely to have low birthweight babies than white women under 15. Examination of births by age group found that mothers over age 40 years had the highest percentage of low birthweight babies (14.3% of live births), followed by mothers under age 20 (14.0%).

[4] High - Risk Infants. Journal of the American Medical Association. 284 (16) 2142 October 25th 2000.
[5] Waldman HB. Perlman SP., Low Birthweight babies grow older, but there could be many problems. Journal of Dentistry for Children. 68 (5-6): 302, 2001 Sep-Dec.
[6] Hack M, Klein NK & Taylor HG. *Long-term developmental outcomes of low birthweight infants*. The Future of Children, Low Birthweight '95; 5:19-34.



Source: Louisiana State Center for Health Statistics

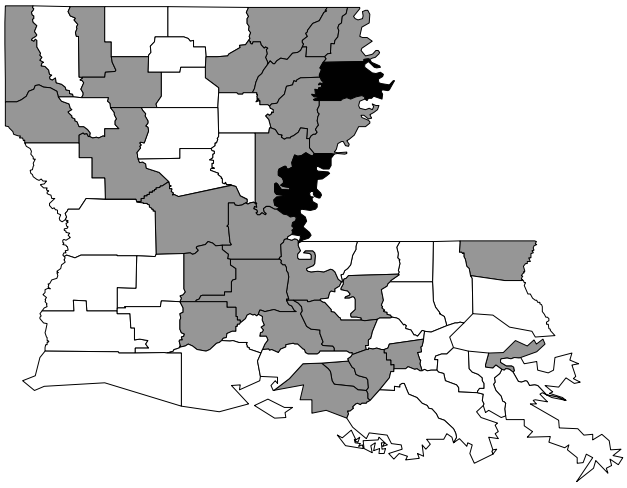
Infants weighing less than 1500 grams (3 pounds, 5 ounces) at birth are considered to be very low birthweight and are at much greater risk of mortality and long-term disability. The risk of early death for very low birthweight infants is about 65 times that of infants who weigh at least 1500 grams [7]. In the year 2004, 2.1% of infants born to Louisiana residents weighed less than 1,500 grams, as compared to 1.5% of infants born to United States residents as a whole. As with infants weighing less than 2,500 grams, there were demographic differences in the mothers giving birth to very low birthweight infants. Black mothers gave birth to very low birthweight infants nearly three times as frequently as white mothers did, at 3.5% compared to 1.2% of live births, respectively. Infants born to the youngest and the oldest mothers were more likely to be very low birthweight.

In the year 2004, St. Helena Parish had the highest percentage of low birthweight babies in Louisiana at 16.0% of live births, while Caldwell Parish had the lowest at 5.0% of live births. The map on the following page shows the percent of live births that were low birthweight babies in each parish.

[7] Ventura SJ, Martin JA, Curtin SC, Mathews TJ. "Report of Final Natality Statistics, 1995." *Monthly Vital Statistics Report*; vol. 45 no 11, suppl. Hyattsville, Maryland: National Center for Health Statistics. 1997.

Percent of Live Births less than 2500 grams
Five-Year Average

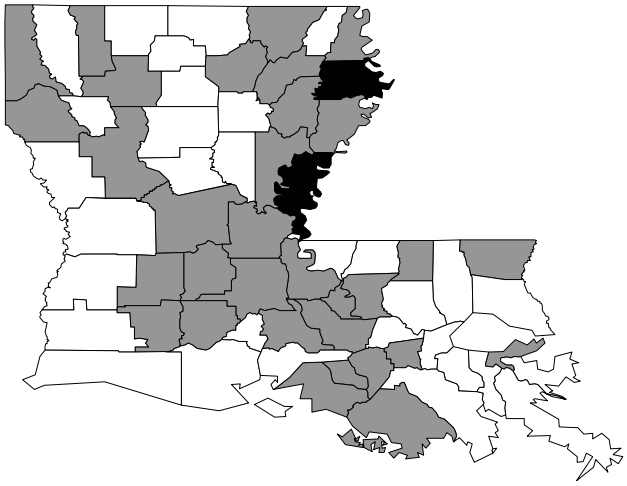
YEARS 1999-2003



Percent

7.1 – 10.5
10.6 – 14.0
14.1 – 17.5

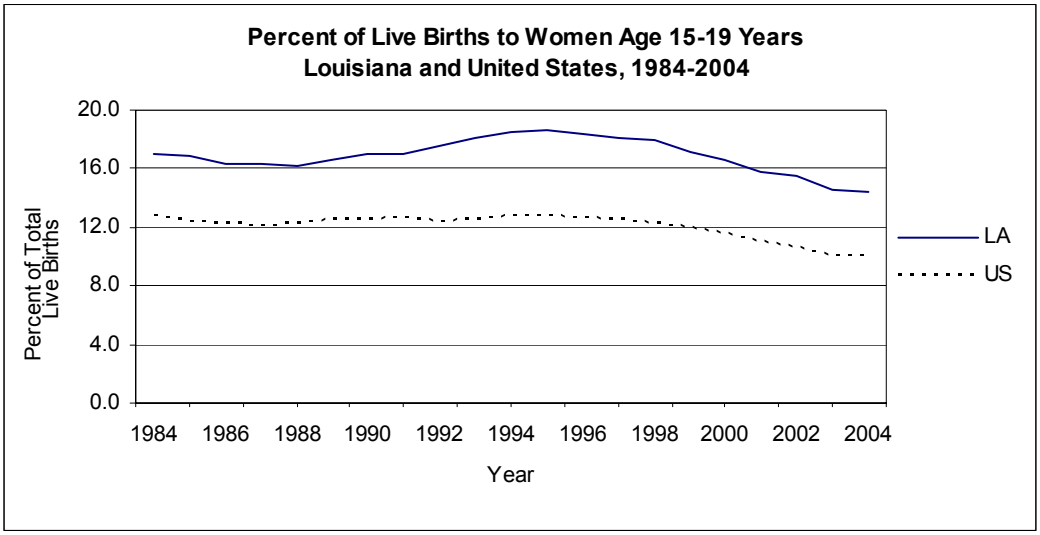
YEARS 2000-2004



Teen Births

Despite an overall decrease in teen birth rates over the last two decades, teenage pregnancy continues to be a problem for the nation. Teen mothers are less likely to receive adequate prenatal care and are more likely to give birth to low birthweight infants.[8] Their infants are more likely to be hospitalized and go on to have childhood health problems. National statistics report that most births to teens (78.9%) occur outside marriage[9] and 25% of teenage mothers go on to have additional children within the next two years [10]. These factors, combined with the fact that teenage mothers are less likely to finish high school, contribute to the high proportion of women living in poverty who first gave birth during adolescence. During the fiscal years of 1997-1998, Louisiana spent over $540 million on programs such as the Family Independent Temporary Assistance Program (FITAP), Food Stamps, Women, Infant and Children (WIC) Program, Foster Care and Medicaid to support adolescent pregnancy in Louisiana [11]. In contrast, the state spent over $10.3 million in fiscal year 1997-1999 on programs designed to prevent teenage pregnancy [12].

As illustrated in the graph below, the percentage of live births to teen mothers aged 15-19 years has decreased over the last twenty years nationwide, this percentage is higher in Louisiana overall than in United States. While, both nationwide and in Louisiana, an increase in teenage births was observed in the mid-1990's, the proportion of teenage births as a total of all births has been on a downward trend for the last six years.



Source: Louisiana State Center for Health Statistics and National Center for Health Statistics, NVSR Reports

[8] Lewis CT, Mathews TJ, Heuser RL. *Prenatal Care in the United States, 1980-94*. National Center for Health Statistics. Vital Health Statistics 21(54). 1996.
[9] Ventura SJ, Curtin SC, Martin JA, Mathews TJ. "Variations in Teenage Birth Rates, 1991-98." *National Vital Statistics Reports,* vol. 48 no 6. Hyattsville, Maryland: National Center for Health Statistics. 2000.
[10] The Alan Guttmacher Institute. *Sex and America's Teenagers*. 1994.
[11] Louisiana Task Force on Teen Pregnancy. Consequences of Adolescent Pregnancy, p. 27, March 1999.
[12] Louisiana Task Force on Teen Pregnancy. Consequences of Adolescent Pregnancy, p. 28, March 1999.

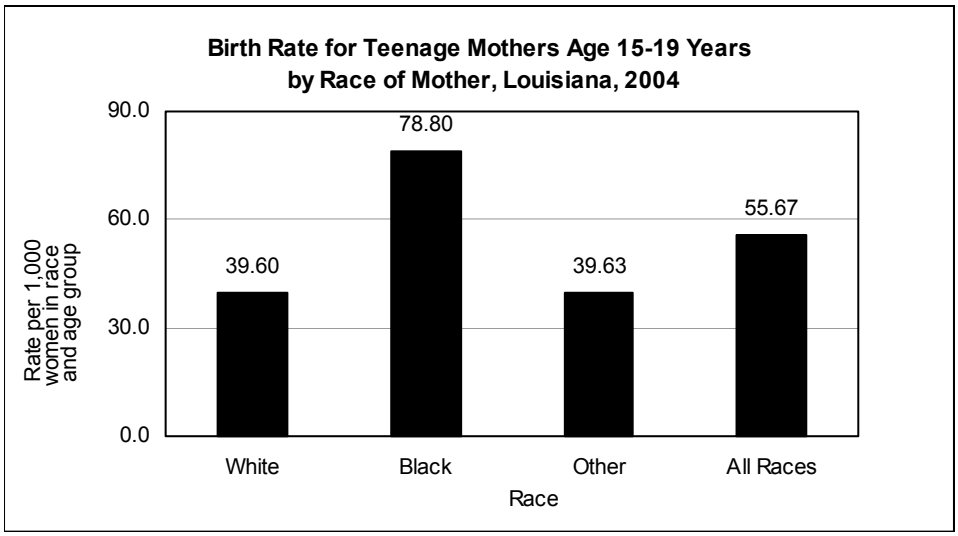
The following table shows teen birth rates for women aged 15-19 years in Louisiana and neighboring states. Louisiana has consistently ranked among the top ten states in terms of rate of live births to teens. In the year 2004, Louisiana had the 6th highest rate of live births to teens aged 15-19 in the nation, ranking lower than Mississippi, Texas and Arkansas which were all in the top five.

Rate of Live Births to Teenage Mothers aged 15-19 Years
Louisiana, Neighboring States, and United States, 2004

State	Rate per 1,000 Live Births	National Ranking
Alabama	53.4	9
Arkansas	61.5	4
Louisiana	57.5	6
Mississippi	63.6	2
Texas	64.2	1
United States	42.0	-

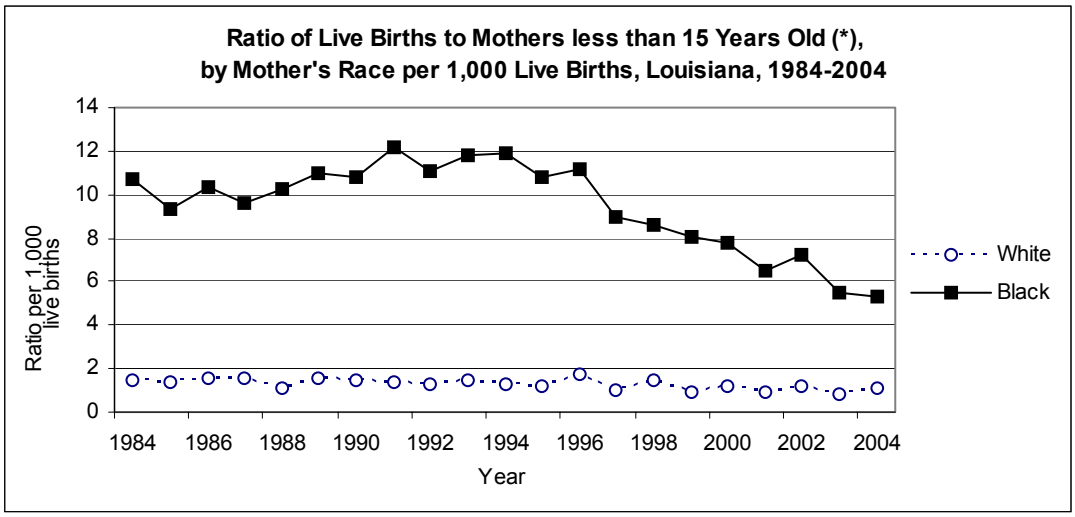
Source: Morgan, K.O. and Morgan, S (Editors) 2006. Health Care State Rankings 2006: Health Care in the 50 United States. (14th Ed.): Morgan Quitno Press, Lawrence, KS.

To make meaningful comparisons of births among teens in different race groups, teen birth rates have been calculated by relating the number of teen births in each race group, to the total number of teen women in the same age-race group. In Louisiana, the birth rate for black teenagers aged 15-19 in 2004 (78.80) was nearly twice than that of white teenagers (39.60) and teenagers of other race (39.63), of that same age group, as illustrated in the following graph.



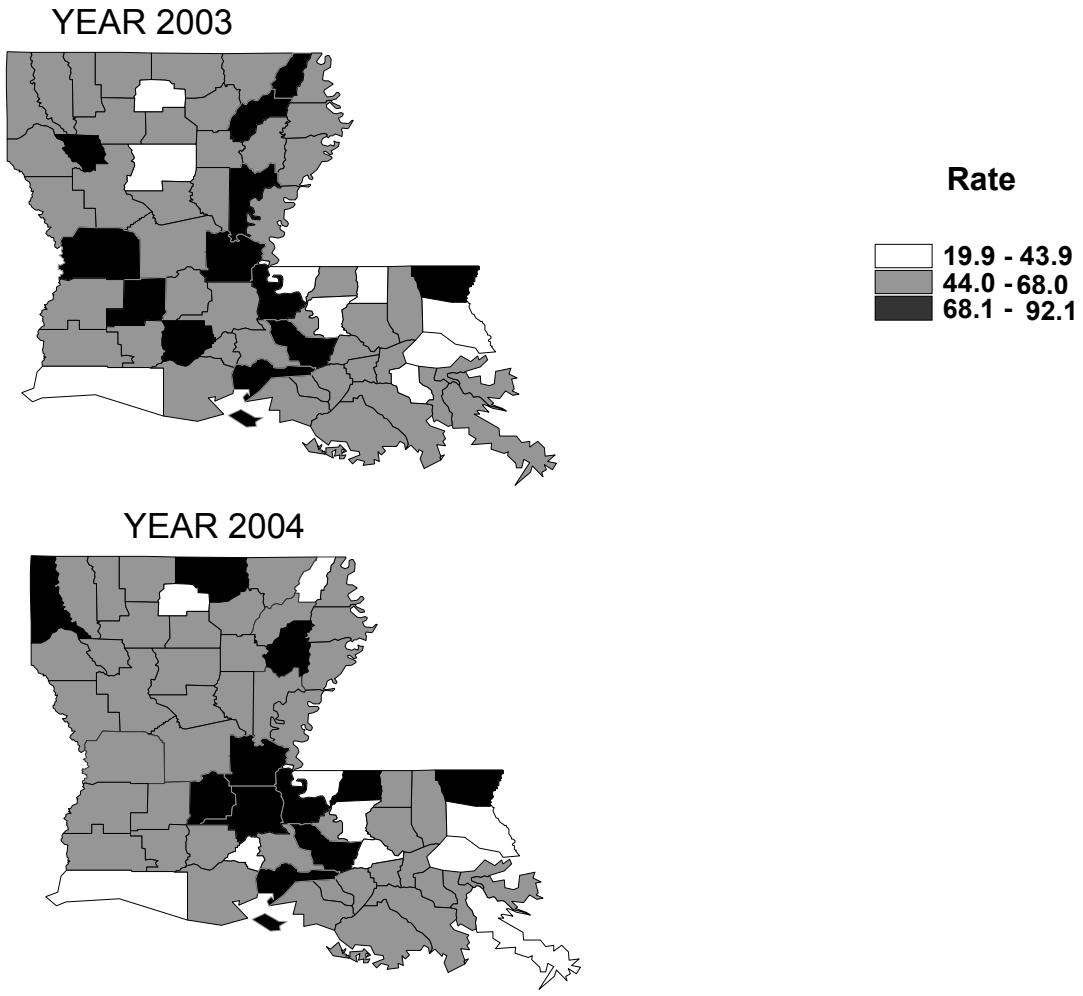
Source: Louisiana State Center for Health Statistics

While this chapter has focused on births to teenage mothers aged 15-19 years, it is important to note that live births do occur among women aged less than 15. There is a great racial disparity in the proportion of women giving birth to live infants when younger than 15 years of age. Black women are historically more likely than white women to conceive and deliver an infant before turning 15 years old as illustrated in the following graph.



Source: Louisiana State Center for Health Statistics (*) Mothers aged less than 8 years are not included in the count

Teen birth rate per 1,000 women 15-19
Louisiana, 2003- 2004



Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2004					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 2000 - 2004	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Louisiana	64956	80.98	10.64	14.42	14.71
White	36848	87.49	7.72	10.28	10.39
Black	26522	71.78	14.78	20.50	21.06
Other	1586	83.78	8.63	9.02	9.02
Acadia	916	65.52	11.22	16.38	16.70
White	699	70.13	8.76	14.45	14.45
Black	212	50.24	19.23	23.11	24.53
Other	5	80.00	14.29	0.00	0.00
Allen	344	85.88	11.12	15.70	15.99
White	248	90.20	9.13	14.52	14.52
Black	70	75.36	17.56	22.86	24.29
Other	26	73.08	14.75	7.69	7.69
Ascension	1470	84.65	8.78	8.98	9.18
White	1110	89.97	7.25	6.49	6.58
Black	349	67.54	13.79	17.19	17.77
Other	11	90.91	3.23	0.00	0.00
Assumption	266	74.43	10.99	18.42	18.80
White	133	85.50	7.92	14.29	15.04
Black	131	62.79	14.55	22.90	22.90
Other	****	100.00	25.00	0.00	0.00
Avoyelles	593	82.50	10.73	20.57	21.08
White	356	87.71	7.59	15.73	16.01
Black	227	74.11	16.02	27.75	28.63
Other	10	88.89	10.67	30.00	30.00
Beauregard	458	70.04	7.40	15.50	15.72
White	391	73.26	6.44	15.86	16.11
Black	54	50.00	12.20	12.96	12.96
Other	13	53.85	11.90	15.38	15.38
Bienville	192	83.87	11.55	15.10	15.63
White	103	85.00	10.00	12.62	13.59
Black	89	82.56	13.44	17.98	17.98
Other	0	0.00	0.00	**	**
Bossier	1617	80.71	9.92	12.43	12.68
White	1163	86.03	7.95	9.80	9.89
Black	420	65.77	15.69	20.48	21.19
Other	34	82.35	5.49	2.94	2.94
Caddo	3684	76.16	12.63	17.35	17.86
White	1552	86.76	8.40	10.05	10.24
Black	2067	67.94	15.83	23.17	23.95
Other	65	86.89	10.98	6.15	6.15
Calcasieu	2705	90.89	9.77	14.42	14.53
White	1849	93.48	7.82	11.90	12.06
Black	818	84.84	14.37	20.29	20.29
Other	38	94.74	5.33	10.53	10.53

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2004					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 2000 - 2004	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Caldwell	139	86.96	8.01	14.39	15.11
White	119	88.24	7.24	12.61	13.45
Black	19	77.78	11.65	26.32	26.32
Other	****	100.00	20.00	0.00	0.00
Cameron	94	91.40	8.28	13.83	13.83
White	89	92.05	7.69	13.48	13.48
Black	5	80.00	20.00	20.00	20.00
Other	0	0.00	0.00	**	**
Catahoula	112	72.48	13.30	16.07	16.07
White	76	86.49	9.93	11.84	11.84
Black	36	42.86	19.56	25.00	25.00
Other	0	0.00	0.00	**	**
Claiborne	167	78.92	9.93	17.96	18.56
White	75	86.49	6.54	8.00	8.00
Black	91	72.53	12.69	26.37	27.47
Other	****	100.00	0.00	0.00	0.00
Concordia	178	63.28	17.19	19.10	19.66
White	71	87.32	14.58	11.27	11.27
Black	106	47.62	19.54	24.53	25.47
Other	****	0.00	8.33	0.00	0.00
DeSoto	366	75.41	12.43	15.03	15.57
White	202	84.42	9.62	12.38	12.38
Black	160	64.15	15.24	18.13	19.38
Other	****	75.00	25.00	25.00	25.00
E. Baton Rouge	5716	80.05	11.32	12.30	12.61
White	2370	88.79	7.45	6.29	6.37
Black	3152	73.31	14.53	17.32	17.83
Other	194	82.90	9.12	4.12	4.12
East Carroll	144	61.70	12.62	13.19	13.89
White	32	90.63	9.23	12.50	12.50
Black	112	53.21	13.37	13.39	14.29
Other	0	0.00	0.00	**	**
E. Feliciana	255	86.85	9.64	19.22	19.22
White	134	94.74	7.58	17.16	17.16
Black	118	78.26	11.76	22.03	22.03
Other	****	66.67	28.57	0.00	0.00
Evangeline	536	83.99	13.03	18.84	18.84
White	352	87.61	10.67	16.19	16.19
Black	181	76.80	17.72	24.31	24.31
Other	****	100.00	14.29	0.00	0.00
Franklin	295	68.73	11.66	24.41	24.41
White	158	80.25	8.86	17.72	17.72
Black	136	54.89	15.04	32.35	32.35
Other	****	100.00	0.00	0.00	0.00

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2004					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 2000 - 2004	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Grant	234	88.70	9.70	17.95	17.95
White	203	91.96	9.70	17.24	17.24
Black	29	65.52	10.46	20.69	20.69
Other	****	100.00	0.00	50.00	50.00
Iberia	1109	66.42	10.06	17.94	18.30
White	598	75.97	6.79	12.37	12.37
Black	481	55.01	14.68	25.16	25.99
Other	30	56.67	8.43	13.33	13.33
Iberville	458	72.31	11.70	16.81	17.25
White	183	84.44	9.15	8.20	8.74
Black	272	64.34	13.55	22.43	22.79
Other	****	66.67	0.00	33.33	33.33
Jackson	189	81.62	9.04	15.34	15.34
White	133	86.82	6.12	15.79	15.79
Black	54	68.52	15.29	14.81	14.81
Other	****	100.00	0.00	0.00	0.00
Jefferson	6278	84.78	9.45	11.83	12.03
White	3729	89.35	7.20	8.45	8.58
Black	2246	76.98	13.48	18.34	18.66
Other	303	86.24	7.94	5.28	5.28
Jefferson Davis	462	73.39	10.93	11.69	12.55
White	368	77.65	9.29	10.60	10.87
Black	91	55.56	17.52	16.48	19.78
Other	****	100.00	4.76	0.00	0.00
Lafayette	2972	85.76	9.12	10.50	10.63
White	1958	91.82	6.64	6.59	6.64
Black	944	72.70	14.40	18.75	19.07
Other	70	94.12	6.73	8.57	8.57
Lafourche	1203	80.62	9.94	13.88	13.97
White	919	82.56	8.26	11.53	11.53
Black	240	73.84	15.72	21.67	22.08
Other	44	77.27	10.85	20.45	20.45
LaSalle	162	90.68	8.11	14.81	14.81
White	142	94.33	6.20	11.97	11.97
Black	16	56.25	22.32	31.25	31.25
Other	****	100.00	0.00	50.00	50.00
Lincoln	534	78.37	9.70	14.98	14.98
White	282	88.85	6.36	9.93	9.93
Black	239	66.10	13.72	21.34	21.34
Other	13	76.92	4.00	7.69	7.69
Livingston	1625	87.40	8.24	12.43	12.68
White	1537	87.86	7.84	12.17	12.36
Black	81	77.50	15.62	18.52	19.75
Other	7	100.00	5.41	0.00	0.00

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2004					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 2000 - 2004	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Madison	111	70.27	16.76	24.32	25.23
White	33	93.94	15.15	6.06	6.06
Black	77	59.74	17.33	32.47	33.77
Other	****	100.00	0.00	0.00	0.00
Morehouse	415	78.54	12.06	17.35	17.83
White	177	88.57	8.96	12.99	12.99
Black	236	70.82	14.61	20.34	21.19
Other	****	100.00	9.09	50.00	50.00
Natchitoches	581	74.91	10.97	18.24	18.59
White	271	79.70	7.25	14.02	14.39
Black	306	70.67	14.09	22.22	22.55
Other	****	75.00	20.00	0.00	0.00
Orleans	6838	78.19	13.36	16.82	17.17
White	1334	91.05	7.49	3.00	3.00
Black	5319	74.68	14.93	20.77	21.23
Other	185	86.49	7.56	2.70	2.70
Ouachita	2336	80.38	11.25	13.96	14.51
White	1238	89.94	7.82	9.13	9.13
Black	1061	68.98	15.38	19.89	21.11
Other	37	86.49	10.08	5.41	5.41
Plaquemines	441	83.52	8.17	9.07	9.30
White	298	87.12	6.47	8.72	9.06
Black	111	71.82	12.03	12.61	12.61
Other	32	90.63	7.80	0.00	0.00
Pointe Coupee	297	77.13	12.96	19.19	19.53
White	150	90.54	8.74	10.00	10.00
Black	147	63.45	17.31	28.57	29.25
Other	0	0.00	0.00	**	**
Rapides	1878	88.48	10.61	16.08	16.19
White	1081	93.90	7.85	12.86	12.86
Black	767	80.50	14.90	20.99	21.25
Other	30	96.67	8.44	6.67	6.67
Red River	139	73.72	9.55	16.55	16.55
White	58	84.21	7.16	17.24	17.24
Black	79	65.38	11.80	16.46	16.46
Other	****	100.00	0.00	0.00	0.00
Richland	289	81.47	11.30	15.92	16.96
White	151	89.26	7.11	11.26	11.92
Black	134	72.18	15.31	20.90	22.39
Other	****	100.00	33.33	25.00	25.00
Sabine	336	76.52	9.78	15.77	15.77
White	221	81.19	7.47	12.22	12.22
Black	88	63.86	15.12	22.73	22.73
Other	27	77.78	14.84	22.22	22.22

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2004					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 2000 - 2004	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
St. Bernard	886	88.77	10.02	15.35	15.35
White	709	91.27	9.16	13.96	13.96
Black	154	76.82	15.17	22.73	22.73
Other	23	91.30	10.91	8.70	8.70
St. Charles	719	82.53	8.99	13.63	13.91
White	459	89.09	6.67	9.80	9.80
Black	253	70.16	13.48	20.55	21.34
Other	7	100.00	10.26	14.29	14.29
St. Helena	100	72.45	11.09	19.00	19.00
White	36	79.41	8.72	19.44	19.44
Black	64	68.75	12.61	18.75	18.75
Other	0	0.00	0.00	**	**
St. James	309	73.93	11.77	15.86	16.18
White	122	83.33	8.26	8.20	8.20
Black	187	67.76	14.19	20.86	21.39
Other	0	0.00	0.00	**	**
St. John	712	78.92	10.50	16.29	16.57
White	323	87.23	7.32	9.60	9.60
Black	381	71.31	13.50	22.05	22.57
Other	8	100.00	3.51	12.50	12.50
St. Landry	1379	71.63	11.23	20.09	20.38
White	665	81.94	7.98	15.19	15.49
Black	710	61.91	14.61	24.79	25.07
Other	****	75.00	2.70	0.00	0.00
St. Martin	701	78.58	10.89	14.41	14.98
White	405	87.44	8.72	12.35	12.35
Black	283	65.36	13.93	17.67	19.08
Other	13	92.31	15.69	7.69	7.69
St. Mary	758	78.43	10.65	17.55	18.21
White	441	83.75	8.03	14.97	15.19
Black	291	69.79	15.02	22.34	23.71
Other	26	84.62	7.14	7.69	7.69
St. Tammany	2953	87.29	7.96	9.28	9.41
White	2450	89.35	7.09	8.00	8.08
Black	453	77.88	12.78	15.89	16.34
Other	50	71.43	10.20	12.00	12.00
Tangipahoa	1607	79.97	10.23	14.93	15.37
White	938	86.44	6.83	10.23	10.34
Black	658	70.75	15.18	21.88	22.80
Other	11	81.82	14.75	0.00	0.00
Tensas	82	60.00	12.00	13.41	13.41
White	23	90.91	10.66	4.35	4.35
Black	58	47.37	12.35	17.24	17.24
Other	****	100.00	25.00	0.00	0.00

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2004					
Parish	Total Births	Percent with Adequate Prenatal Care+	Percent Low Weight Births (<5lbs, 8oz) 2000 - 2004	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Terrebonne	1716	84.54	10.67	15.44	15.56
White	1235	86.10	8.72	12.31	12.39
Black	323	80.25	17.98	21.98	22.29
Other	158	81.01	9.47	26.58	26.58
Union	317	78.78	8.70	16.72	17.98
White	203	84.58	7.37	12.81	13.30
Black	112	68.52	11.58	24.11	26.79
Other	****	50.00	0.00	0.00	0.00
Vermilion	806	86.58	9.37	13.15	13.28
White	618	88.63	7.78	10.36	10.52
Black	172	79.64	15.50	24.42	24.42
Other	16	81.25	7.63	0.00	0.00
Vernon	885	69.21	7.23	10.62	10.73
White	675	70.15	6.12	10.96	11.11
Black	169	66.87	11.26	9.47	9.47
Other	41	63.41	6.81	9.76	9.76
Washington	607	83.33	10.98	20.43	20.76
White	382	91.25	8.58	18.59	18.59
Black	222	69.16	14.78	23.42	24.32
Other	****	100.00	0.00	33.33	33.33
Webster	508	81.51	12.33	19.69	20.08
White	329	86.81	9.55	16.72	16.72
Black	177	71.43	16.84	25.42	26.55
Other	****	100.00	25.00	0.00	0.00
W. Baton Rouge	331	81.85	11.02	13.29	13.90
White	198	87.11	8.36	11.11	11.11
Black	131	74.42	15.16	16.79	18.32
Other	****	50.00	0.00	0.00	0.00
West Carroll	130	89.06	10.26	6.15	6.15
White	109	92.52	8.50	6.42	6.42
Black	21	71.43	17.61	4.76	4.76
Other	0	0.00	0.00	**	**
W. Feliciana	113	87.27	9.59	8.85	8.85
White	57	90.91	6.65	7.02	7.02
Black	56	83.64	12.80	10.71	10.71
Other	0	0.00	0.00	**	**
Winn	203	80.20	10.30	14.29	14.78
White	125	85.83	6.87	8.00	8.00
Black	76	70.67	16.39	23.68	25.00
Other	****	100.00	0.00	50.00	50.00

+According to modified Kessner index.
****Counts less than 5 and greater than 0.
** Cell count is 0 in total count of live births by residence in all age group (Denominator) and total count of live births in 15-19 & < 20 years age category (Numerator)
Source: Louisiana State Center for Health Statistics.

C. DEATHS

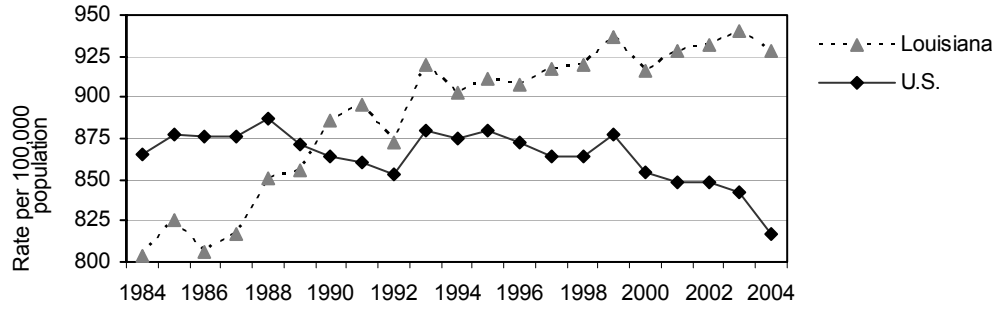
Death Counts and Crude Mortality Rates

There were 41,942 deaths among Louisiana residents in 2004, representing a decrease from 42,297 deaths in 2002. In 2004, there were 28,594 (68.2%) deaths among whites, 13,087 (31.2%) among blacks, and 261 (0.6%) among other races. Among age groups there were 21.4% deaths in the age group 45-64 years, 44.5% in the age group 65-84 years and 22.5% among those who were 85 years and older.

Crude (unadjusted) death rates are useful for examining the overall mortality in an area or population group, since they utilize total population and do not account for any population attributes. In Louisiana, the crude death rate slightly increased from 940.7 per 100,000 population in 2003 to 928.8 per 100,000 population in 2004.

The United States death rate in 2004 was 816.7 per 1,000 population in comparison with 841.9 per 1,000 population in 2003.

Figure 5.2 Crude Death Rates
Louisiana and United States, 1984-2004



Source: Louisiana State Center for Health Statistics
National Center for Health Statistics Preliminary Data 2004

Crude death rates also give an estimate of the overall mortality for a population, because they measure deaths in the population as a whole. Adjusted rates (also called standardized rates) are derived from statistical procedures that adjust for differences in population composition, such as age, race, or sex, which can increase or decrease the likelihood of death in one or more of the populations being considered. Because age-adjusted death rates control for the variations in age structures of populations, they make comparisons between mortality rates of different populations meaningful. However, the age-adjusted mortality measure is not a true estimation of the death rate as the crude mortality rate is, and it should not be used in comparisons with crude mortality rates. Differences in age-adjusted rates in two different populations may reflect an actual difference in death rates in the two populations, or may be due to other factors, such as race or sex, which were not taken into account when the adjustments for age were made. In the table below, crude rates for 2004 are preliminary.

Mortality Rates
Louisiana, Neighboring States, and United States, 2004

State	Crude Rate*	Age-Adjusted Rate**
Alabama	1,017.9	992.3
Arkansas	1,000.5	925.2
Louisiana	936.8	988.1
Mississippi	960.1	998.1
Texas	680.4	836.5
United States	816.7	801.0

*Rate per 100,000 population, preliminary data 2004. **Rate per 100,000 U.S. Standard population 2000.

Source: National Center for Health Statistics, National Vital Statistics Reports Vol. 54, No 19, Preliminary Death Data 2004)

Number of Deaths by Age Group and Sex
Louisiana, 2004

Sex	Age Group								
	Under 5	5-14	15-24	25-44	45-64	65-84	85+	Unknown	Total
Male	420	104	689	1904	5469	9469	3031	2	21088
Female	383	74	200	1040	3526	9214	6417	0	20854
Total	803	178	889	2944	8995	18683	9448	2	41942

Source: Louisiana State Center for Health Statistics

Number and Rate of Deaths by Race-Sex, Age Group, and Parish
Louisiana, 2004

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
State Total	41942	9.3	ALL	678	125	72	106	329	560	1076	1868	3742	5253	7412	11271	9448	****
	14042		WM	157	19	16	33	141	209	375	691	1322	1858	2825	4064	2330	****
	14552		WF	125	34	22	25	55	69	177	373	741	1308	2197	4425	5001	-
	6895		BM	204	35	24	30	105	223	356	456	1017	1225	1276	1264	680	-
	6192		BF	186	36	9	16	20	51	151	326	630	823	1067	1484	1393	-
	151		OM	****	-	-	****	****	****	11	15	20	27	23	17	21	-
	110		OF	****	****	****	****	****	****	6	7	12	12	24	17	23	-
Acadia	600	10.1	ALL	8	****	****	****	****	10	16	23	44	84	125	154	130	-
	238		WM	****	-	-	****	****	5	9	11	25	40	53	60	30	-
	248		WF	****	****	-	-	-	-	****	7	9	23	46	70	86	-
	64		BM	****	****	****	-	****	****	****	****	****	12	17	9	5	-
	50		BF	****	-	-	-	-	****	-	****	****	9	9	15	9	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Allen	241	9.5	ALL	****	****	****	-	****	****	****	11	15	37	45	69	49	-
	109		WM	****	****	****	-	****	-	****	6	5	18	25	35	14	-
	85		WF	****	****	****	-	****	-	****	****	****	10	13	25	25	-
	19		BM	-	-	-	-	-	****	****	****	****	5	****	****	****	-
	24		BF	-	-	-	-	-	-	-	****	****	****	****	****	****	-
	****		OM	-	-	-	-	-	-	-	-	****	****	****	-	-	-
	****		OF	-	-	-	-	-	-	-	-	-	****	-	-	-	-
Ascension	543	6.2	ALL	11	5	****	****	6	8	19	26	59	72	96	137	99	-
	214		WM	****	-	-	****	****	5	8	11	23	37	41	49	33	-
	191		WF	****	****	-	-	****	-	****	7	11	19	33	65	46	-
	84		BM	****	****	****	****	****	****	6	****	16	9	11	15	9	-
	54		BF	****	****	-	-	-	****	****	****	9	7	11	8	11	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race-Sex, Age Group, and Parish
Louisiana, 2004

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Assumption	194	8.3	ALL	****	-	****	****	-	5	****	11	17	33	31	46	42	-
	60		WM	****	-	-	-	-	****	****	5	****	9	11	15	12	-
	61		WF	****	-	****	****	-	****	-	****	****	****	11	16	20	-
	43		BM	****	-	-	-	-	****	****	****	6	14	7	7	****	-
	30		BF	****	-	-	-	-	-	****	****	****	****	****	8	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Avoyelles	501	11.8	ALL	7	****	****	****	5	8	8	21	37	57	85	140	130	-
	183		WM	-	-	****	-	****	5	6	8	17	19	36	53	35	-
	191		WF	****	-	-	****	-	-	-	8	5	20	26	58	70	-
	72		BM	****	-	-	-	-	****	****	****	8	13	18	****	12	-
	53		BF	****	****	-	-	****	****	-	****	7	5	****	15	13	-
	****		OM	-	-	-	-	-	-	-	-	-	-	-	****	-	-
	****		OF	-	-	-	-	-	-	-	-	-	-	****	-	-	-
Beauregard	328	9.8	ALL	6	****	****	****	****	****	13	18	32	39	52	79	77	-
	146		WM	****	****	-	****	****	****	8	8	13	19	33	34	19	-
	139		WF	****	****	****	-	-	****	5	6	9	13	****	33	51	-
	25		BM	****	-	-	-	-	-	-	****	****	5	****	6	****	-
	16		BF	-	****	-	-	-	-	-	****	6	****	-	****	****	-
	****		OM	-	-	-	-	-	-	-	-	-	-	-	****	-	-
	****		OF	-	-	-	-	-	-	-	-	-	****	-	-	-	-
Bienville	232	14.8	ALL	****	-	-	-	-	****	****	7	17	22	40	58	82	-
	67		WM	-	-	-	-	-	-	****	****	****	8	13	17	22	-
	80		WF	-	-	-	-	-	-	-	****	****	****	18	18	34	-
	****		BM	****	-	-	-	-	****	-	-	7	****	****	11	6	-
	48		BF	-	-	-	-	-	-	****	****	****	5	****	12	20	-
	****		OM	-	-	-	-	-	-	-	-	-	****	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bossier	825	7.9	ALL	13	****	****	****	8	13	21	26	73	99	191	212	164	-
	347		WM	5	-	****	****	5	8	13	10	33	43	100	80	47	-
	335		WF	****	-	-	-	****	****	****	8	24	31	66	103	95	-
	68		BM	****	****	-	-	****	****	****	****	8	13	12	12	6	-
	71		BF	****	****	-	-	****	-	-	****	7	****	****	17	16	-
	****		OM	-	-	-	-	-	-	-	-	-	****	-	-	-	-
	****		OF	-	-	-	-	-	****	-	-	****	-	****	-	-	-
Caddo	2623	10.3	ALL	52	****	****	6	22	27	53	90	230	330	451	708	645	-
	759		WM	7	****	-	****	6	13	17	31	56	90	144	251	141	-
	836		WF	****	-	-	****	****	****	****	9	38	77	108	272	316	-
	512		BM	21	****	****	****	11	10	24	20	83	94	114	****	59	-
	511		BF	21	****	****	****	****	****	8	30	53	****	****	114	129	-
	****		OM	-	-	-	-	-	-	-	-	-	****	-	-	-	-
	****		OF	-	-	-	-	-	-	-	-	-	-	****	****	-	-
Calcasieu	1812	9.8	ALL	****	5	****	5	6	18	53	76	150	229	327	481	444	-
	662		WM	6	****	-	****	5	9	18	35	71	89	126	183	117	-
	740		WF	****	-	****	****	****	5	13	19	32	76	118	205	266	-
	209		BM	****	-	-	****	-	****	15	10	24	44	48	****	20	-
	195		BF	5	****	-	****	-	****	7	12	23	20	34	49	39	-
	****		OM	-	-	-	-	-	-	-	-	-	-	-	****	****	-
	****		OF	-	-	-	-	-	****	-	-	-	-	****	-	****	-
Caldwell	126	11.8	ALL	-	-	-	-	****	****	****	****	12	15	29	29	32	-
	58		WM	-	-	-	-	-	-	****	****	8	8	20	9	10	-
	49		WF	-	-	-	-	****	****	****	****	****	****	7	15	16	-
	8		BM	-	-	-	-	-	-	-	****	****	****	****	****	****	-
	11		BF	-	-	-	-	-	-	-	-	-	****	****	****	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cameron	81	8.4	ALL	****	-	-	-	-	-	-	****	****	20	21	15	18	-
	42		WM	****	-	-	-	-	-	-	****	****	****	13	8	****	-
	34		WF	-	-	-	-	-	-	-	****	-	11	6	****	10	-
	****		BM	-	-	-	-	-	-	-	-	-	****	****	-	****	-
	****		BF	-	-	-	-	-	-	-	-	-	-	****	****	-	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race-Sex, Age Group, and Parish
Louisiana, 2004

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Catahoula	127	12.1	ALL	****	-	****	****	-	-	****	8	15	9	21	37	30	-
	51		WM	****	-	-	****	-	-	****	****	6	****	12	14	10	-
	42		WF	-	-	-	-	-	-	-	****	****	****	****	16	12	-
	21		BM	****	-	****	-	-	-	****	****	****	****	****	****	****	-
	13		BF	-	-	-	-	-	-	-	****	****	****	****	****	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Claiborne	184	11.4	ALL	****	****	-	-	****	****	****	****	8	22	32	53	56	-
	38		WM	-	-	-	-	-	-	****	****	****	****	7	11	****	-
	66		WF	-	-	-	-	-	****	-	****	****	7	10	19	26	-
	38		BM	****	****	-	-	****	****	-	-	****	8	6	12	****	-
	42		BF	****	-	-	-	-	-	****	-	****	****	9	11	17	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concordia	196	10.1	ALL	****	****	-	-	****	****	****	11	12	32	32	56	42	****
	74		WM	****	-	-	-	-	****	****	****	7	10	16	20	11	****
	50		WF	-	-	-	-	-	-	-	****	****	6	9	20	11	-
	38		BM	-	****	-	-	-	-	-	****	****	7	****	10	8	-
	34		BF	****	-	-	-	****	-	-	****	-	9	****	6	12	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DeSoto	271	10.5	ALL	****	-	****	****	****	****	7	12	19	38	38	76	73	-
	85		WM	-	-	-	-	-	-	****	****	7	13	16	26	17	-
	62		WF	-	-	-	****	-	-	****	-	****	5	5	22	25	-
	66		BM	****	-	****	-	****	****	****	7	9	11	11	11	10	-
	58		BF	****	-	-	-	-	****	-	****	****	9	6	17	21	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E. Baton Rouge	3344	8.0	ALL	64	14	****	8	18	50	99	149	321	372	543	938	765	-
	921		WM	8	****	-	-	9	10	21	28	72	105	193	299	175	-
	1040		WF	8	****	****	****	-	5	12	22	53	72	127	348	389	-
	703		BM	26	****	****	****	9	29	44	53	111	112	124	126	60	-
	661		BF	21	7	****	****	-	****	22	46	82	83	94	161	136	-
	9		OM	****	-	-	-	-	****	-	-	****	-	****	****	****	-
	10		OF	-	-	-	-	-	-	-	-	****	-	****	****	****	-
East Carroll	102	11.4	ALL	****	-	-	-	****	-	****	7	****	14	21	20	31	-
	25		WM	-	-	-	-	****	-	-	****	-	****	6	7	5	-
	11		WF	-	-	-	-	-	-	-	-	-	-	****	****	5	-
	26		BM	****	-	-	-	****	-	****	****	****	****	****	5	8	-
	40		BF	-	-	-	-	-	-	****	****	****	6	10	****	13	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E. Feliciana	241	11.5	ALL	****	-	****	-	-	****	5	18	20	35	46	55	56	-
	78		WM	****	-	****	-	-	-	****	6	****	15	16	20	13	-
	60		WF	****	-	-	-	-	****	****	****	****	8	9	15	22	-
	64		BM	****	-	-	-	-	-	****	7	10	****	14	15	8	-
	39		BF	****	-	-	-	-	-	****	****	****	****	7	5	13	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Evangeline	403	11.4	ALL	****	****	****	****	****	****	****	20	36	54	74	100	98	-
	146		WM	****	-	****	****	****	****	****	8	13	20	34	37	25	-
	167		WF	-	****	****	****	****	-	****	6	7	15	26	49	59	-
	47		BM	****	-	****	****	-	****	-	6	5	12	8	8	****	-
	43		BF	****	-	-	-	-	-	****	-	11	7	6	6	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Franklin	264	12.9	ALL	-	****	****	-	****	****	5	5	22	24	53	68	80	-
	81		WM	-	-	-	-	****	-	****	-	6	6	25	24	17	-
	101		WF	-	-	-	-	-	-	****	****	8	8	11	29	41	-
	35		BM	-	****	****	-	****	****	****	-	****	****	7	5	6	-
	47		BF	-	****	-	-	-	-	-	****	****	****	10	10	16	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race-Sex, Age Group, and Parish
Louisiana, 2004

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Grant	194	10.4	ALL	5	****	****	-	****	-	****	8	12	18	28	64	51	-
	80		WM	****	****	-	-	****	-	****	****	****	****	11	27	20	-
	91		WF	****	-	-	-	-	-	****	****	6	9	14	31	25	-
	10		BM	-	-	-	-	-	-	****	****	****	****	****	****	****	-
	13		BF	****	-	****	-	-	-	-	-	-	-	****	****	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Iberia	644	8.7	ALL	8	****	****	****	9	10	21	31	44	92	120	141	163	-
	209		WM	-	-	-	-	****	****	6	****	13	27	54	58	37	-
	235		WF	****	****	-	****	****	****	****	9	12	31	32	51	92	-
	104		BM	****	-	-	****	****	****	8	9	10	20	19	****	****	-
	89		BF	****	****	****	-	****	****	****	****	****	14	****	17	20	-
	****		OM	-	-	-	-	-	-	****	-	****	-	****	-	-	-
	****		OF	-	-	-	-	-	-	-	-	-	-	-	****	****	-
Iberville	343	10.5	ALL	****	****	-	-	****	****	7	17	32	55	64	88	67	-
	101		WM	****	-	-	-	****	-	****	7	10	12	22	25	19	-
	83		WF	-	-	-	-	****	****	-	****	****	10	16	28	22	-
	81		BM	-	****	-	-	-	****	****	****	10	22	14	18	8	-
	78		BF	****	****	-	-	****	-	****	5	****	11	12	17	18	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jackson	193	12.4	ALL	****	-	-	****	****	****	****	5	13	24	32	50	62	-
	71		WM	-	-	-	-	****	-	****	****	****	10	14	15	23	-
	69		WF	****	-	-	-	-	****	****	****	****	****	10	21	27	-
	28		BM	-	-	-	****	-	-	-	****	****	7	****	6	****	-
	25		BF	-	-	-	-	-	-	-	****	****	****	****	8	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jefferson	4106	9.0	ALL	70	6	6	8	33	51	102	188	344	458	731	1177	932	-
	1620		WM	17	****	****	****	12	22	37	77	142	198	336	506	268	-
	1681		WF	18	****	****	****	****	7	19	43	83	133	251	541	576	-
	416		BM	18	-	****	****	13	20	29	43	65	64	79	62	18	-
	327		BF	17	****	-	-	****	****	13	15	48	58	54	62	53	-
	33		OM	-	-	-	-	-	-	****	****	****	****	6	****	7	-
	29		OF	-	-	****	****	****	-	****	****	****	****	5	****	10	-
Jefferson Davis	319	10.3	ALL	****	-	****	****	****	****	****	14	31	35	69	99	61	-
	133		WM	****	-	-	-	****	-	****	8	13	17	32	42	****	-
	137		WF	****	-	-	****	-	-	****	****	10	11	23	45	41	-
	24		BM	-	-	****	-	-	-	-	****	****	****	7	5	-	-
	25		BF	-	-	-	-	****	****	-	****	****	****	7	7	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lafayette	1420	7.3	ALL	28	9	****	****	9	17	25	70	143	180	238	387	308	-
	519		WM	6	****	****	****	6	12	11	27	51	71	102	147	82	-
	563		WF	9	****	****	****	-	****	****	24	30	53	76	174	188	-
	163		BM	6	****	-	-	****	****	7	11	36	34	****	****	****	-
	166		BF	7	****	-	****	****	****	****	8	24	****	33	37	26	-
	****		OM	-	-	-	-	-	-	****	-	****	****	-	-	-	-
	6		OF	-	-	-	-	-	-	****	-	****	-	****	****	****	-
Lafourche	700	7.6	ALL	9	****	-	-	9	15	12	34	59	76	107	222	153	-
	324		WM	****	****	-	-	7	8	6	18	33	37	79	101	52	-
	294		WF	****	****	-	-	-	****	****	12	18	26	37	101	91	-
	41		BM	****	****	-	-	-	****	-	****	****	****	5	****	5	-
	33		BF	****	-	-	-	-	****	****	****	****	****	****	11	5	-
	****		OM	****	-	-	-	****	****	-	-	-	-	-	****	-	-
	****		OF	-	-	-	-	-	-	****	-	-	-	****	-	-	-
LaSalle	176	12.4	ALL	****	-	-	-	****	****	****	****	15	22	31	45	52	-
	77		WM	-	-	-	-	****	****	****	****	8	12	17	21	****	-
	88		WF	-	-	-	-	-	-	****	****	****	8	****	22	37	-
	****		BM	****	-	-	-	-	-	-	-	-	****	-	****	-	-
	****		BF	-	-	-	-	-	-	-	-	****	****	****	****	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race-Sex, Age Group, and Parish
Louisiana, 2004

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Lincoln	360	8.3	ALL	7	****	-	****	****	6	11	15	25	38	61	90	101	-
	90		WM	****	****	-	-	****	****	****	9	****	9	16	24	18	-
	137		WF	****	-	-	****	****	-	****	****	9	12	21	33	53	-
	58		BM	****	-	-	-	-	****	****	****	7	6	12	13	9	-
	75		BF	****	****	-	-	-	****	****	****	****	11	12	20	21	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Livingston	725	7.1	ALL	18	****	****	-	6	9	22	32	88	111	139	183	111	-
	347		WM	13	****	-	-	****	6	12	19	51	47	73	92	31	-
	332		WF	****	****	****	-	****	****	****	9	31	57	57	85	71	-
	28		BM	****	****	-	-	-	****	****	****	****	****	****	****	****	-
	16		BF	-	-	-	-	-	-	-	****	****	****	****	****	****	-
	****		OM	-	-	-	-	-	-	-	-	-	****	-	-	-	-
	****		OF	-	-	-	-	-	-	-	-	****	-	-	-	-	-
Madison	156	12.0	ALL	****	****	****	-	-	****	****	8	12	19	36	21	45	-
	32		WM	****	-	****	-	-	-	****	****	****	****	7	****	10	-
	42		WF	****	-	-	-	-	-	-	****	****	-	12	7	18	-
	49		BM	****	****	-	-	-	****	****	****	****	10	12	7	9	-
	33		BF	****	****	-	-	-	****	-	****	****	****	5	****	8	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morehouse	387	12.8	ALL	9	****	****	****	****	****	9	18	29	32	75	117	92	-
	126		WM	-	-	-	-	****	-	****	7	10	16	27	41	20	-
	121		WF	****	-	-	-	-	-	****	****	5	****	22	41	45	-
	****		BM	****	****	-	****	-	****	****	7	8	****	11	18	10	-
	70		BF	6	-	****	-	-	-	-	****	6	7	15	17	17	-
	****		OM	-	-	-	-	-	-	-	****	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Natchitoches	382	9.7	ALL	6	****	-	-	****	****	9	18	28	46	73	97	100	-
	116		WM	****	****	-	-	****	****	****	6	12	12	29	31	18	-
	128		WF	-	****	-	-	-	-	****	****	****	****	21	33	52	-
	71		BM	****	-	-	-	-	****	****	5	****	21	13	16	7	-
	****		BF	****	-	-	-	-	-	****	****	8	****	10	17	23	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	****		OF	-	-	-	-	-	-	-	-	-	****	-	-	-	-
Orleans	4999	10.8	ALL	67	10	6	8	51	116	191	253	543	646	809	1257	1041	****
	803		WM	****	-	-	****	****	9	22	47	92	86	114	274	149	****
	914		WF	****	****	****	-	****	****	6	****	26	52	95	300	413	-
	1751		BM	34	6	****	5	41	88	121	110	274	311	311	297	150	-
	1484		BF	24	****	****	****	****	16	37	80	146	192	283	379	318	-
	33		OM	****	-	-	****	****	****	****	****	5	****	****	****	****	-
	14		OF	****	-	-	-	-	-	****	-	-	****	****	****	****	-
Ouachita	1262	8.5	ALL	25	****	****	****	****	****	20	53	100	144	244	341	322	-
	393		WM	6	-	****	****	-	****	6	20	31	50	92	116	69	-
	472		WF	7	-	-	-	****	-	****	7	21	44	79	135	174	-
	****		BM	7	****	-	-	****	****	6	16	29	26	35	48	22	-
	203		BF	****	****	-	-	-	****	****	10	19	24	38	42	57	-
	****		OM	****	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Plaquemines	224	7.7	ALL	****	****	****	****	****	6	5	12	17	35	46	53	44	-
	90		WM	****	-	****	-	-	****	5	7	9	18	20	16	8	-
	84		WF	****	-	-	****	****	****	-	****	****	9	15	23	29	-
	26		BM	-	-	-	-	-	-	-	****	****	****	6	8	****	-
	21		BF	-	-	-	-	-	-	-	****	****	****	5	****	****	-
	****		OM	-	-	-	-	-	-	-	-	-	-	-	****	-	-
	****		OF	-	****	-	-	-	-	-	-	****	-	-	-	-	-
Pointe Coupee	250	11.2	ALL	****	-	-	****	****	****	****	9	24	33	30	77	65	-
	77		WM	-	-	-	-	****	-	****	****	9	13	****	33	15	-
	68		WF	****	-	-	-	-	****	-	****	****	6	13	19	24	-
	58		BM	****	-	-	-	-	****	****	****	7	7	7	15	13	-
	47		BF	****	-	-	****	-	-	****	****	****	7	****	10	13	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race-Sex, Age Group, and Parish
Louisiana, 2004

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Rapides	1291	10.1	ALL	22	5	****	****	8	15	33	54	101	133	256	369	288	-
	449		WM	****	-	****	****	5	****	14	19	42	60	98	124	75	-
	460		WF	****	****	-	****	****	****	9	7	29	27	78	144	153	-
	185		BM	6	****	****	****	****	7	****	15	19	****	****	43	18	-
	193		BF	7	-	****	-	-	****	****	13	11	23	36	56	42	-
	****		OM	-	-	-	-	-	-	-	-	-	****	****	****	-	-
	****		OF	-	-	-	-	-	-	-	-	-	-	-	****	-	-
Red River	96	9.8	ALL	****	-	-	****	-	****	****	****	7	11	15	38	14	-
	32		WM	-	-	-	-	-	-	****	****	****	7	****	11	****	-
	30		WF	-	-	-	-	-	-	-	****	-	****	6	13	9	-
	14		BM	****	-	-	-	-	-	****	-	****	-	****	7	-	-
	20		BF	****	-	-	****	-	****	-	****	****	****	****	7	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Richland	239	11.7	ALL	7	-	-	-	5	****	6	12	20	28	44	57	56	-
	83		WM	****	-	-	-	****	****	****	****	10	11	18	19	14	-
	79		WF	****	-	-	-	****	****	****	****	****	6	11	21	27	-
	****		BM	-	-	-	-	****	****	****	****	****	6	9	9	****	-
	39		BF	****	-	-	-	-	-	****	****	****	5	6	****	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	****		OF	-	-	-	-	-	-	-	-	-	-	-	****	-	-
Sabine	251	10.6	ALL	****	****	-	****	****	****	6	8	17	30	51	64	67	-
	97		WM	-	-	-	-	****	****	****	5	9	9	21	27	23	-
	109		WF	****	****	-	-	-	-	****	****	****	14	18	25	38	-
	25		BM	****	-	-	****	-	-	****	****	****	****	****	6	****	-
	20		BF	-	-	-	-	-	-	-	-	****	****	****	6	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Bernard	797	11.9	ALL	7	-	-	****	7	11	22	35	81	81	135	258	157	-
	349		WM	****	-	-	-	****	9	12	17	39	48	53	104	57	-
	397		WF	****	-	-	****	****	****	8	16	31	23	74	148	93	-
	22		BM	****	-	-	****	-	****	-	****	5	5	****	****	****	-
	23		BF	****	-	-	****	-	-	****	-	****	****	5	****	****	-
	****		OM	-	-	-	-	-	-	-	-	****	-	-	-	****	-
	****		OF	-	-	-	-	-	-	-	-	****	****	****	-	-	-
St. Charles	323	6.7	ALL	12	-	****	****	7	8	13	16	31	40	51	82	59	-
	128		WM	6	-	-	****	****	****	9	8	14	17	8	41	17	-
	114		WF	****	-	****	****	****	****	****	****	****	9	27	25	36	-
	****		BM	****	-	-	-	****	****	****	-	9	8	7	7	****	-
	39		BF	****	-	-	-	-	****	****	****	****	6	****	9	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	****		OF	-	-	-	-	-	-	-	****	-	-	****	-	****	-
St. Helena	96	9.5	ALL	-	****	-	-	****	-	****	****	8	18	15	26	21	-
	30		WM	-	****	-	-	****	-	****	****	****	****	****	10	6	-
	20		WF	-	-	-	-	-	-	-	-	****	****	****	****	8	-
	27		BM	-	-	-	-	-	-	****	****	****	10	8	****	****	-
	19		BF	-	-	-	-	-	-	-	****	****	-	****	7	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. James	188	9.0	ALL	6	-	****	-	****	****	****	9	14	27	33	58	34	-
	65		WM	****	-	-	-	****	-	****	****	5	****	15	22	11	-
	41		WF	****	-	-	-	-	-	-	****	****	****	****	18	11	-
	46		BM	****	-	****	-	-	****	****	****	****	8	10	10	6	-
	36		BF	****	-	-	-	-	****	-	-	****	11	****	8	6	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. John	363	8.2	ALL	8	****	-	****	5	7	9	21	47	66	66	80	52	-
	95		WM	****	-	-	-	****	****	****	6	11	15	18	25	13	-
	96		WF	****	-	-	-	****	****	****	****	13	15	18	19	21	-
	92		BM	****	****	-	-	****	****	****	****	13	23	14	19	7	-
	****		BF	****	-	-	****	-	****	****	6	****	13	16	17	11	-
	****		OM	-	-	-	-	-	-	-	-	****	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race-Sex, Age Group, and Parish
Louisiana, 2004

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
St. Landry	900	10.0	ALL	17	****	****	5	8	14	18	31	75	123	178	229	195	-
	294		WM	****	-	****	****	****	****	6	12	26	38	71	71	56	-
	281		WF	6	****	****	-	****	5	****	6	9	26	45	81	94	-
	171		BM	****	****	****	****	****	****	****	7	31	34	31	38	13	-
	152		BF	****	****	-	****	-	****	****	6	9	****	****	39	32	-
	****		OM	-	-	-	-	-	-	-	-	-	****	-	-	-	-
	****		OF	-	-	-	-	-	-	-	-	-	-	****	-	-	-
St. Martin	392	7.9	ALL	11	-	****	****	****	****	9	19	28	51	76	101	86	-
	130		WM	****	-	-	-	****	****	5	10	11	11	20	39	30	-
	138		WF	****	-	-	****	****	-	****	****	6	16	28	46	32	-
	63		BM	****	-	****	****	****	-	****	****	6	16	16	5	8	-
	****		BF	5	-	****	-	-	-	****	****	5	****	12	11	16	-
	****		OM	-	-	-	-	-	-	-	-	-	****	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Mary	560	10.7	ALL	6	****	****	****	****	7	7	28	57	79	104	159	104	-
	191		WM	****	-	-	****	****	****	****	14	22	26	33	60	25	-
	186		WF	-	****	-	-	****	-	-	5	16	20	33	59	51	-
	103		BM	****	-	****	****	-	****	****	5	****	14	22	23	13	-
	72		BF	****	****	-	-	****	****	-	****	****	16	13	****	15	-
	****		OM	-	-	-	-	-	-	-	****	-	****	****	****	-	-
	****		OF	-	-	-	-	-	-	-	-	-	****	****	-	-	-
St. Tammany	1618	7.7	ALL	30	****	****	5	20	16	38	63	136	208	284	462	351	-
	718		WM	9	****	****	****	12	11	23	31	72	114	138	203	99	-
	710		WF	8	-	-	-	6	****	10	21	35	63	116	222	225	-
	102		BM	8	****	-	****	****	****	****	6	20	19	15	****	12	-
	77		BF	5	-	-	****	****	-	****	****	6	9	****	21	13	-
	7		OM	-	-	-	-	-	-	-	****	****	****	****	-	****	-
	****		OF	-	-	-	-	-	-	-	-	****	****	-	****	****	-
Tangipahoa	1043	10.7	ALL	24	****	****	****	9	16	41	60	114	165	162	244	198	-
	382		WM	5	****	-	****	5	****	14	30	47	69	67	97	42	-
	360		WF	****	-	****	****	****	****	5	10	23	51	51	89	118	-
	161		BM	9	****	****	-	****	7	13	13	24	27	24	28	13	-
	136		BF	5	****	-	****	-	****	****	7	20	****	20	30	25	-
	****		OM	****	-	-	-	****	-	****	-	-	-	-	-	-	-
	****		OF	-	-	-	-	-	-	-	-	-	****	-	-	-	-
Tensas	64	10.6	ALL	****	-	-	-	-	****	-	****	****	9	9	21	16	-
	16		WM	-	-	-	-	-	-	-	-	****	5	****	****	****	-
	****		WF	-	-	-	-	-	-	-	-	****	-	-	7	5	-
	16		BM	****	-	-	-	-	****	-	****	****	****	****	****	****	-
	19		BF	-	-	-	-	-	-	-	-	****	****	****	7	5	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	****		OF	-	-	-	-	-	-	-	-	-	****	-	-	-	-
Terrebonne	842	7.9	ALL	12	****	****	****	11	18	24	49	69	123	160	191	176	-
	333		WM	****	****	-	****	****	13	10	23	34	43	74	81	49	-
	332		WF	****	****	****	-	****	****	7	14	14	51	55	82	100	-
	73		BM	****	****	****	-	****	****	****	5	14	13	6	17	****	-
	79		BF	6	-	-	****	****	-	****	****	****	9	20	****	22	-
	16		OM	-	-	-	-	-	****	****	****	****	****	****	****	-	-
	9		OF	-	-	-	-	****	-	-	****	-	****	****	-	****	-
Union	226	10.1	ALL	****	****	-	****	****	****	****	9	14	26	43	63	64	-
	83		WM	-	-	-	-	****	-	****	****	****	9	21	24	19	-
	85		WF	-	-	-	****	****	-	-	****	****	10	13	22	35	-
	33		BM	****	****	-	-	-	****	-	****	6	****	****	10	****	-
	25		BF	-	-	-	-	-	-	-	****	****	****	****	7	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vermilion	544	10.0	ALL	5	****	****	****	****	7	9	24	37	58	84	161	152	-
	217		WM	-	-	****	-	****	5	5	16	20	24	37	70	37	-
	245		WF	****	****	****	****	-	****	****	****	11	17	25	73	106	-
	42		BM	****	-	-	-	-	-	****	****	****	9	****	9	****	-
	36		BF	****	-	-	****	-	-	-	****	-	8	12	9	****	-
	****		OM	-	-	-	-	-	-	-	****	****	-	****	-	-	-
	****		OF	-	-	-	-	-	-	-	-	****	-	-	-	-	-

Number and Rate of Deaths by Race-Sex, Age Group, and Parish
Louisiana, 2004

Parish	Total	Rate*	Race Sex	Age in Years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	UNK.
Vernon	315	6.0	ALL	****	****	-	****	****	****	9	7	22	42	55	107	61	-
	158		WM	****	****	-	****	****	****	5	****	15	23	36	49	20	-
	126		WF	****	-	-	-	-	-	****	****	****	15	14	51	33	-
	14		BM	-	-	-	****	-	-	-	-	****	****	****	****	****	-
	13		BF	****	-	-	-	-	-	****	-	-	****	****	****	****	-
	****		OM	-	-	-	-	-	****	-	-	-	-	-	-	****	-
	****		OF	-	-	-	-	-	-	-	****	-	-	-	****	-	-
Washington	559	12.6	ALL	5	****	-	****	5	10	15	27	57	76	85	166	111	-
	176		WM	****	-	-	-	****	7	5	10	15	25	31	50	27	-
	220		WF	-	****	-	-	-	****	****	8	20	16	31	77	61	-
	89		BM	****	-	-	****	-	****	5	****	15	21	15	16	9	-
	****		BF	****	-	-	-	****	-	****	****	****	14	8	23	14	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	****		OF	-	-	-	-	-	-	-	-	****	-	-	-	-	-
Webster	500	12.1	ALL	9	-	-	-	****	****	14	20	31	74	94	125	129	-
	189		WM	****	-	-	-	****	-	5	9	14	42	40	45	30	-
	165		WF	****	-	-	-	****	****	****	****	****	11	26	46	68	-
	70		BM	****	-	-	-	-	****	5	****	7	10	19	15	9	-
	76		BF	****	-	-	-	-	-	****	6	****	11	9	19	22	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W. Baton Rouge	179	8.2	ALL	5	-	-	-	****	****	****	9	16	26	37	50	29	-
	59		WM	****	-	-	-	-	-	****	****	7	8	12	16	9	-
	51		WF	****	-	-	-	****	****	-	****	****	7	14	11	10	-
	33		BM	****	-	-	-	-	****	****	****	5	****	6	8	****	-
	36		BF	****	-	-	-	-	-	-	****	****	****	5	15	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Carroll	148	12.4	ALL	-	-	-	-	****	****	****	6	9	13	21	44	50	-
	65		WM	-	-	-	-	****	****	****	****	5	7	12	18	16	-
	62		WF	-	-	-	-	-	-	****	****	****	****	****	18	28	-
	10		BM	-	-	-	-	-	-	-	****	****	****	-	****	****	-
	11		BF	-	-	-	-	-	-	-	-	****	****	****	****	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W. Feliciana	94	6.1	ALL	-	-	****	****	****	****	****	5	16	17	22	15	12	-
	29		WM	-	-	-	-	-	****	****	****	****	5	6	6	****	-
	30		WF	-	-	****	****	****	-	****	****	-	****	10	5	7	-
	27		BM	-	-	-	-	-	-	-	****	9	9	****	****	****	-
	8		BF	-	-	-	-	-	-	-	-	****	****	****	****	-	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Winn	213	13.0	ALL	****	-	-	-	****	****	5	5	18	24	43	59	53	-
	72		WM	-	-	-	-	-	****	****	****	6	11	16	23	9	-
	75		WF	****	-	-	-	****	-	-	****	****	7	12	19	29	-
	37		BM	****	-	-	-	-	-	****	****	5	****	9	6	9	-
	****		BF	-	-	-	-	****	-	****	-	****	****	6	11	****	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	****		OF	-	-	-	-	-	-	-	-	-	-	-	-	****	-

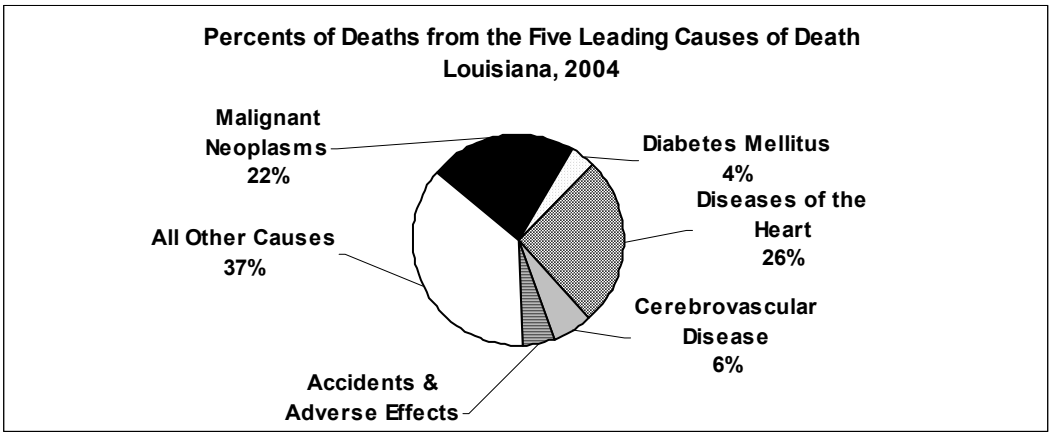
Source: Louisiana State Center for Health Statistics.
*Rate per 1,000 population.
****Cells suppressed to protect confidentiality.

Age-Adjusted Mortality Rate for Total Deaths

The age-adjusted death rate from all causes for Louisiana in 2004 was 979.9per 100,000 (2000 U.S. standard population).

Leading Causes of Death

Beginning with deaths occurring in 1999, the United States has adopted the World Health Organization's tenth revision of the International Classification of Diseases (ICD-10) guidelines for coding cause of death information recorded on death certificates. Because ICD-10 incorporated changes in the way causes of death are grouped to produce cause-of-death statistics, death statistics generated under ICD-9 (1979-1998) and ICD-10 might not be comparable for some causes of death. It is important to be aware of these potential comparability issues when viewing and evaluating changes in death rates over time.



Source: Louisiana State Center for Health Statistics

Of the total 41,942 deaths to Louisiana residents in 2004, the leading causes were: diseases of the heart; malignant neoplasms (cancer); cerebrovascular disease (stroke); accidents; and diabetes mellitus. 63.4% of all deaths in Louisiana in 2004 were attributable to these five causes, as shown in the figure.

The top four causes - diseases of the heart, malignant neoplasms, cerebrovascular disease, and accidents - together account for 59.3% of total deaths. There was no variation observed between the years 2004 and 2003 with regard to leading causes of death. In fact, these four causes have consistently been the leading causes of death in Louisiana for the past 20 years, though the specific order has alternated. The fifth-ranked cause has shown more variation, shifting between diabetes, chronic lower respiratory disease, and influenza and pneumonia.

Although the last two decades have seen a considerable downward trend in diseases of the heart, these conditions remain Louisiana's number one cause of death. The 2004 crude death rate of 238.8 per 1,000 population was lower than the 2003 rate of 254.4 deaths per 100,000 population. Rounding out the top ten causes of death in the state in 2003 were: diabetes mellitus; chronic lower respiratory diseases; alzheimer's disease, nephritis, nephrotic syndrome, and nephrosis; influenza and pneumonia; and septicemia.

The leading causes of death in Louisiana were determined by ranking the crude death rates from the highest to lowest, and then adjusting these rates for age. Once adjusted, the top five cause-specific, death rates for the state were found to be the same for both 2004 and 2003. The causes in question were:

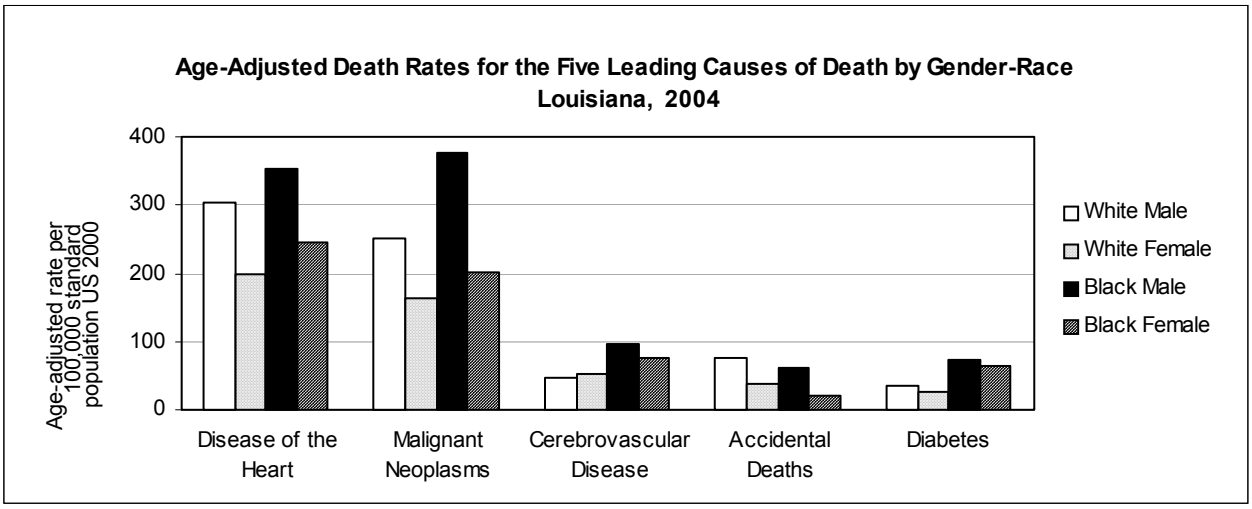
- Diseases of the heart
- Malignant Neoplasms
- Cerebrovascular disease
- Accidents and adverse effects
- Diabetes Mellitus

Age-Adjusted Mortality Rates* for the Top Ten Causes of Death Louisiana and United States, 2003

LA Rank**	Cause of Death	Age-Adjusted Death Rate		U.S. Rank**
		Louisiana	United States***	
-	*All Causes*	979.9	801.1	-
1	*Diseases of the Heart*	255.0	217.5	*1*
2	*Malignant Neoplasms*	215.5	184.6	*2*
3	*Cerebrovascular Disease*	59.2	50.0	*3*
4	*Accidents*	50.3	36.6	*5*
5	*Diabetes Mellitus*	39.8	24.4	*6*
6	*Chronic Lower Respiratory Diseases*	38.1	41.8	*4*
7	*Alzheimer's Disease*	31.4	21.7	*7*
8	*Nephritis, Nephrotic Syndrome, and Nephrosis*	26.2	14.3	*9*
9	*Influenza and Pneumonia*	21.8	20.4	*8*
10	*Septicemia*	19.7	11.2	*10*

*Age-Adjusted Rate per 100,000 U.S. standard population 2000
**Causes of death are ranked based on crude death rates
Source: Louisiana State Center for Health Statistics
***NCHS, National Vital Statistics Reports Vol. 54, No 19 (Preliminary Death Data 2004)

The following chart displays age-adjusted mortality rates for the five leading causes of death in Louisiana in 2004. The age-adjusted rates show that males, particularly black males, are at higher risk than females of dying of heart disease, cancer, cerebrovascular disease, accidents, and chronic lower respiratory disease. Blacks are at higher risk than whites of dying of heart disease, cancer, and cerebrovascular disease.



Source: Louisiana Center for Health Statistics

The following table lists age-adjusted mortality rates for the four major race-sex groups in 2004.

Age-Adjusted Death Rates* for Selected Causes of Mortality by Race-Sex Louisiana, 2004	
Cause of Death/Race/Sex	**Age-adjusted Rate***
Diseases of the Heart	255.0
White Male	302.4
White Female	199.5
Black Male	354.7
Black Female	245.9
Malignant Neoplasm	215.5
White Male	251.7
White Female	163.0
Black Male	375.5
Black Female	200.6
Cerebrovascular Diseases	59.2
White Male	46.8
White Female	52.3
Black Male	95.3
Black Female	75.4
Accidents	50.3
White Male	76.1
White Female	36.9
Black Male	62.3
Black Female	20.0
Diabetes	39.8
White Male	34.4
White Female	27.7
Black Male	72.9
Black Female	65.5
Chronic Lower Respiratory Disease	38.1
White Male	48.8
White Female	38.1
Black Male	46.5
Black Female	17.3
Alzheimer's Disease	31.4
White Male	28.7
White Female	36.1
Black Male	24.5
Black Female	24.3
Nephritis, Nephrotic Syndrome and Nephrosis	26.1
White Male	25.1
White Female	17.5
Black Male	47.5
Black Female	42.3
Influenza and Pneumonia	21.8
White Male	26.8
White Female	18.5
Black Male	32.3
Black Female	17.1

Age-Adjusted Death Rates* for Selected Causes of Mortality by Race-Sex Louisiana, 2004	
Cause of Death/Race/Sex	**Age-adjusted Rate***
Septicemia	19.7
White Male	18.2
White Female	16.2
Black Male	34.6
Black Female	25.6
Homicide	13.0
White Male	5.0
White Female	3.5
Black Male	54.0
Black Female	7.8
Suicide	11.9
White Male	24.5
White Female	6.1
Black Male	11.8
Black Female	1.0

*Age-adjusted Rate per 100,000 U.S. standard population 2000
Source: Louisiana State Center for Health Statistics
United States Census Bureau, 2000 Census

Infant Deaths

Overview

Infant mortality encompasses all deaths that occur within the first year of life and excludes fetal deaths (miscarriages and abortions). This measure can be a significant predictor of the health status of a particular area, population, or nation, since it is associated with many factors, such as socioeconomic status and access to health care.

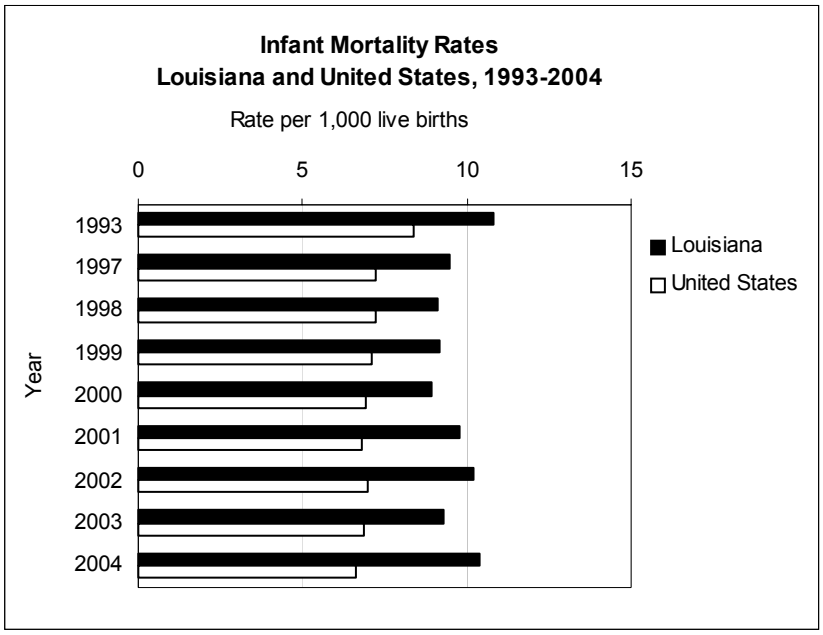
There are several measures used to describe mortality in this age group. While infant mortality measures deaths during the first year, neonatal mortality describes deaths occurring through the first 27 days after birth. Other measures include post-neonatal mortality (deaths occurring from 28 days to one year after birth), hebdomadal mortality (deaths occurring during the first seven days after birth), and perinatal mortality (fetal deaths and infant deaths occurring during the first seven days after birth).

Infant Mortality Rates* by Race of Child Louisiana, 2004						
Race	**Number of Deaths**	**Infant Mortality Rate**	**Neonatal Mortality Rate**	**Post-Neonatal Mortality Rate**	**Hebdomadal Mortality Rate**	**Perinatal Mortality Rate**
Total	678	10.4	6.3	4.2	4.8	12.9
White	282	7.7	4.2	3.4	3.2	9.1
Black	390	14.7	9.4	5.3	7.2	18.7
Other	6	3.8	1.9	1.9	1.9	5.7

*All rates, except perinatal, are per 1,000 live births. Perinatal rates are per 1,000 stillbirths + live births
Source: Louisiana State Center for Health Statistics

Infant Mortality

In the year 2004, there were 678 deaths in Louisiana to children under one year of age, i.e., a rate of 10.4. The infant mortality rate is defined as the number of deaths within the first year of life per 1,000 live births. Since 1983, the infant mortality rate has seen an overall decline from 13.2 deaths per 1000 live births in 1983 to 8.9 in 2000. The national infant mortality rate in 2003 is 6.6 per 1,000 live births.



Source: Louisiana State Center for Health Statistics, 2004
National Center for Health Statistics, Preliminary Data 2004

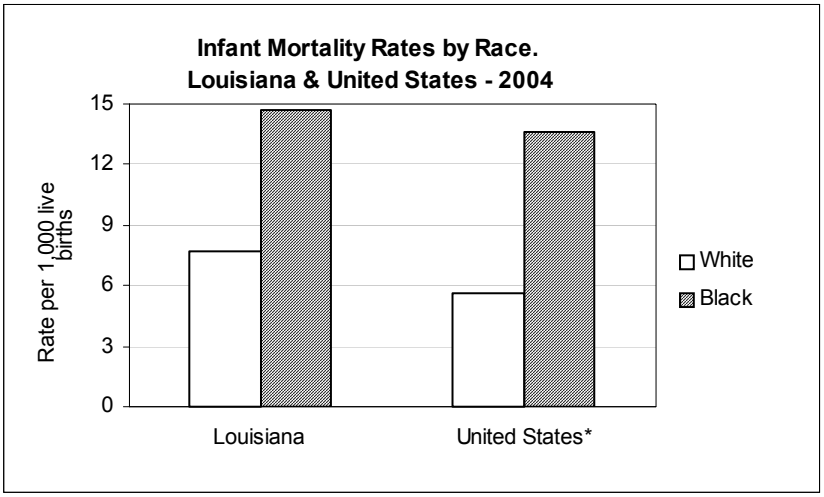
For comparison purposes, the table below shows infant mortality rates for Louisiana and its neighboring states. (Note: Although Louisiana's final 2004 infant mortality rate is available and is reported in this document, the table below uses National Center for Health Statistics preliminary 2004 infant mortality data for all states.) Rates for Louisiana's neighboring states (except Texas) are above the national figure.

Infant Mortality Rates*
Louisiana, Neighboring States, and the United States, 2004**

State	*Rate*	*National Ranking****
Alabama	8.6	5
Arkansas	8.6	6
Louisiana	10.4	1
Mississippi	9.2	2
Texas	6.1	32
United States	6.6	-

Rate per 1,000 live births
** NCHS, National Vital Statistics Reports Vol. 54, No 20 (Preliminary Death Data 2004)
*** All states are ranked on a high to low basis
Source: National Center for Health Statistics, Vol 54, No. 20, page 01, 05

Infant mortality rates differ substantially by race. Though rates of infant deaths are decreasing across racial groups, children born to black mothers tend to have higher death rates than those born to white mothers. It is important to note that, beginning in the year 1989, the race of the mother is used for analysis rather than the inferred race of the child. Accordingly, race-specific infant mortality rates prior to 1989 are not comparable to the more current rates. In 2004, there were 282 white, 390 black, and 6 other-race infant deaths in Louisiana. The infant mortality rates were 7.7, 14.7, and 3.8 deaths per 1,000 race-specific live births, respectively.



Source: Louisiana State Center for Health Statistics, 2003
NCHS, NVSR,Preliminary Data for 2004

There are geographic variations in infant mortality as well. The table below shows parish-level figures for infant deaths in Louisiana.

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 2004

Parish	*Mother's Race*	*Number of Infant Deaths*	*Infant Mortality Rate*[+]
State	*All*	678	10.4
	White	282	7.7
	Black	390	14.7
	Other	6	3.8
Acadia	*All*	8	8.7
	White	****	7.2
	Black	****	14.2
	Other	-	-
Allen	*All*	****	11.6
	White	****	16.1
	Black	-	-
	Other	-	-
Ascension	*All*	11	7.5
	White	7	6.3
	Black	****	11.5
	Other	-	-
Assumption	*All*	****	15.0
	White	****	15.0
	Black	****	15.3
	Other	-	-

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 2004			
Parish	**Mother's Race**	**Number of Infant Deaths**	**Infant Mortality Rate+**
Avoyelles	*All*	7	11.8
	White	****	8.4
	Black	****	17.6
	Other	-	-
Beauregard	*All*	6	13.1
	White	****	12.8
	Black	****	18.5
	Other	-	-
Bienville	*All*	****	5.2
	White	-	-
	Black	****	11.2
	Other	-	-
Bossier	*All*	13	8.0
	White	7	6.0
	Black	6	14.3
	Other	-	-
Caddo	*All*	53	14.4
	White	11	7.1
	Black	42	20.3
	Other	-	-
Calcasieu	*All*	15	5.5
	White	7	3.8
	Black	8	9.8
	Other	-	-
Caldwell	*All*	-	-
	White	-	-
	Black	-	-
	Other	-	-
Cameron	*All*	****	10.6
	White	****	11.2
	Black	-	-
	Other	-	-
Catahoula	*All*	****	26.8
	White	****	26.3
	Black	****	27.8
	Other	-	-
Claiborne	*All*	****	12.0
	White	-	-
	Black	****	22.0
	Other	-	-
Concordia	*All*	****	22.5
	White	****	28.2
	Black	****	18.9
	Other	-	-
Desoto	*All*	****	8.2
	White	-	-
	Black	****	18.8
	Other	-	-
E Baton Rouge	*All*	64	11.2
	White	16	6.8
	Black	47	14.9
	Other	****	5.2

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 2004			
Parish	**Mother's Race**	**Number of Infant Deaths**	**Infant Mortality Rate+**
East Carroll	*All*	****	6.9
	White	-	-
	Black	****	8.9
	Other	-	-
E Feliciana	*All*	****	15.7
	White	****	14.9
	Black	****	16.9
	Other	-	-
Evangeline	*All*	****	7.5
	White	****	5.7
	Black	****	11.0
	Other	-	-
Franklin	*All*	-	-
	White	-	-
	Black	-	-
	Other	-	-
Grant	*All*	5	21.4
	White	****	19.7
	Black	****	34.5
	Other	-	-
Iberia	*All*	8	7.2
	White	****	1.7
	Black	****	14.6
	Other	-	-
Iberville	*All*	****	8.7
	White	****	16.4
	Black	****	3.7
	Other	-	-
Jackson	*All*	****	5.3
	White	****	7.5
	Black	-	-
	Other	-	-
Jefferson	*All*	70	11.2
	White	35	9.4
	Black	35	15.6
	Other	-	-
Jeff Davis	*All*	****	6.5
	White	****	8.2
	Black	-	-
	Other	-	-
Lafayette	*All*	28	9.4
	White	15	7.7
	Black	13	13.8
	Other	-	-
Lafourche	*All*	9	7.5
	White	****	4.4
	Black	****	16.7
	Other	****	22.7
LaSalle	*All*	****	6.2
	White	-	-
	Black	****	62.5
	Other	-	-

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 2004			
Parish	**Mother's Race**	**Number of Infant Deaths**	**Infant Mortality Rate+**
Lincoln	*All*	7	13.1
	White	****	7.1
	Black	****	20.9
	Other	-	-
Livingston	*All*	18	11.1
	White	****	11.1
	Black	****	12.3
	Other	-	-
Madison	*All*	****	36.0
	White	****	60.6
	Black	****	26.0
	Other	-	-
Morehouse	*All*	9	21.7
	White	****	5.6
	Black	****	33.9
	Other	-	-
Natchitoches	*All*	5	8.6
	White	****	3.7
	Black	****	13.1
	Other	-	-
Orleans	*All*	67	9.8
	White	7	5.2
	Black	58	10.9
	Other	2	10.8
Ouachita	*All*	25	10.7
	White	13	10.5
	Black	11	10.4
	Other	****	27.0
Plaquemines	*All*	****	4.5
	White	****	6.7
	Black	-	-
	Other	-	-
Pointe Coupee	*All*	****	13.5
	White	****	6.7
	Black	****	20.4
	Other	-	-
Rapides	*All*	22	11.7
	White	9	8.3
	Black	13	16.9
	Other	-	-
Red River	*All*	****	14.4
	White	-	-
	Black	****	25.3
	Other	-	-
Richland	*All*	7	24.2
	White	****	26.5
	Black	****	22.4
	Other	-	-
Sabine	*All*	****	8.9
	White	****	9.0
	Black	****	11.4
	Other	-	-

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 2004			
Parish	**Mother's Race**	**Number of Infant Deaths**	**Infant Mortality Rate+**
St Bernard	*All*	7	7.9
	White	****	7.1
	Black	****	13.0
	Other	-	-
St Charles	*All*	12	16.7
	White	9	19.6
	Black	****	11.9
	Other	-	-
St Helena	*All*	-	-
	White	-	-
	Black	-	-
	Other	-	-
St James	*All*	6	19.4
	White	****	24.6
	Black	****	16.0
	Other	-	-
St John	*All*	8	11.2
	White	****	9.3
	Black	****	13.1
	Other	-	-
St Landry	*All*	17	12.3
	White	****	13.5
	Black	****	11.3
	Other	-	-
St Martin	*All*	11	15.7
	White	4	9.9
	Black	7	24.7
	Other	-	-
St Mary	*All*	6	7.9
	White	****	4.5
	Black	****	13.7
	Other	-	-
St Tammany	*All*	30	10.2
	White	17	6.9
	Black	13	28.7
	Other	-	-
Tangipahoa	*All*	24	14.9
	White	****	9.6
	Black	14	21.3
	Other	****	90.9
Tensas	*All*	****	24.4
	White	-	-
	Black	****	34.5
	Other	-	-
Terrebonne	*All*	12	7.0
	White	****	2.4
	Black	****	27.9
	Other	-	-
Union	*All*	****	3.2
	White	-	-
	Black	****	8.9
	Other	-	-

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 2004			
Parish	**Mother's Race**	**Number of Infant Deaths**	**Infant Mortality Rate[+]**
Vermilion	*All*	5	6.2
	White	****	3.2
	Black	****	17.4
	Other	-	-
Vernon	*All*	****	4.5
	White	****	3.0
	Black	****	11.8
	Other	-	-
Washington	*All*	5	8.2
	White	****	5.2
	Black	****	13.5
	Other	-	-
Webster	*All*	9	17.7
	White	****	15.2
	Black	****	22.6
	Other	-	-
W Baton Rouge	*All*	5	15.1
	White	****	15.2
	Black	****	15.3
	Other	-	-
West Carroll	*All*	-	-
	White	-	-
	Black	-	-
	Other	-	-
W Feliciana	*All*	-	-
	White	-	-
	Black	-	-
	Other	-	-
Winn	*All*	****	9.9
	White	****	8.0
	Black	****	13.2
	Other	-	-

**** Cells suppressed to protect confidentiality.
[+]Rate per 1,000 live births. Very small numbers of deaths, such as those seen for 2003 infant mortality, result in rates that are likely to fluctuate from year to year.
[++]To create rates that are more stable, 1999-2003 five-year infant mortality rates have been calculated.
Source: Louisiana State Center for Health Statistics

Injury Deaths

The term "injury" includes:

a. unintentional injuries (more commonly referred to as "accidents")
b. intentional injuries (suicides and homicides)
c. injuries in which the intent could not be determined, and
d. other - legal intervention (law enforcement), operations of war

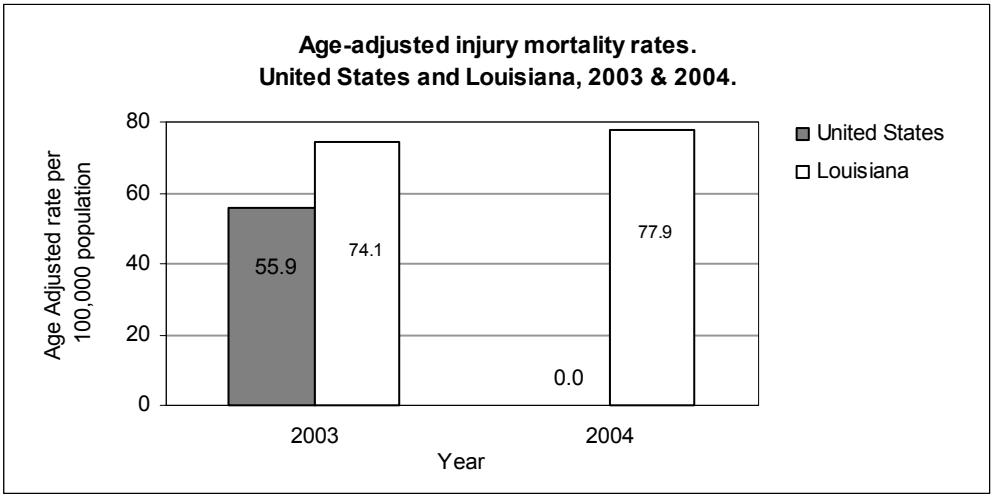
The term excludes adverse effects of either medical care or therapeutic use of drugs.

Background

Injuries are the number one killer of children and young adults aged 1 – 44 years in Louisiana, and the leading cause of potential life lost before age 65. Injuries leave tens of thousands of people suffering from chronic disabilities and dramatically affect the lives of tens of thousands of others, particularly loved ones. Almost all injuries are preventable.

Status

Louisiana exceeds the United States in overall injury death rates.



The following tables indicate core findings of the 2004 injury mortality database from the Injury Research and Prevention Program. In 2004, of the 41,942 fatalities among Louisiana residents, 3,498 were due to injuries.

Rank	Top 3 leading causes of injury related deaths for Age Groups and Intent, Louisiana 2004								
	0-4	5-9	10-14	15-19	20-34	35-44	45-54	55-64	65+
1	Unintentional Suffocation 34	Unintentional MV Traffic 18	Unintentional MV Traffic 22	Unintentional MV Traffic 117	Homicide Firearm 305	Unintentional MV Traffic 155	Unintentional MV Traffic 150	Unintentional MV Traffic 82	Unintentional Fall 109
2	Unintentional MV Traffic 20	Unintentional Fire/Flame 8	Tied 1 (*) 6	Homicide Firearm 54	Unintentional MV Traffic 299	Unintentional Poisoning 131	Unintentional Poisoning 91	Suicide Firearm 35	Unintentional MV Traffic 107
3	Unintentional Fire/Flame 13	Unintentional Drowning 6	Unintentional Suffocation 5	Suicide Firearm 22	Unintentional Poisoning 132	Suicide Firearm 71	Suicide Firearm 75	Homicide Firearm 21	Suicide Firearm 65

(*) Tied 1: Unintenional Drowning, Unintentional Fire/Flame.
Source: Injury Research and Prevention Program using LA OPH Health Statistics Program - Death Certificates, 2004

Injury Deaths by Public Health Region. Louisiana 2004		
	Number of Injury Deaths	Death Rate per 100,000 Residents
State Total	**3,498**	**77.5**
Region 1	877	86.8
Region 2	341	55.6
Region 3	297	76.0
Region 4	396	70.8
Region 5	206	72.2
Region 6	214	71.5
Region 7	382	72.5
Region 8	195	55.4
Region 9	388	81.0
Missing	202	-----

Source: LA OPH Health Statistics Program - Death Certificates, 2004
*Rate per 100,000 calculated using 2004 US Census Population Estimates

Injury Deaths by Age Group, Gender and Race. Louisiana 2004		
	Number of Injury Deaths	Death Rate per 100,000 Residents
State Total	**3,498**	**77.5**
Age Group (Years)		
< 1	49	72.8
1 - 4	58	22.6
5 - 14	96	15.0
15 - 24	704	99.8
25 - 34	646	108.1
35 - 44	591	92.0
45 - 54	539	84.4
55 - 64	259	58.7
65 - 74	180	64.4
75 - 84	222	118.2
85 & +	154	255.3
Gender		
Male	2,498	113.9
Female	1,000	43.1
Race		
White	2,321	80.1
Black	1,132	75.9
Other	45	35.3

Source: LA OPH Health Statistics Program - Death Certificates, 2004
*Rate per 100,000 calculated using 2004 US Census Population Estimates

Product

The Louisiana DHH/OPH EMS/INJURY PREVENTION SECTION analyzes injury data from mortality records. Both routine and special reports are available and used for public and community program planning and support. The section's dissemination of this information drives policy and resource distribution decisions and identifies emerging or special population injury events for intervention efforts. These injury mortality data constitute a foundation for program planning, development and evaluation.

II. MORBIDITY

A. INFECTIOUS DISEASES

West Nile Encephalitis

In 2001, the first case of West Nile in humans was diagnosed in Louisiana. This was followed by a large outbreak in 2002 with 204 cases of NID reported. In 2003 and 2004 the number of cases decreased. Clinical presentation of neuroinvasive diseases or of West Nile fever was confirmed serologically.

Disease	Year			
	2001	2002	2003	2004
NeuroInvasive Disease	1	204	101	84
Fever	0	124	21	24
Asymptomatic	0	0	0	6
Total	1	328	122	114

Antibiotic Resistance

Hospital laboratories routinely monitor the prevalence of antibiotic-resistant infections in their facilities. The Antibiotic Sensitivity Active Sentinel Surveillance system is Louisiana's compilation of antibiotic-resistance reports generated by individual hospitals. Currently, forty-three hospitals voluntarily participate in submission of monthly lab aggregate reports documenting the percentage of infections in their facilities from the following antibiotic-resistant bacteria:

- Vancomycin Resistant Enterococci (VRE)
- Drug Resistant Streptococcus Pneumoniae (DRSP)
- Methicillin Resistant Staphylococcus Aureus (MRSA)

The current active surveillance system includes only aggregate laboratory-based data from sentinel reporting sites. The Infectious Diseases Epidemiology Program's Disease Surveillance Specialists and Surveillance Epidemiologists identify the primary laboratory contact person in each acute care facility within their assigned regions and actively recruit new hospital lab reporting sites to participate in this surveillance activity. Because surveillance program for antibiotic resistance is interested in tracking all degrees of resistance, bacteria with either intermediate or total resistance have been combined in the Table. The resistance rate for two of the three reported organisms (MRSA and DRSP) increased between 1999 and 2004.

A trend analysis was conducted to determine if the rates of resistance were increasing over the past five years (2000, 2001, 2002, 2003 and 2004). The results can be seen in the following Table.

Trend Analysis of Resistance 2000-2004								
Bacteriae	**Trend Analysis**	**2000**	**2001**	**2002**	**2003**	**2004**	**Z** (C-A trend test)	**p-value**
	Resistant	547	662	548	432	371		
S. Pneumoniae	Susceptible	729	744	696	604	485	-0.9648	0.3346
	% Resistant	42.87%	47.08%	44.05%	41.70%	43.34%		
	Resistant	4560	6682	9489	9711	9514		
S. Aureus	Susceptible	7377	8347	8152	7425	6180	42.4123	<.0001
	% Resistant	38.20%	44.46%	53.79%	56.67%	60.62%		
	Resistant	451	496	647	288	600		
Enterococcus	Susceptible	8577	10013	9327	4446	8346	6.3074	<.0001
	%Resistant	5.00%	4.95%	6.49%	6.08%	6.71%		

A Cochran-Armitage Trend test was calculated for each organism. The rates of drug resistant *S. pneumoniae* have not been increasing over the past five years (Z for trend =-0.9648, p=0.3346). The rates of Methicillin-resistant *S. aureus* have increased from 2000 to 2004. These increases were highly significant Z for trend =42.4123, p<0.0001). Rates of Vancomycin resistant Enterococcus appeared to be significantly different over the past five years (Z for trend =6.3074, p<0.0001). However, this may be attributed to the underreporting in 2003 that was due to the change in VRE's case definition (Sept. 2002).

Hepatitis C

Reportable cases of Hepatitis C virus (HCV) infections consist of newly infected individuals who are symptomatic and have elevated liver enzymes as an indicator of recent infection. According to the Centers for Disease Control and Prevention (CDC), it is estimated that 80,000 residents of Louisiana are infected by HCV. Annually, 120 Louisiana residents are expected to die from Hepatitis C. About 4,000 individuals (5% of those infected by Hepatitis C) are candidates for a liver transplant, at a cost of $300,000 per transplant.

There are an estimated 500 to 600 new (acute) infections each year in Louisiana. Since the early 1990s, the state has seen a slow but steady increase of reported new Hepatitis C cases. The decline in the number of reported cases of Hepatitis C that started in 2001 continued until 2004. This decline was due most likely to a CDC-mandated change in the case definition for acute Hepatitis C. Beginning in 1990, the designation for elevated liver enzymes was established by the CDC as 2.5 times the upper limit of normal. However, in 2001, the CDC increased the required elevation level to seven times the upper limit of normal, thus excluding a large number of cases that previously would have been considered reportable.

Meningococcal Invasive Diseases

Meningococcal meningitis is an acute bacterial disease caused by *Neisseria meningitidis*. It is characterized by sudden fever onset, intense headache, nausea and often vomiting, stiff neck, and rash.

During the 1990s, the number of meningitis cases in Louisiana steadily increased from a low of 30 in 1990 to a high of 74 in 2001, then again a decrease in the last 3 years. The incidence rate ranges from

0.8 to 1.6 /100,000. This incidence is similar to US incidence which is around 1/100,000/year. Based on capsular polysaccharide there are 5 groups of meningococci. These groups are important to consider because of their epidemiologic, clinical and preventive importance. The 3 main groups observed in Louisiana are B, C and Y. Group A and W135 are uncommon. This is important because the quadrivalent vaccine available in the USA is effective only against A, C, Y and W135, thus ineffective against B which represents about 1/3 of the cases. The seasonal trend in the number of cases shows a high peak during the first quarter of the year (January to March) with close to 50% of the cases. The lowest quarter is the July to September quarter. Infants 0-1 year old have the highest incidence of new cases (10/100,000 cases/year). The incidence decreases to reach a low plateau around 1.5 from ages 5 to 19, then decrease again to a low of 0.4 in the 40-49 age group and rises slowly in the older age group (1.1 in the older than 70 group).

Shigellosis

Shigellosis or bacterial dysentery is acute infectious enteritis of humans due to *Shigella*. It has a human reservoir and is transmitted via the fecal-oral route. 99% of *Shigella* isolates come from stools. The peaks and troughs observed in trends of *Shigella* infections are mainly driven by the number of cases in children. There is a slight rise in incidence in young adults, then a decline until rates stabilize in middle age.

Vibriosis

Vibrios are gram-negative, curved, rod-shaped bacteria that are natural inhabitants of the marine environment. In the United States, transmission of Vibrio infections is primarily through the consumption of raw or undercooked shellfish or exposure of wounds to warm seawater. The most common clinical presentation of Vibrio infection is self-limited gastroenteritis, but wound infections and primary septicemia also may occur. Patients with liver disease are at a particularly high risk for significant morbidity and mortality associated with these infections. Many cases of Vibrio-associated gastroenteritis are under-recognized because most clinical laboratories do not routinely use the selective medium, thiosulfate-citrate-bile salts-sucrose (TCBS) agar, for processing of stool specimens unless they are specifically requested to do so.

Early detection and initiation of treatment of these infections is very important, particularly for cholera and invasive Vibrio infections, because these infections may rapidly progress to death.

The numbers of cases of reported Vibrio infections have remained fairly stable over the past twenty years, ranging from twenty to fifty cases per year, with a slight increase from year to year. There are several species of Vibrios, some increasing in reported numbers over time and others decreasing in numbers. The most common Vibrio species observed in reported cases in Louisiana is V. para-

hemolyticus (24%), followed by V. vulnificus (24%), V. cholerae non O1 (21%) and all other Vibrios. (All other Vibrios include V. algino-lyticus, V. damse-lae, V. fluvialis, V. hollisae and V. mimicus.)

Vibrio parahemolyticus

Consumption of crustacean and molluscan shellfish commonly has been implicated in the transmission of V. parahaemolyticus. Raw oysters are the primary source of ingestion-associated V. parahaemolyticus infection. A review of infections between 1988 and 1997 found that 88% of patients with V. parahaemolyticus gastroenteritis and 91% of patients with V. parahaemolyticus primary septicemia and known food history reported eating raw oysters. Studies indicate that the infectious dose of V. parahaemolyticus is about 100,000 viable cells ingested. The number of reported cases of V. parahemolyticus has remained stable over the years.

Vibrio Vulnificus

V. vulnificus is the most important pathogenic Vibrio in the U. S. because of its invasiveness and the high fatality rates associated with infection. It was first identified and described by the Centers for Disease Control and Prevention (CDC) in 1976 and has become the leading cause of seafood-associated deaths in the United States.

In a review of V. vulnificus infections in the U.S., 96% of patients with primary septicemia consumed raw oysters within seven days before symptom onset. All follow-ups (trace-backs) with complete information, implicated oysters harvested in the Gulf of Mexico; 89% were harvested in seawater warmer than 22°C (71.6°F). All clinical syndromes of V. vulnificus are more common during the warmer months.

Among the 422 culture-confirmed V. vulnificus infections on the Gulf Coast reported to the CDC through the Vibrio Surveillance System between 1988 and 1996:

- 45% were classified as wound infections
- 43% as primary septicemia
- 5% as gastroenteritis
- 7% were from other, or unknown sites of infection

There has been a steady increase in the number of V.vulnificus cases reported every year.
This increase is probably due to increased awareness and an increase in the susceptible population (those with liver disease, hemo-chromatosis, diabetes, cancers - particularly those on chemo or radio-therapy, leukemia, lymphoma, Hodgkin's, immune suppression such as HIV, long term steroid use, alcoholism, chronic kidney disease and the elderly population).

66% of Vibrio vulnificus cases had underlying conditions prior to illness onset, with the most frequently reported underlying conditions including liver disease (41%), alcoholism (22%) and heart disease (37%). 12% consumed oysters including 10% consuming raw oysters. 44% were wound infections. These wound infections may be a result of sustaining a wound in salty or brackish water. An infection could also occur in a pre-existing wound being exposed to salty or brackish water or seafood drippings.

Other Non-Cholerae Vibrios

The increase in reported numbers of other non-cholerae Vibrios is attributed to better awareness among medical providers and laboratory testing.

V. alginolyticus is a halophilic Vibrio, first recognized as being pathogenic in humans in 1973. Wound infections account for 71% of V. alginolyticus infections; ear infections are also seen with this organism. Gastroenteritis is thought to be a rare presentation of V. alginolyticus infection. Other clinical syndromes reported in association with V. alginolyticus infection include chronic diarrhea in a patient with AIDS, conjunctivitis and post-traumatic intracranial infection. Resistance to tetracycline and chloramphenicol has been reported in a few isolates of V. alginolyticus, but all strains appear to be sensitive to ciprofloxacin.

V. mimicus is a non-halophilic Vibrio named according to its similarity to V. cholerae. V. mimicus can cause sporadic episodes of acute gastroenteritis and ear infections.

V. fluvialis is a halophilic Vibrio, first identified in Bahrain in 1975, in a patient with diarrhea. It is biochemically similar to Aero-monas hydrophila but can be differentiated from this organism by its ability to grow well on media containing 6%-7% sodium chloride. The largest series of V. fluvialis infections involved 500 patients in Bangladesh, half of whom were young children. In that series, patients presented with diarrhea (100% with 75% bloody diarrhea), vomiting (97%), abdominal pain (75%), dehydration (67%) and fever (35%). V. fluvialis rarely causes wound infections or primary septicemia.

Photobacterium damsela (formerly Vibrio damsela) is a halophilic gram-negative bacillus similar to V. vulnificus. It strictly causes soft tissue infections following exposure of wounds to brackish water or injury by saltwater animals. P. damsela infections can be fulminant and frequently are fatal, even in immuno-competent hosts. Of the sixteen cases of P. damsela infection reported between 1982 and 1996, four were fatal.

V. hollisae is a halophilic Vibrio, first described in 1982. It most commonly causes gastroenteritis. V. hollisae is difficult to isolate, since it grows poorly on selective TCBS media and it needs to be isolated

from colonies on a blood agar plate. V. hollisae septicemia and wound infections have been reported but are rare.

Vibrio Cholerae Non-O1

Vibrio cholerae is classified in groups according to its somatic antigen O.

Non-O1 is found in surface waters (freshwater rivers, oceans) throughout the world. The infection is acquired by ingesting heavily contaminated water or food (raw or poorly cooked seafood, especially oysters, clams, shrimp or crabs). Small outbreaks are some-times reported. These infections usually occur in individuals with increased susceptibility to infections: immunocompromised individuals with gastric disease (low gastric acidity) or liver disease.

V. cholerae non-O1 can produce a wide range of symptoms: asymptomatic infections, simple diarrhea, or severe diarrheal disease. Some isolates are capable of producing a toxin indistinguishable from V. cholerae O1. Diarrhea and simple enteritis is the most common clinical picture. Approximately a quarter of infected patients have bloody stools. Illness usually is self-limiting and requires no treatment.

Age, Gender, and Race Distribution

Since the distribution is similar for all Vibrio cases, the following discussion describes all Vibrio species combined.

The age group distribution shows an increase in Vibrio cases in older age groups, an expected finding since adults and older people are the most common consumers of raw seafood and therefore, comprise most of the high risk population group.

B. TUBERCULOSIS

Background

Pulmonary tuberculosis (TB) occurs as a result of infection of the lungs with an organism named *Mycobacterium tuberculosis,* which infected persons may transmit by coughing. If untreated, a pulmonary TB case may infect others who breathe in the organisms expelled by the infected person. Infection is not limited to the lungs as it can also occur in other regions of the body.

Due to the danger of contagion, individuals who have been exposed to TB should be identified and evaluated. A simple skin test is used to determine if the exposed person has been infected. If the skin test and evaluation reveal that the person has been infected, a course of preventive therapy may be prescribed to protect against progression from TB infection to TB disease. Preventive therapy generally consists of six months of therapy with a single anti-TB drug called isoniazid, or INH.

Treatment of TB disease requires an initial course of four anti-tuberculosis drugs. Length of treatment for TB disease is usually six months, but may vary due to the severity of illness or the presence of other factors, such as the Human Immunodeficiency Virus (HIV). Due to the potentially great public health impact of this infectious disease, and because of the intricacy of the therapy (i.e., length of treatment and number of medications involved), a practice called Directly Observed Therapy (DOT) is employed to assist the patient with his or her therapy and assure completion. With DOT, trained field staff or medical personnel monitor the efficacy of treatment and the patient's compliance with the treatment regimen.

2005 Status

Louisiana reported 257 cases of TB in the year 2005, for a case rate of 5.7 per 100,000 population. This represents only a 3.2 percent increase from the year 2004 figure of 249 cases (5.5 cases per 100,000 population). This is still above the 2002 case rate. The natural decline of tuberculosis is 6 percent a year.

Tuberculosis Case Counts
Louisiana, 2001-2005

2001	*2002*	*2003*	*2004*	*2005*
294	230	260	249	257

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Tuberculosis Program

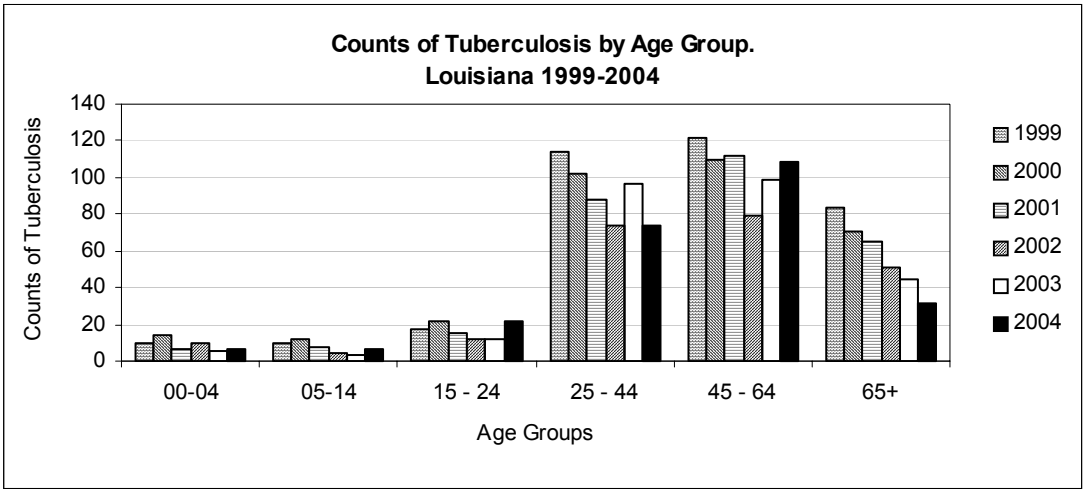
In 2005, Louisiana's state ranking for TB case rates (i.e., cases per 100,000) was the eighth highest in the nation. The state's year 2005 rate was similar to those in neighboring states but was significantly higher than the national rate of 4.8 per 100,000, which declined from 2004 to 2005 by 3.8 percent.

Tuberculosis Cases and Rates* Louisiana and Neighboring States, 2005		
State	Number of Cases	Case Rate
Alabama	216	4.7
Arkansas	114	4.1
Louisiana	257	5.7
Mississippi	103	3.5
Texas	1535	6.7
United States	14,093	4.8

*Rate per 100,000 population
Source: Louisiana Department of Health and Hospitals, Office of Public Health, Tuberculosis Program
National Tuberculosis Surveillance System, Division of Tuberculosis Elimination, Centers for Disease Control and Prevention. Provisional 2002 data.

Drug-resistant TB continues to be a problem in Louisiana. In 2005, no cases of multi-drug-resistant tuberculosis (MDR-TB) were reported, while the incidence of INH resistant TB declined to 2.4 percent (the recommended threshold for initiating a four-drug anti-TB regimen for new or suspected cases of TB is 4 percent).

As shown in the following graph, an increase in the number of reported cases of TB in Louisiana was observed in the ages 00 to 24 and 45 to 64over 65. The decrease occurred in 25 to 44 and +64 age groups.



Louisiana Tuberculosis Cases and Rates By Region and Parish, 2005 State Total = 257 State Case Rate = 5.8 per 100,000		
Region/Parish	Cases	Rate/100,000
Region 1	102	9.4
Jefferson	35	7.2
Orleans	62	12.5
Plaquemines	1	3.6
St Bernard	4	5.6
Region 2	17	2.8
Ascension	2	2.7
East Baton Rouge	13	3.1
East Feliciana	0	0.0
Iberville	0	0.0
Pointe Coupee	0	0.0
West Baton Rouge	2	9.1
West Feliciana	0	0.0
Region 3	17	4.1
Assumption	0	0.0
Lafourche	2	2.1
St Charles	1	1.9
St James	0	0.0
St John	4	8.8
St Mary	7	11.4
Terrebonne	3	2.7
Region 4	28	4.7
Acadia	4	6.4
Evangeline	2	5.4
Iberia	0	0.0
Lafayette	11	5.5
St Landry	4	4.4
St Martin	3	6.0
Vermilion	3	5.4
Region 5	15	5.1
Allen	1	3.9
Beauregard	0	0.0
Calcasieu	11	5.7
Cameron	2	20.6
Jefferson Davis	1	2.9
Region 6	5	1.5
Avoyelles	0	0.0
Catahoula	0	0.0
Concordia	1	4.5
Grant	0	0.0
LaSalle	0	0.0
Rapides	4	1.5
Vernon	2	3.6
Winn	0	0.0
Region 7	33	6.0
Bienville	0	0.0
Bossier	5	5.0
Caddo	19	7.2
Claiborne	2	11.0
DeSoto	3	11.1
Natchitoches	1	2.5
Red River	0	0.0
Sabine	2	7.8
Webster	1	2.2

Louisiana Tuberculosis Cases and Rates
By Region and Parish, 2005
State Total = 257
State Case Rate = 5.8 per 100,000

Region/Parish	Cases	Rate/100,000
Region 8	22	5.8
Caldwell	0	0.0
East Carroll	0	0.0
Franklin	1	4.2
Jackson	0	0.0
Lincoln	6	13.3
Madison	1	7.1
Morehouse	4	11.7
Ouachita	8	5.0
Richland	1	4.4
Tensas	0	0.0
Union	0	0.0
West Carroll	0	0.0
Region 9	18	5.4
Livingston	0	0.0
St Helena	0	0.0
St Tammany	8	4.0
Tangipahoa	10	9.7
Washington	0	0.0

Source: Louisiana, Department of Health and Hospitals, Office of Public Health, Tuberculosis Program

C. Sexually Transmitted Diseases

Overview

Sexually transmitted diseases (STDs) are hidden epidemics of enormous health and economic consequence in the United States. They are hidden because many Americans are reluctant to address sexual health issues in an open way and because of the biologic and social characteristics of these diseases. STD prevention is important because all communities are impacted by STDs and all individuals directly or indirectly pay for the costs of these diseases. STDs are public health problems that lack easy solutions because they are rooted in human behavior and fundamental societal problems. Indeed, there are many obstacles to effective prevention efforts. The first hurdle will be to confront the reluctance of American society to openly confront issues surrounding sexuality and STDs.

STD Rates* and National Rankings** Louisiana, 2000-2005

	Primary and Secondary Syphilis		*Gonorrhea*		*Chlamydia*	
Year	*Rate*	*Rank*	*Rate*	*Rank*	*Rate*	*Rank*
2000	4.8	8	302.9	2	408.2	3
2001	4	8	291	1	423	4
2002	3.4	8	255	1	412.9	4
2003	4.1	3	264.4	1	467.8	2
2004	7.4	1	236.9	2	491.3	3
2005	6.4	-	214.5	-	386.4	-

* Rate per 100,000 Population, Census 2000
** States ranked from highest to lowest disease incidence. Nationwide ranks for 2005 currently not available.
Sources: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2005
Centers for Disease Control and Infection, STD Surveillance Report 2004

Syphilis

Syphilis infections are caused by *Treponema pallidum*, a spirochete (bacterium). The primary stage of the disease is characterized by a painless, indurated ulcer that appears at the site(s) of exposure in about 21 days (range of 10-90 days), and lasts from 1 to 5 weeks. The secondary stage, which usually appears 1 to 5 weeks after the primary ulcer has healed, is characterized by skin rash, mucous patches, and *condylomata lata* (fluid-secreting skin eruptions), sometimes accompanied by generalized lymphadenopathy, headache, and fever. The latent stage is defined as any interval following the primary stage during which the infected individual has no clinical signs or symptoms.

Syphilis, a genital ulcerative disease, facilitates the transmission of HIV and may be important in contributing to HIV transmission in those parts of the country where rates of both infections are high. Untreated early syphilis in pregnant women results in perinatal death in up to 40% of cases and, if acquired during the four years preceding pregnancy, may lead to infection of the fetus in over 70% of cases.

Louisiana had the highest rate of primary and secondary (P&S) syphilis nationwide in the year 2004. In Louisiana, there were 284 reported cases of P&S syphilis cases for the year 2005. In comparison with the number of reported cases of P&S syphilis cases in the year 2004 (330 cases), the number of reported cases decreased by 14.0% in 2005.

Early Syphilis (Primary, Secondary, and Early Latent) Rates* by Gender and Race Louisiana, 2000-2005

Year	White			Blacks			Other		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
2000	2	3	2	32	26	28	0	2	1
2001	2	1	2	27	23	25	0	5	2
2002	0.9	1.1	1	22.2	19.3	20.7	3.7	2.5	3.1
2003	1.9	1.5	1.7	23.6	21.6	22.5	1.2	1.3	1.2
2004	3.3	2.4	2.8	42.3	33.8	37.8	9.4	3.2	6.3
2005	2.1	1.9	2	37.2	27.8	32.2	16	10.1	13.1

* Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2005

The Louisiana incidence rate for primary and secondary syphilis for 2005 was 6.4 per 100,000 population, while the latest national rate available (year 2004) was 4.7. The 2005 Louisiana P&S syphilis rate is still 1.4 times higher than the 2004 national P&S syphilis rate. The *Healthy People 2010* rate objective for primary and secondary syphilis is 0.2.

Primary and Secondary Syphilis Rates

State	1999	2000	2001	2002	2003	2004
Alabama	4.6	2.8	3.2	3.4	2.5	3.7
Arkansas	3.4	4.1	1.8	1.3	1.9	1.7
Louisiana	7	4.8	3.9	3.4	4.1	7.4
Mississippi	7	4.9	4.9	1.7	1.4	2
Texas	2.4	2	2.3	2.8	3	3.7
United States	2.4	2.2	2.2	2.4	2.5	2.7

Gonorrhea

Infections by *Neisseria gonorrhoeae* may be symptomatic or asymptomatic, and may include genital, anorectal, and/or pharyngeal infections.

In the year 2005, 9,586 cases of gonorrhea were reported in Louisiana with a corresponding rate of 214.5 cases per 100,000 population. In comparison with the number of reported cases for the year 2004, in the year 2005 there was a 8.9% decline in the rates. The rate among males was 221.3 per 100,000 population and the rate among females was 208.6 per 100,000 population in year 2005. The male rate for year 2005 declined by 4.7% when compared to the year 2004, while the female rate declined by 11.7%.

The numbers of reported cases were 4,136 among black males, 288 for white males, and 14 for other males in 2005. The numbers of reported cases among black females were 3,538, white females were 597, and others were 42 in 2005. In Year 2005 blacks had the highest rate and reported cases, nearly 81% of total reported cases were among blacks.

Gonorrhea Rates* by Gender and Race
Louisiana, 2000-2005

Year	White			Black			Other		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
2000	22	39	31	1019	780	892	22	32	27
2001	23	40	31	929	727	821	17	46	32
2002	21.1	45.7	33.7	702.7	598.6	648.2	8.6	15.1	11.8
2003	23	41	32.4	697.2	567.7	628.7	29.6	33.8	31.7
2004	19.2	40.5	30	633.2	520.1	537.3	18.9	44.5	31.7
2005	20.6	40.9	31	605.1	460.4	528.5	17.2	52.8	34.8

* Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2005

The Louisiana incidence rate of gonorrhea for 2005 was 214.5 per 100,000 population, while the most recent national rate available (year 2004) was 113.5. The 2004 Louisiana gonorrhea rate was 1.9 times higher than the 2004 national gonorrhea rate. The *Healthy People 2010* objective for gonorrhea is to reduce the rate to 19.0 per 100,000 population.

Gonorrhea Rates
Louisiana, Neighboring States, and United States, 1999-2004

State	1999	2000	2001	2002	2003	2004
Alabama	249.2	276	251.4	227.5	207.4	207.7
Arkansas	126.4	142.7	172.2	171.5	156.9	157.7
Louisiana	301.7	302.9	274.2	254.8	264.4	230.4
Mississippi	376	332.9	272.8	241.7	220.4	200.6
Texas	164.2	164.2	144	129.4	112.9	108.1
United States	132	131.6	128.5	125	116.2	110

Chlamydia

Infection caused by *Chlamydia trachomatis* is among the most prevalent STDs in the United States. Therapy is commonly based on the clinical syndrome, and is often administered simultaneously with treatment for gonorrhea.

Chlamydia trachomatis infection is the most commonly reported notifiable disease in Louisiana and the United States. It is among the most prevalent of all STDs and, since 1994, has comprised the largest proportion of all STDs reported to CDC. In 2005, 17,270 Chlamydia cases were reported to the Louisiana STD Control Program from Nine Health Regions. This count corresponds to a rate of 386.4 cases per

100,000 population, a decrease of 20.8% compared with the rate of 488.4 in 2004. The numbers of reported cases of Chlamydia infections in females was 13,559 to a corresponding rate of 588.0 per 100,000 female populations. The number of reported cases for males was 3,641 with a corresponding rate of 168.3 per 100,000 male population. In 2005 the number of reported cases for females was 3.7 times higher than those for males. The rate of Chlamydia infection among black females was 1,176.4 per 100,000 black female population, while that among white females was 138.5 per 100,000 white female population, and 158.3 per 100,000 female others population. The rate for black females was 8.5 times higher than the rate for white females and 7.4 times higher than the rate for other females.

Chlamydia Rates* by Gender and Race
Louisiana, 2000-2005

	White			Black			Other		
Year	Males	Females	Total	Males	Females	Total	Males	Females	Total
2000	27	140	85	518	1477	1031	12	115	63
2001	28	145	88	457	1539	1035	22	90	56
2002	30	150.1	91.5	403.7	1392	927.7	17.2	65.4	41
2003	29.8	157.3	94.9	401.3	1397.7	928.7	42	207.5	124.8
2004	32.6	166.1	100.7	437.5	1509.4	1004.8	24.1	140.3	82.3
2005	31.6	138.5	86.2	395.3	1176.4	808.7	39.3	158.3	98.2

* Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2005

Chlamydia Rates
Louisiana, Neighboring States, and United States, 1999-2004

State	1999	2000	2001	2002	2003	2004
Alabama	283.2	350.7	326.6	351	316.7	295.8
Arkansas	229.9	243.8	272.3	273.5	289.9	288.5
Louisiana	380.5	408.2	399.2	412.7	467.8	485.7
Mississippi	417	458.6	414.6	414.8	424.6	654.7
Texas	314.1	343.3	334.5	333.4	317.7	317.5
United States	251.6	257.5	278.3	296.5	304.3	319.6

Sexually Transmitted Disease Rates+ by Parish
Louisiana, 2005

Parish	Early Syphilis (Primary, Secondary, & Early Latent)	Gonorrhea	Chlamydia
State Total	12.2	214.5	386.4
Acadia	8.5	146.1	248.0
Allen	0.0	51.1	204.4
Ascension	11.7	124.0	276.7
Assumption	0.0	166.8	342.1
Avoyelles	2.4	154.3	335.1
Beauregard	0.0	30.3	75.8
Bienville	0.0	273.0	374.6
Bossier	1.0	303.1	598.1
Caddo	3.2	572.7	799.5
Calcasieu	1.6	153.1	274.0
Caldwell	9.5	56.8	236.7
Cameron	0.0	10.0	100.1
Catahoula	9.2	64.1	293.0

Sexually Transmitted Disease Rates+ by Parish Louisiana, 2005			
Parish	Early Syphilis (Primary, Secondary, & Early Latent)	Gonorrhea	Chlamydia
Claiborne	0.0	255.2	403.5
Concordia	0.0	148.2	414.9
DeSoto	0.0	219.7	710.0
East Baton Rouge	54.7	262.6	433.3
East Carroll	0.0	297.2	658.1
East Feliciana	70.2	84.3	252.8
Evangeline	0.0	141.1	276.6
Franklin	0.0	249.3	310.4
Grant	0.0	155.1	272.8
Iberia	2.7	323.5	368.5
Iberville	48.0	171.1	510.2
Jackson	0.0	136.4	272.8
Jefferson	6.4	120.1	259.1
Jefferson Davis	0.0	140.0	187.7
Lafayette	16.3	220.5	434.1
Lafourche	0.0	108.9	249.0
LaSalle	0.0	63.0	98.0
Lincoln	0.0	345.8	564.6
Livingston	6.5	71.9	156.8
Madison	0.0	400.6	976.1
Morehouse	0.0	461.0	473.9
Natchitoches	2.6	365.9	913.5
Orleans	23.5	360.7	598.5
Ouachita	0.7	235.0	372.2
Plaquemines	3.7	78.5	194.3
Pointe Coupee	4.4	140.6	263.6
Rapides	2.4	164.6	308.7
Red River	0.0	311.8	623.6
Richland	0.0	123.9	338.4
Sabine	0.0	89.5	315.4
St. Bernard	1.5	50.6	84.8
St. Charles	2.1	137.3	278.7
St. Helena	28.5	114.0	323.0
St. James	4.7	99.0	311.1
St. John	7.0	181.2	304.3
St. Landry	3.4	180.2	330.7
St. Martin	6.2	218.2	403.4
St. Mary	1.9	181.3	269.2
St. Tammany	2.1	52.3	142.2
Tangipahoa	29.8	201.8	521.9
Tensas	0.0	75.6	498.6
Terrebonne	0.0	105.3	304.3
Union	0.0	210.5	258.7
Vermilion	7.4	91.1	152.4
Vernon	1.9	125.6	403.6
Washington	0.0	202.6	277.7
Webster	2.4	162.6	356.2
West Baton Rouge	55.6	175.9	296.3
West Carroll	0.0	48.7	227.4
West Feliciana	19.9	59.6	86.0
Winn	0.0	153.9	219.0

+Rates per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals Office of Public Health, STD Control Program 2005

D. HIV/AIDS

Background

Acquired Immunodeficiency Syndrome (AIDS) is caused by the human immunodeficiency virus, or HIV. *Acquired Immunodeficiency Syndrome* (AIDS) is caused by the *human immunodeficiency virus*, or HIV. People infected with HIV can develop many health problems, including extreme weight loss, severe pneumonia, cancer, and damage to the nervous system; these illnesses signal the onset of AIDS. The time at which symptoms first begin to appear varies from person to person. In some people, these illnesses may develop within a year or two, while others may remain asymptomatic for 10 years or more. Although recent advances in treatment have significantly slowed the progression from HIV to AIDS and from AIDS to death, there is still no cure for the disease. This means that the most effective way to curb the HIV/AIDS epidemic is through the prevention of HIV infections, provision of HIV prevention interventions, and improved access to treatment and other services for persons living with HIV/AIDS.

The HIV/AIDS epidemic continues to greatly impact public health in Louisiana and will make growing demands on health and social service systems for many decades. The lifetime medical cost for caring for a person with AIDS is approximately $200,000 - most of which is paid for by the government. Every year, new infections obligate Louisiana to approximately $120 million in future medical costs.

Summary

As of December 31, 2005, there were 14,654 persons reported to be living with HIV/AIDS in Louisiana. In 2005 alone, 777 new AIDS cases and 1,010 new HIV cases were diagnosed.

There are persons living with HIV/AIDS in every parish in Louisiana. New cases of HIV/AIDS were diagnosed in 59 of Louisiana's 64 parishes in 2005. The HIV diagnosis rate among black persons remains disproportionately high. In 2005, 72% of newly diagnosed HIV/AIDS cases and 76% of newly diagnosed AIDS cases were among black persons. The 2005 HIV diagnosis rate for black persons was almost six times higher than that of white persons.

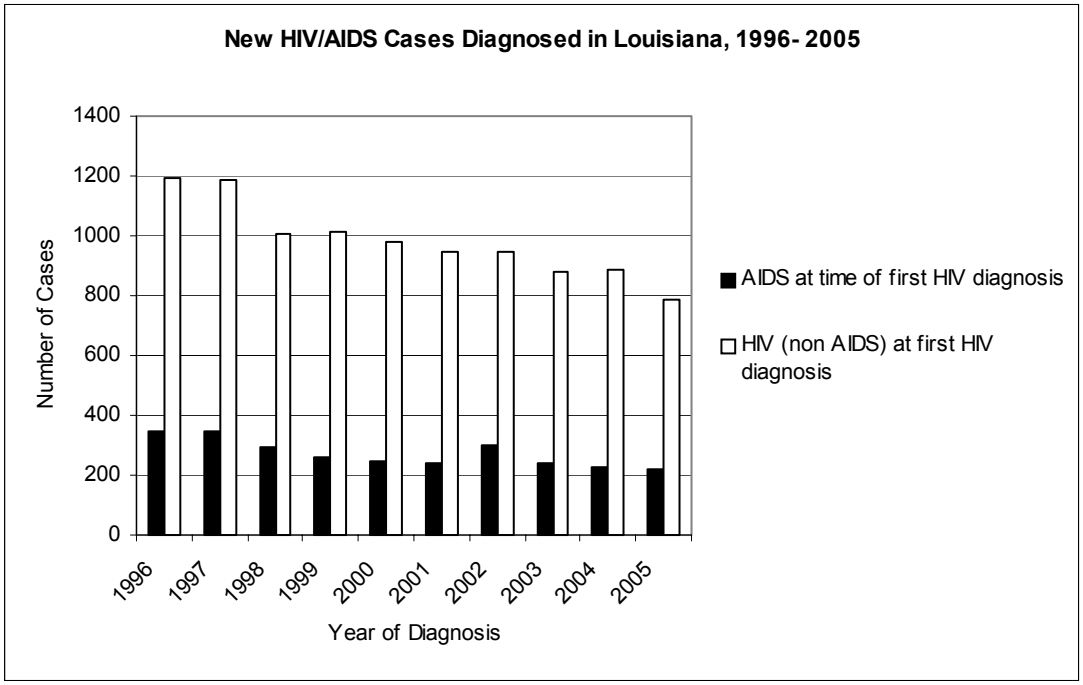
In 2005, the largest proportion of cases diagnosed was attributed to men who have sex with men (MSM), after adjusting for unreported risk. For black persons, high-risk heterosexual activity has remained the leading exposure category, while, among white persons, the predominant exposure to HIV is among MSM.

Both new AIDS diagnoses and AIDS-related mortality began to decline dramatically in the mid-1990s, coinciding with the emergence of more effective treatments. However, from 1999 to 2005, the estimated number of deaths among persons with AIDS remained relatively stable.

2005 Status

New highly active antiretroviral therapies (HAART) have been shown to be effective in treating HIV infection. These new therapies have delayed the progression from HIV to AIDS and from AIDS to death among many people infected with the virus. However, due to factors such as late testing, limited access to or use of health care services, and limitations of current therapies for some people, AIDS cases are increasing.

In the year 2004 (for which the most recent statistics available), Louisiana ranked fifth highest in reported AIDS case rates nationwide, a slight increase from sixth highest in the year 2003. The state ranked eleventh in the number of new AIDS cases reported in the United States for the year 2003, the same ranking as the previous year. Louisiana's AIDS case rate continues to be higher than the rates of neighboring states.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program.

AIDS Cases and Rates Louisiana, Neighboring States, and United States, 2003 and 2004							
	2003		2004		Cumulative Totals		
State	Cases	Rate/100,000	Cases	Rate/100,000	Cases	Children less than 13	Total
Alabama	472	10.5	440	9.7	8,180	76	8,256
Arkansas	188	6.9	206	7.6	3,935	38	3,973
Louisiana	898	20.1	872	19.5	16,031	134	16,165
Mississippi	508	17.6	479	16.6	5,976	56	6,032
Texas	3,379	15.3	3,236	14.6	64,519	388	64,907
United States	43,7104	15.0	42,516	14.6	934,863	9,443	944,306

Source: CDC HIV/AIDS Surveillance Report (Vol. 16, No. 1)
*The cumulative total includes all cases of AIDS reported to the health departments from 1984 (when AIDS became reportable) through December 31, 2004.

In Louisiana, the New Orleans area had the highest number of HIV/AIDS cases diagnosed in 2005. Since 1996, the New Orleans and Baton Rouge areas have had similar HIV/AIDS case diagnosis rates. However, in 2005, Baton Rouge had a significantly higher case diagnosis rate than the New Orleans area, possibly due to effects of hurricane Katrina. Among the large cities in the nation, the metropolitan Baton Rouge area ranked 3rd and the metropolitan New Orleans area ranked 6th in AIDS case rates in 2004.

Persons Living with HIV/AIDS

The number of persons living with HIV/AIDS continues to increase in Louisiana each year. In 2005, 14,654 persons in Louisiana were known to be living with HIV/AIDS. These numbers reflect only those persons who were confidentially tested and reported to the state Department of Health and Hospitals, and should be considered a minimum estimate of the total number of persons infected with HIV in Louisiana. As the number of persons living with HIV continues to increase, more resources will need to be directed toward programs and services that address primary and secondary prevention, early diagnosis, and effective treatment.

Currently, there are persons living with HIV/AIDS in every parish in Louisiana. As of the end of 2005, 16 parishes out of 64 (25%) had greater than 300 persons living with HIV per 100,000 members of the population. The HIV/AIDS Program has funded community-based organizations in every region of the state to deliver HIV prevention programs to persons at high-risk and to provide services for persons living with HIV/AIDS.

Persons Living with HIV/AIDS by Parish
Louisiana, 2005

Parish	Persons Living with HIV/AIDS	Parish	Persons Living with HIV/AIDS
Statewide	14,654	Region VI	738
		Avoyelles	159
Region I	5,426	Catahoula	26
Jefferson	1,185	Concordia	32
Orleans	4,119	Grant	26
Plaquemines	32	La Salle	10
St. Bernard	90	Rapides	358
		Vernon	46
Region II	3,419	Winn	81
Ascension	132		
East Baton Rouge	2,642	Region VII	1,170
East Feliciana	128	Bienville	19
Iberville	250	Bossier	134
Pointe Coupee	40	Caddo	773
West Baton Rouge	78	Claiborne	82
West Feliciana	149	De Soto	41
		Natchitoches	62
Region III	527	Red River	7
Assumption	22	Sabine	17
Lafourche	91	Webster	35
St. Charles	67		
St. James	46	Region VIII	766
St. John the Baptist	84	Caldwell	12
St. Mary	58	East Carroll	36
Terrebonne	149	Franklin	15
		Jackson	14
Region IV	1,085	Lincoln	43
Acadia	68	Madison	48
Evangeline	44	Morehouse	41
Iberia	82	Ouachita	428
Lafayette	547	Richland	46
St. Landry	190	Tensas	38
St. Martin	77	Union	34
Vermilion	77	West Carroll	11
Region V	811	Region IX	722
Allen	214	Livingston	115
Beauregard	40	St. Helena	12
Calcasieu	504	St. Tammany	263
Cameron	***	Tangipahoa	182
Jefferson Davis	50	Washington	150

Shifts in the Epidemic

In keeping with national trends, Louisiana has seen a shift over the last decade in the HIV/AIDS epidemic, with an increasing proportion of cases among women, minorities, and high-risk heterosexuals. The percentage of persons in the state living with HIV/AIDS who likely contracted their infection through heterosexual contact increased from 18% in 1993 to an estimated 23% in 2003.

Black persons continue to be disproportionately impacted by HIV/AIDS. In 2005, 72% of newly diagnosed HIV/AIDS cases in Louisiana were among black persons, who comprise only 32% of the total state population. The 2005 HIV diagnosis rate among black persons was nearly six times higher than the rate among white persons, and twice as high as the rate among Hispanic persons.

The percentage of women in Louisiana living with HIV/AIDS has increased from 11.3% in 1990 to 29% in 2005. Furthermore, the percentage of newly diagnosed HIV/AIDS cases reported among women in the state has been increasing steadily. In 1990, 18% of all newly diagnosed cases were among women; this percentage has steadily increased to 34% in 2005. Black women accounted for 82% of all new HIV/AIDS cases among women in 2005.

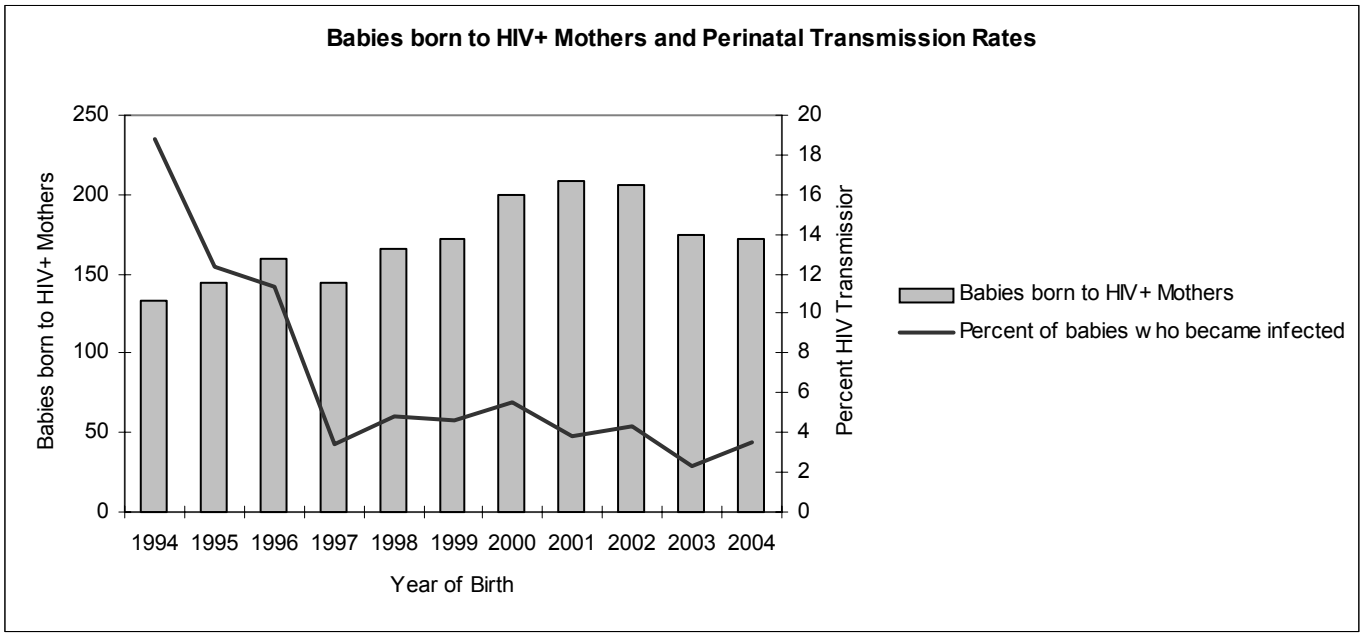
Newly-diagnosed HIV/AIDS Cases, by Demographics and Exposure Group
Louisiana, 1998-2005

Year	1998	1999	2000	2001	2002	2003	2004	2005
Total Cases	1,299	1,271	1,224	1,181	1,250	1,116	1,118	1,010
Sex								
Male	890	894						
Female	409	377						
Race								
Black	949	947	903	876	927	836	858	728
White	320	289	288	269	291	240	228	243
Other	30	34	32	32	31	40	29	28
Unknown	0	***	***	***	***	0	***	11
Exposure Group								
Cases with Specified Risk	819	695	644	587	666	578	512	464
MSM *	40.3%	40.6%	43.3%	43.3%	46.8%	46.9%	52.1%	55.6%
IDU *	26.0%	25.0%	20.6%	20.6%	19.1%	17.6%	12.9%	11.6%
MSM & IDU	5.1%	7.6%	8.2%	5.3%	4.5%	3.6%	4.8%	4.1%
HRH *	26.2%	24.0%	25.9%	28.1%	27.2%	30.4%	26.3%	25.9%
Transf/Hemo *	1.6%	1.6%	1.7%	<1%	<1%	0%	<1%	<1%
Perinatal	<1%	1.1%	1.2%	2.4%	1.8%	1.4%	2.9%	2.4%

MSM: Men who have Sex with Men;
IDU: Injection Drug Users;
HRH: High Risk Heterosexual;
Transf/Hemo:Transfusion/Transplant/Hemophiliac
Source: Louisiana Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program

Perinatal HIV Transmission

Despite the increasing number of women infected with HIV, the percentage of pediatric HIV/AIDS cases (children diagnosed when younger than 13 years of age) has been decreasing in recent years. Perinatal transmission rates dropped dramatically from 18% of all births to HIV infected mothers in 1994 to under 4% in 2004. However, perinatal transmission rates remain higher in Louisiana than in other southern states that collect these data. This decline is credited to greater screening for HIV as a part of prenatal care, improved treatment protocols for HIV-infected pregnant women, and increased use of antiretroviral therapy during pregnancy, delivery, and for the exposed infants. The OPH HIV/AIDS Program Perinatal Prevention Program continues to work with medical centers and providers around the state to reinforce the importance of offering HIV counseling and testing to all pregnant women, to encourage early diagnosis and treatment for HIV-infected pregnant women, and to promote appropriate testing and treatment of exposed children.



SOURCE: LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF PUBLIC HEALTH, HIV/AIDS PROGRAM.

E. CANCER

1999–2003 Status

In Louisiana, cancer incidence rates among males have been declining in recent years. Among white women, a more gradual decline is seen whereas among African-American women the rates continue to rise slowly. The same patterns are seen for mortality, although the declines began earlier than for incidence. More people are surviving cancer now than ever before (nationally, five-year survival for cases diagnosed in 1996-1999 was 66%, versus 50% for those diagnosed twenty years earlier). Survival rates vary, however, according to race, age-group, and type of cancer.

Five Most Common Cancers
Louisiana, 1999–2003
(Five-Year Case Counts - Invasive Cases Only)

Type	*Number of Cases*
All Cancers	103,515
Lung	17,089
Prostate	16,163
Breast	14,629
Colon & Rectum	12,487
Non-Hodgkin's Lymphoma	3,940

Source: Louisiana Tumor Registry

Cancer includes many differenent diseases, some more aggressive than others. Different types of cancer are associated with different risk factors. Lung, breast, prostate, and colorectal cancers account for about half the new cases diagnosed each year, and all can either be prevented or be diagnosed early enough to prevent spread to other organs.

The National Cancer Institute estimates that tobacco use accounts for 30% of cancer deaths, with dietary factors and sedentary lifestyle accounting for another 35%. Most cases of lung cancer can be prevented by not smoking. Consuming a diet low in fat and high in fiber may help prevent colon, rectal, breast, prostate, and other cancers.

Early detection is important in lowering the rate of deaths due to cancer. Mammography, clinical breast examination, Papanicolaou (Pap) tests, fecal occult blood tests, and proctosigmoidoscopy (colon exam with lighted scope) aid in the early detection and treatment of cancers in their early stages to reduce the impact of the diseases. Nonetheless, a significant portion of the population at risk for various cancers fails to participate in screening procedures.[1]

[1] *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*. United States Department of Health and Human Services. Washington: GPO, 1990.

Five Most Common Cancers In Males, Louisiana 1999–2003					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	595.6	All Cancers	680.3	All Cancers	55,661
Prostate	169.1	Prostate	234.0	Prostate	16,163
Lung	108.8	Lung	133.4	Lung	10,289
Colon & Rectum	71.4	Colon & Rectum	78.2	Colon & Rectum	6,479
Bladder	39.1	Kidney & Renal Pelvis	21.9	Non-Hodgkin's Lymphoma	2,061
Non-Hodgkin's Lymphoma	24.2	Stomach	19.7	Kidney & Renal Pelvis	1,999

* All races combined. In situ cases are excluded. Case counts cover five years.
** Average annual age-adjusted (2000 U.S.) incidence rates per 100,000 population
Source: Louisiana Tumor Registry.

Five Most Common Cancers In Females, Louisiana 1999–2003					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	406.6	All Cancers	397.9	All Cancers	47,854
Breast	137.6	Breast	120.3	Breast	14,468
Lung	59.7	Colon & Rectum	58.1	Lung	6,800
Colon & Rectum	46.8	Lung	49.0	Colon & Rectum	6,008
Non-Hodgkin's Lymphoma	17.5	Uterus	17.8	Corpus Uteri	2,022
Uterus	17.2	Cervix	14.9	Non-Hodgkin's lymphoma	1,879

* All races combined. In situ cases are excluded. Case counts cover five years.
** Average annual age-adjusted (2000 U.S.) incidence rates per 100,000 population.
Source: Louisiana Tumor Registry

Background [2]

Breast cancer is the most frequently occurring invasive cancer among women in the United States and is second only to lung cancer in cancer-related deaths. Nationwide, the death rate from breast cancer has decreased steadily since the mid-1990s, and this decline is attributed to both early detection and improved treatment. Family history, exposure to hormones, reproductive issues, postmenopausal issues, overweight, and excessive alcohol use can influence the risk for breast cancer. It has recently been discovered that alterations in two genes can account for most inherited breast cancer, which constitutes 5%-10% of all breast cancers. Since early detection improves the chances of survival, the National Cancer Institute recommended in 1997 that women in their forties or older undergo screening mammograms every year. Women who are at increased risk for breast cancer should seek medical advice about when to begin having mammograms and how often to be screened.

Cervical (cervix uteri) cancer afflicts almost 250 Louisiana women each year. Increased use of the Pap test has contributed to an almost 70% drop in cervical cancer deaths since 1973. Cervical cancer screening should begin approximately three years after a woman begins having sexual intercourse, but

[2] From the National Cancer Institute (WWW.CANCER.GOV) and the American Cancer Society (WWW.CANCER.ORG) resources and publications.

no later than at 21 years old. The NCI recommends that women have a Pap test at least once every three years.

Colorectal cancer caused the second largest number of cancer deaths in the years 1999–2003, although both incidence and mortality rates have been declining nationwide since 1990. Incidence and mortality rates in Louisiana tend to be higher than the national ones. A diet high in fruits, vegetables, and fiber and low in fat appears to reduce the risk of colorectal cancer while physical activity may also lower the risk for this type of cancer. Research suggests that increased screening and polyp removal has contributed to the reduction in the impact of this disease.

Kidney cancer accounts for almost 3% of all new cancers detected in the United States. Cigarette smoking, overweight, heredity, high blood pressure, and certain occupational exposures have been linked to increased risk for this disease whereas beverages such as coffee, tea, and alcoholic drinks have not been found to be important risk factors. About 40% of kidney cancer could be avoided by eliminating the use of tobacco.

Leukemias together account for 2.5% of the annual cancer incidence in the United States and for almost one fourth of cancers in children under 20 years old. Rates for all types of leukemia are higher among males than among females, and for most leukemias, rates are higher among whites than blacks. Risk factors include cigarette smoking, benzene, ionizing radiation, and the human T-cell leukemia/lymphoma virus.

Lung cancer is the leading cause of cancer mortality in the United States. Difficult to detect and hard to treat, lung cancer causes approximately 30% of all cancer deaths in Louisiana. Smoking is responsible for 85% of lung cancers. The risk of developing lung cancer is 22 times higher for male smokers and 12 times higher for female smokers than for people who have never smoked. Smoking rates rose significantly among high school students from 1991 to 1997 but have been declining since.

Melanoma of the skin incidence rates have increased steadily over the last several decades. Although incidence rates have doubled since 1975, mortality rates have risen only slightly. Earlier diagnoses of melanoma of the skin are associated with increased survival rates. Whites are over ten times as likely to develop melanoma as African Americans. Risk factors include excessive exposure to ultraviolet radiation, occupational exposures, family history, and multiple or atypical moles.

Non-Hodgkin's lymphoma cases increased dramatically in the 1970s and 1980s, but the rate stabilized in the 1990s. Part of this increase is due to AIDS-related cases. Among the risk factors are reduced immune function, family history, and exposure to certain infectious agents. Occupational exposures to certain chemicals are also suspected.

Cancer of the oral cavity and the pharynx accounted for approximately 3% of all Louisiana malignancies in 1999 to 2003. In the United States, oral cancer is two to three times more common among males than females. Tobacco use and heavy alcohol consumption account for approximately three fourths of all oral

cancers in the United States. Epidemiological evidence indicates that, while smoking and drinking are independent risk factors, their combination increases the risk of cancer. Use of snuff is a primary cause of cancers of the gum and cheek. Pipes, cigars, and smokeless tobacco, though not as prevalent as cigarette smoking, are associated with outcomes similar to those for cigarette smoking.

Ovarian cancer strikes almost 300 Louisiana women every year. Currently, the five-year survival rate is approximately 50%. Reproductive history, family history, and estrogen alone as a postmenopausal therapy have been linked to the incidence of ovarian cancer. As is the case for almost all cancers, the risk increases with age.

Pancreatic cancer is called a "silent" disease, as it is asymptomatic until well advanced. Survival is considered poor since only about 5% of patients are alive five years after diagnosis. In the period from 1999 through 2003, it ranked eleventh in incidence among all cancers in the United States, but was fifth in cancer mortality. While the only established risk factor is cigarette smoking, others may include obesity, chronic pancreatitis, diabetes, and cirrhosis.

Prostate cancer is the most frequently diagnosed invasive cancer in men but is a distant second to lung cancer as a cause of death. Increasingly, evidence points to diet, particularly animal fat, in prostate cancer development. Hormones are also being investigated, as well as occupational and other lifestyle factors. The National Cancer Institute (NCI) is currently conducting a study to determine whether regular screening with a digital rectal exam and a blood test for prostate-specific antigen (PSA) reduces mortality. Annual screening is advised for men aged 50 and above (age 45 for African Americans and for those with a family history of diagnosis at an early age).

Urinary bladder cancer was the fourth most common type of cancer in the five-year period from 1999 to 2003 among men and the eleventh most common among women in the United States. It is especially prevalent among older white men. Since the late 1980s, incidence and mortality rates have generally leveled off. The most important known risk factor is cigarette smoking, as smokers demonstrate twice the risk for urinary bladder cancer as non-smokers. Several occupational exposures such as those involved in rubber, chemical, and leather industries also increase the risk for bladder cancer. Despite previous speculation, research shows that neither artificial sweeteners nor coffee drinking appears to increase the risk of cancer. Drinking more fluids and eating more vegetables may reduce the risk for bladder cancer.

Uterine (endometriali) cancer, the fourth most common cancer in women in Louisiana and the United States, accounted for approximately 3%-4% of all cancer cases in women from 1999 through 2003. It has a good five-year survival rate of 85%. High cumulative exposure to estrogen is the major risk factor for the most common type of cancer of the uterine corpus; low parity and obesity are also linked to this disease.

To learn more about cancer statistics, visit the following websites:

Louisiana Tumor Registry: http://publichealth.lsuhsc.edu/tumorregistry

Louisiana Cancer Control Partnership's Parish Profiles:
http:www.lcltfb.org/laccp/ParishProfiles/default.htm

State Cancer Profiles: http://statecancerprofiles.cancer.gov
(developed by the National Cancer Institute and the CDC)

TABLE 1. Ten Most Common Cancers: Average Annual Incidence Rates[1] By Geographic Region. 1999-2003 White Males

PRIMARY SITE:	U.S[2].	Louisiana	REGIONS: New Orleans	Baton Rouge	South East	Acadiana	South West	Central	North West	North East
INVASIVE CANCERS										
All Sites Combined	554	595.6*	585.1	587.1	590.4*	616.9*†	623.0*†	572.7†	614.7*†	577.6*
Prostate	168.9	162.1*	142.9*†	163.8	158.5*	181.6*†	193.4*†	148.3* †	174.0†	141.6*†
Lung and Bronchus	75.3	108.8*	107.2	101.9*†	101.3*†	111.8*	108.1*	121.0* †	112.7*	115.6*
Colon and Rectum	60	71.4*	67.6	70.3	74.5*	70.6*	66.9	78.3*	77.0*	70.2*
Urinary Bladder (Incl. In Situ)	39.8	39.1*	41.3	41.6	42.5	37.9	34.2*	33.3*†	36.6	38.3
Non-Hodgkin Lymphoma	24.7	24.2*	24.6	24.6	27	23.9	31.6*†	19.8*†	21.7	19.8*†
Kidney and Renal Pelvis	17	21.3*	22.9	22.8	21.9*	20.9*	22.2*	19.7	20.0	16.4†
Oral Cavity and Pharynx	15.3	18.8*	17.8	18.9	16.2	17.6	16.3	18.4	19.2*	28.5*†
Leukemia	17	17.6*	15.8	16.2	15.8	19.5	17.1	19.4	21.0*†	18.8
Melanoma of the Skin	26.4	17.4*	14.7*†	18.9	14.3*†	14.7*	20.5*	15.8*	20.6*	24.9†
Pancreas	12.5	14.1*	15.1	13.2	14.1	15.4*	12.7	18.4*†	10.6†	13.9

1. Rates per 100,000, age-adjusted to the U.S. 2000 standard.
2. U.S. incidence rate estimates are from the Surveillance, Epidemiology and End Results (SEER) Program of the National Cancer Institute.
* The age-adjusted rate is significantly different (p<0.05) from the U.S. rate (SEER combined incidence rate).
† The age-adjusted rate is significantly different (p<0.05) from the Louisiana rate

TABLE 2. Ten Most Common Cancers: Average Annual Incidence Rates[1] By Geographic Region. 1999-2003 White Females

PRIMARY SITE:	U.S[2].	Louisiana	REGIONS: New Orleans	Baton Rouge	South East	Acadiana	South West	Central	North West	North East
INVASIVE CANCERS										
All Sites Combined	424.9	406.6*	413.2*	397.2*	413.3	413.7	415.0	373.8*†	409.1*	403.7*
Breast	137.6	124.1*	129.6*	127.0*	129.0*	123.1*	122.9*	103.3*†	125.0*	116.3*
Lung and Bronchus	51.0	59.7*	61.7*	54.5†	57.7*	63.5*	59.3*	52.6†	65.1*†	59.6*
Colon and Rectum	44.2	46.8*	44.7	48.4*	46.8	43.8	53.4*†	48.3	48.5*	44.6
Non-Hodgkin Lymphoma	16.9	17.5	17.0	16.3	17.3	19.8*	21.9*†	17.2	15.2	17.3
Corpus and Uterus, NOS	25.3	17.2*	17.1*	17.3*	17.4*	17.9*	16.6*	13.6*†	18.1*	19.2*
Ovary	14.6	13.1*	13.3	12.6*	14.3	12.3*	10.9*	13.3	13.0	14.1
Kidney and Renal Pelvis	8.6	11.5*	11.4*	10.7*	12.8*	13.5*	10.7	11.7*	11.1*	9.4
Thyroid	12.5	11.5*	11.1	8.0*†	13.5	17.0*†	10.3	8.9*	10.5	10.6
Melanoma of the Skin	17.5	10.7*	9.0*	11.6*	10.5*	9.1	13.7*	8.6*	11.3*	14.5*†
Pancreas	9.6	9.8	9.8	9.8	9.0	13.9*†	9.2	10.5	8.1†	6.9*†

1. Rates per 100,000, age-adjusted to the U.S. 2000 standard.
2. U.S. incidence rate estimates are from the Surveillance, Epidemiology and End Results (SEER) Program of the National Cancer Institute.
* The age-adjusted rate is significantly different (p<0.05) from the U.S. rate (SEER combined incidence rate).
† The age-adjusted rate is significantly different (p<0.05) from the Louisiana rate

TABLE 3. Ten Most Common Cancers: Average Annual Incidence Rates[1] By Geographic Region. 1999-2003 Black Males

PRIMARY SITE:	U.S[2].	Louisiana	REGIONS: New Orleans	Baton Rouge	South East	Acadiana	South West	Central	North West	North East
INVASIVE CANCERS										
All Sites Combined	672.6	680.3	678.9	689.3	696.6	702.8	640.0	656.2	682.1	654.2
Prostate	266.0	234.0*	214.0*†	264.2	225.6*	232.3*	215.1*	226.0*	241.1*	250.3
Lung and Bronchus	111.5	133.4*	137.3*	122.3	134.2*	149.1*	126.0	131.7	128.6*	133.2*
Colon and Rectum	71.9	78.2*	83.1*	74.0	85.1	80.3	67.3	77.9	84.0*	60.0
Kidney and Renal Pelvis	19.8	21.9	19.3	23.8	30.7*	22.0	21.3	16.2	24.3	17.1
Oral Cavity and Pharynx	18.3	21.0*	19.1	21.0	19.0	25.0*	21.6	20.7	23.1	21.0
Stomach	17.3	19.7*	19.7	19.4	27.2*	17.7	15.4	19.9	22.6	13.5†
Urinary Bladder (Incl. In Situ)	20.5	18.7	23.2	16.2	18.7	20.3	25.1	16.9	14.5*	12.1*†
Pancreas	16.3	18.3	16.4	19.6	21.8	20.6	17.4	22.3	17.2	16.3
Non-Hodgkin Lymphoma	17.8	16.6	19.2	17.6	15.3	15.4	21.6	12.0	14.0	11.6*
Myeloma	13.4	15.9*	14.8	17.8	12.7	15.3	8.8†	12.4	15.9	24.9*†

1. Rates per 100,000, age-adjusted to the U.S. 2000 standard.
2. U.S. incidence rate estimates are from the Surveillance, Epidemiology and End Results (SEER) Program of the National Cancer Institute.
* The age-adjusted rate is significantly different (p<0.05) from the U.S. rate (SEER combined incidence rate).
† The age-adjusted rate is significantly different (p<0.05) from the Louisiana rate

TABLE 4. Ten Most Common Cancers: Average Annual Incidence Rates[1] By Geographic Region. 1999-2003 Black Females

PRIMARY SITE:	U.S[2].	Louisiana	REGIONS: New Orleans	Baton Rouge	South East	Acadiana	South West	Central	North West	North East
INVASIVE CANCERS										
All Sites Combined	396.9	397.9	402.9	398.7	392.6	422.0*†	403.9	377.9	387.5	382.3
Breast	118.9	120.3	122.3	126.2	107.2	126.6	118.6	91.3*†	121.9	119.9
Colon and Rectum	55.5	58.1	56.7	59.8	57.1	59.2	68.9	54.5	60.4	53.4
Lung & Bronchus	54.7	49.0*	53.7	40.6*†	52.2	53.2	59.7	65.0†	39.6*†	43.8*
Corpus and Uterus, NOS	19.2	17.8	16.8	17.1	19.1	18.5	15.8	12.3	21.4	18.3
Cervix Uteri	10.7	14.9*	12.3†	15.3*	14.0	14.0	14.9	17.1*	18.6	17.9*
Pancreas	13.7	13.9	13.8	14.7	15.8	17.7	14.4	15.0	9.7*†	13.0
Stomach	9.3	11.4*	11.1	12.9*	16.3	13.2	9.6	8.9	10.7	8.3
Non-Hodgkin Lymphoma	11.8	10.6	10.6	11.0	9.8	12.0	14.4	8.3	9.3	10.8
Kidney and Renal Pelvis	9.8	10.4	9.4	10.4	13.9	10.9	6.6	16.4*	7.9	12.0
Ovary	10.1	10.4	11.3	9.4	9.9	10.8	7.9	10.7	10.4	8.9

1. Rates per 100,000, age-adjusted to the U.S. 2000 standard.
2. U.S. incidence rate estimates are from the Surveillance, Epidemiology and End Results (SEER) Program of the National Cancer Institute.
* The age-adjusted rate is significantly different (p<0.05) from the U.S. rate (SEER combined incidence rate).
† The age-adjusted rate is significantly different (p<0.05) from the Louisiana rate

F. Chronic Diseases: Associated Risk Factors

1. Heart Disease And Stroke: Risk Factors

Cardiovascular diseases (CVDs) are a group of diseases of the heart and blood vessels, including coronary heart disease (CHD), the disease that leads to heart attack, and diseases of the blood vessels that lead to stroke or hemorrhage. CVDs are the leading cause of death for both men and women in all racial and ethnic groups in Louisiana and the United States. Almost 1 million people in the United States die of CVDs each year, accounting for approximately 40% of all deaths.[3] In Louisiana, CVDs caused 14,697 deaths in 2002, which accounted for 35% of all deaths that year.[4]

In addition to the approximately 15,000 Louisiana residents that die from CVDs each year, many more state residents experience a heart attack, stroke, or other non-fatal cardiovascular event. For most of these CVD survivors, their lives have changed forever: the majority will need medications for the rest of their lives, and some are left with permanent, severe disabilities such as the loss of speech or the inability to move an arm or leg.

Some CVD risk factors cannot be changed, such as age (CVD mortality increases with age), sex (males have higher CVD mortality rates than women, especially before menopause), race (blacks generally have higher rates than whites), and a family history of heart attacks at a young age.

However, most CVD risk factors are modifiable, meaning that individuals can change their behavior to slow, or even reverse the process of arterial blockage and decrease their risk of having a heart attack or stroke. The modifiable risk factors include tobacco use, high blood pressure, high blood cholesterol, lack of regular physical activity, overweight/obesity, poor nutrition, and diabetes.

1.1 Tobacco

1.1.1 Cigarette Smoking

Cigarette smoking was the leading risk factor for disease, responsible for an estimated 6,427 deaths and 96,085 years of potential years of life lost in 1999[5]. Furthermore, cigarette smoking is responsible for one in four deaths due to CVDs and contributes to illness and death due to cancers, respiratory diseases, premature and low birth weight infants, sudden infant death syndrome, and burns. More than 770,000

3 American Heart Association, 2004 Heart and Stroke Statistical Update. Dallas: AHA, 2000.

4 Louisiana Office of Public Health, State Center for Health Statistics

5 Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC) Report – Louisiana 1999.

adults,[6] 79,000 high school,[7] and 28,000 middle school[8] aged children in Louisiana currently smoke cigarettes. Smokers not only put their own lives at risk, but also affect the lives of people around them. The human and economic costs of cigarette smoking are substantial. Recent estimates show that the total direct and indirect costs for 1999 in Louisiana attributable to cigarette smoking stood at $2.81 billion or $645 per capita.[9]

1.1.1.1 Cigarette Smoking Among Adults

1.1.1.1.1 Prevalence of Cigarette Smoking among Adults

Nearly one in four (23.5%) adults in Louisiana currently smokes cigarettes.[10] Rates of adult smoking in Louisiana have not changed significantly over the past decade and have consistently been above the national mean (20.8%).

Rates of current smoking are higher among males, Hispanics, individuals in the 18 - 49 year age group, individuals with annual household income between $15,000 and $25,000 and in individuals with less than a high school level of education.[11]

Demographic Profile of Current Smokers

Age	% Who Currently Smoke	Sex	% Who Currently Smoke	Race	% Who Currently Smoke	Income	% Who Currently Smoke	Education	% Who Currently Smoke
18-24	27.32	**Male**	26.9	**White**	24.4	**Less than $15,000**	28.07	**Less than H.S.**	33.2
25-49	27.3	**Female**	20.5	**Black**	21.3	**$15,000-$24,999**	31.4	**H.S. or G.E.D.**	25.9
50-64	22.3			**Hispanic**	26.7	**$25,000-$49,999**	23.3	**Some post-H.S.**	24.7
65+	9.8					**$50,000+**	19.3	**College Graduate**	13.7

Source: Louisiana Department of Health and Hospitals Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

1.1.1.1.2 Smoking Cessation among Adults

The best way to avoid the undue consequences of smoking is to never start smoking. However, reduction in disease rates among current smokers is best achieved only through cessation. Smoking cessation has major and immediate health benefits for individuals of all ages. Smoking cessation is

6 Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Behavioral Risk Factor Surveillance System (BRFSS) – 2004.

7 Centers for Disease Control and Prevention. Youth Risk Behavior Surveillance System (YRBS) – Louisiana, 1997.

8 Tobacco Control Program, Office of Public Health, Louisiana Department of Health and Hospitals. Louisiana Youth Tobacco Survey – 2000.

9 Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC) Report – Louisiana 1999.

10 Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Behavioral Risk Factor Surveillance System (BRFSS) – 2004.

11 Behavioral Risk Factor Surveillance System Survey Data. Atlanta, GA: US Department of Health and Human Services, Centers for Disease Control and Prevention, 2004.

known to reduce the risk of lung cancer, other cancers, cardiovascular disease and chronic lung disease. Research shows that:[12]

- Individuals who quit before 50 years of age have a 50% reduction in the risk of dying in the next 15 years compared with continuing smokers.
- The risk of lung cancer declines steadily in people who quit smoking, with a 30 to 50% reduction in the risk after 10 years, compared to the risk for those who continue smoking.
- There is a 50% reduction in the risk of cardiovascular disease after 1 year in those who quit smoking and after 15 years, their risk equals that of non-smokers.

In the readiness-to-change model, smoking cessation is viewed as a process of change with five stages: pre-contemplation, contemplation, preparation, action and maintenance. Results from the 2004 Louisiana BRFSS show that approximately 661,000 adult Louisianans have quit smoking. Furthermore, an additional 465,000 have tried to quit smoking for at least one day in the past year. Trend data over the past seven years (1997 – 2004) show a gradual increase in the proportion of adults who are trying to give up the deadly habit, from 49.0 to 60.0%.

1.1.1.2 Cigarette Smoking among Youth

Nine out of ten current smokers started before they were 18 years of age. The younger one begins to smoke, the more likely one is to remain a smoker as an adult. Health problems associated with smoking are a function of the duration (years) and the intensity (amount) of use.[13] Earlier onset of tobacco use also provides more life-years to use tobacco and thereby increases the potential duration of use and the risk of a range of more serious health consequences. Tobacco use is considered a part of the continuum of high-risk behaviors, which include the use of illegal drugs and anti-social behavior. These problem behaviors can be considered a syndrome, since involvement in one behavior increases the risk for involvement in others. Delaying or preventing the use of tobacco may have implications for delaying or preventing these other behaviors as well. [14]

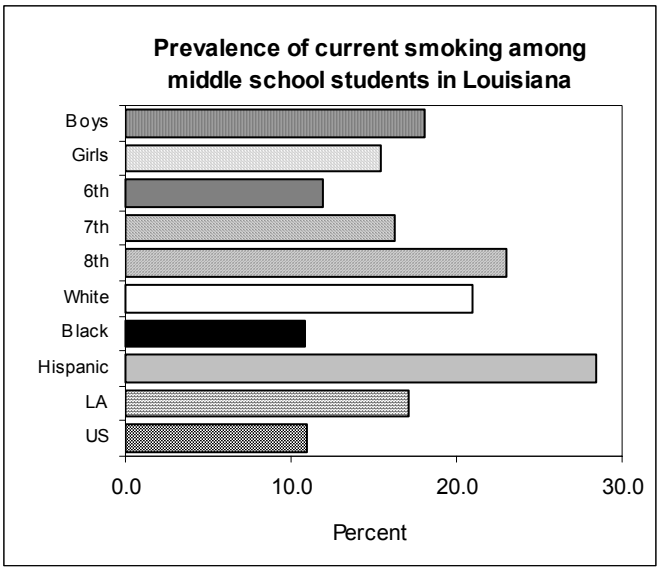
12 U.S. Department of Health and Human Services. The health benefits of smoking cessation: a report of the Surgeon General, Atlanta: U.S. Department of Health and Human Services, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1990.

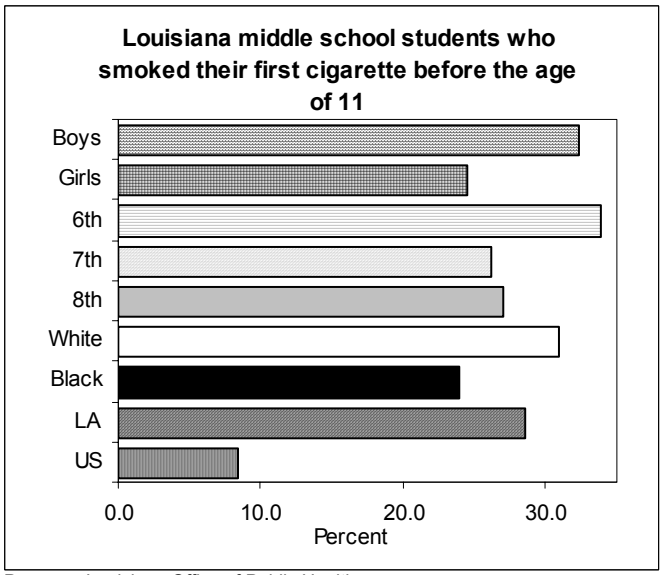
13 U.S. Department of Health and Human Services. Preventing Tobacco Use Among Young People – A Report of the Surgeon General: U.S. Department of Health and Human Services, Public Health Service, CDC, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 1994.

14 EPA. Respiratory health effects of passive smoking: Lung Cancer and other disorders. EPA/600/6-90/006F; December 1992

1.1.1.2.1 Prevalence of Cigarette Smoking among Youth

Results from the 2000 Louisiana Youth Tobacco Survey (YTS) show that more than 70,000 (50.0%) public middle school students in Louisiana reported having ever smoked a cigarette, and 17.1% currently smoke cigarettes. Moreover, more than a fourth (28.6%) of the students had smoked their first cigarette





Source: 2000 Louisiana Youth Tobacco Survey, Louisiana Tobacco Control Program, Louisiana Office of Public Health

before the age of 11. Apart from cigarette smoking, other forms of tobacco use reported by middle school students include cigars (12.5%), pipes (6.3%), bidis (small brown cigarettes from India consisting of tobacco wrapped in a leaf and tied with a thread) (7.1%), and smokeless or chewing tobacco (9.9%). The rates of cigarette smoking and use of other tobacco products increase with each increasing school grade. Furthermore, white and Hispanic students have higher rates of cigarette smoking compared to black students. Rates of current smoking among middle school students in Louisiana are 50% higher than those of their peers nationally.

Sales of tobacco products to children under the age of 18 years are illegal and punishable by law in all 50 states and the District of Columbia. However, underage tobacco sales continue to be a major source of tobacco for minors. Nearly one in two (46.8%) middle school students (under the age of 18) who reported currently smoking cigarettes bought their last pack of cigarettes from a gas station, convenience, grocery, or drug store. Results from the same survey also show that 70.5% of the middle school aged current smokers who bought cigarettes in a store were not asked to show proof of age when buying cigarettes during the 30 days preceding this survey. In addition, a greater proportion of white students (76.0%) reported not being asked for proof of age as compared to black students (55.5%).

1.1.1.2.2 Smoking Cessation among Youth

The continuum of smoking behavior among children and adolescents can be described in five stages: preparation, initial trying, experimentation, regular smoking, and nicotine dependence or addiction. Persons who have smoked can discontinue at any stage, but quitting becomes more difficult as smokers progress through the continuum and become increasingly dependent on nicotine. Desire to quit smoking was shown to decrease with each additional school grade. Current smokers in the sixth grade were more likely to state that they wanted to quit smoking, as compared to eighth graders (61.0% and 47.3%, respectively).

1.1.2. Smokeless Tobacco

Smokeless tobacco (chewing or spit tobacco) can also lead to nicotine addiction, oral cancer, gum disease, and an increased risk of cardiovascular disease, including heart attacks.

1.1.2.1 Use of Smokeless Tobacco among Adults

According to 2004 BRFSS data, 15.3% of the adult population in Louisiana has ever used smokeless tobacco products such as chewing tobacco, dip or snuff. Overall, 4% of the adult population currently uses smokeless tobacco products.

Current Smokeless Tobacco Users									
Age	% Who Use Smokeless Tobacco	Sex	% Who Use Smokeless Tobacco	Race	% Who Use Smokeless Tobacco	Income	% Who Use Smokeless Tobacco	Education	% Who Use Smokeless Tobacco
18-24	4.8	**Male**	7.6	**White**	5.1	**Less than $15,000**	3.5	**Less than H.S.**	5.4
25-49	5.0	**Female**	0.6	**Black**	1.7	**$15,000-$24,999**	3.9	**H.S. or G.E.D.**	3.9
50-64	2.2					**$25,000-$49,999**	3.7	**Some post-H.S.**	4.1
65+	2.7					**$50,000+**	5.2	**College Graduate**	2.9

Source: Louisiana, Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

1.1.2.2 Use of Smokeless Tobacco among Youth

Use of smokeless tobacco products among youth in Louisiana appears to be widely prevalent. Results from the 2000 YTS show that more than one in two (56.1%) middle school students have used smokeless tobacco products before the age of 11 years. One in ten (9.9%) middle school students currently use smokeless tobacco products. Significantly higher rates of use were observed among boys compared to girls (15.8% vs. 3.2%) and white students compared to blacks (12.8% vs. 5.4%).

1.1.3 Environmental Tobacco Smoke

There is a growing body of evidence to support the harmful effect of exposure to Environmental Tobacco Smoke (ETS) or second-hand smoke. ETS is classified as a Group A carcinogen under the United States Environmental Protection Agency's (EPA) carcinogen assessment guidelines. Exposure to ETS causes lung cancer and has been linked to an increased risk for heart disease in nonsmokers. ETS is also known to cause irritation of the conjunctiva of the eyes and the mucous membranes of the nose, throat, and lower respiratory tract.[15] Provision of completely smoke-free environments is the most effective method for reducing ETS exposure.

1.1.3.1 ETS Exposure at home

Results from the 2004 Louisiana BRFSS survey show that nearly one in four adults (24.7%) in Louisiana allow smoking indoors or did not have any rules about smoking inside the house.

Adults who Allow Smoking Indoors

Age	% Who Allow Smoking	Sex	% Who Allow Smoking	Race	% Who Allow Smoking	Income	% Who Allow Smoking	Education	% Who Allow Smoking
18-24	24.8	**Male**	25.9	**White**	22.5	**Less than $15,000**	34.5	**Less than H.S.**	36.8
25-49	24.2	**Female**	23.6	**Black**	30.2	**$15,000-$24,999**	33.9	**H.S. or G.E.D.**	27.7
50-64	26.4					**$25,000-$49,999**	23.6	**Some post-H.S.**	24.0
65+	23.6					**$50,000+**	15.9	**College Graduate**	14.4

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

1.1.3.2 ETS Exposure at work

Exposure to ETS in the workplace represents a substantial contribution to lifetime ETS exposure.

Results from the 2004 Louisiana BRFSS survey show that one in five (19.0%) adults (who work indoors most of the time) report that smoking is allowed in some or all work areas or that there were no rules about smoking in their place of work. Blacks, individuals in the 18 - 24 year age group, individuals with an annual household income between $25,000 and $49,000, and individuals with less than a high school education were more likely to report that their place of work did not prevent indoor smoking. These statistics highlight the increased level of health risk among a large proportion of individuals who are exposed to ETS on a daily basis at their places of work.

15 EPA. Respiratory health effects of passive smoking: Lung cancer and other disorders. EPA/600/6-90/006F; December 1992.

Demographic Profile of Adults Whose Place of Work Does Not Prevent Smoking Indoors									
Age	% Whose Work Allows	Sex	% Whose Work Allows	Race	% Whose Work Allows	Income	% Whose Work Allows	Education	% Whose Work Allows
18-24	29.7	Male	24.3	White	16.5	Less than $15,000	21.7	Less than H.S.	32.9
25-49	18.5	Female	15.1	Black	23.1	$15,000-$24,999	22.6	H.S. or G.E.D.	25.4
50-64	15.0					$25,000-$49,999	23.9	Some post-H.S.	18.9
65+	14.8					$50,000+	14.2	College Graduate	11.1

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

1.1.3.3 Youth Exposure to Environmental Tobacco Smoke

Research has shown that children exposed to ETS are at an increased risk for SIDS, acute lower respiratory tract infections, asthma induction and exacerbation, and middle-ear effusions.[16]

Results from the most recent YTS show that more than three out of four middle school students (84.5%) believe that exposure to ETS is harmful. Middle school students who are current smokers were less likely to believe that ETS exposure can be harmful, as compared to those who have never smoked (77.1% and 87%, respectively).

Nearly one in two middle school students (48.9%) currently lives with someone who smokes cigarettes. Middle school students who were smokers were significantly more likely to be living with someone who smoked, as compared to non-smokers, (66.7% and 33.7% respectively). One out of two middle school students (50.8%) in Louisiana rode in the car with someone smoking on at least one out of the seven days preceding the survey.

1.1.4 Impact of Tobacco Use

1.1.4.1 Morbidity and mortality

Results from the recent Smoking Attributable Morbidity, Mortality and Economic Costs (SAMMEC) study show that in 1999, cigarette smoking contributed to an estimated 6,427 deaths in Louisiana, accounting for 16.0% of all deaths in that year. Also, an estimated 96,085 Years of Potential Life were Lost (YPLL) as a result of the premature mortality resulting from cigarette smoking. Cancer was the leading cause of smoking-attributable YPLL in Louisiana in 1999, it was specifically responsible for 41,890 years of potential life lost (27,088 male and 14,802 female). Cardiovascular disease (CVD) caused a loss of 38,249 years (22,731 male and 15,518 female) of potential life, while respiratory diseases caused 15,948 years to be lost (8,118 male and 7,830 female).

16 EPA. Respiratory health effects of passive smoking: Lung cancer and other disorders. EPA/600/6-90/006F; December 1992.

1.1.4.2 Economic costs

Results from SAMMEC also estimate the total direct and indirect costs for 1999 in Louisiana attributable to cigarette smoking at $2.81 billion. Smoking attributable direct medical costs totaled $1.15 billion:

- $392 million for ambulatory care
- $308 million for hospitalizations
- $101 million for prescription drugs
- $268 million for nursing home services
- $82 million for other professional services

Indirect costs due to loss of productivity resulting from the premature deaths for 1999 in Louisiana due to cigarette smoking were estimated at $1.66 billion. This included $731 million due to malignant neoplasms, $755 million due to CVD and $178 million due to respiratory diseases.

1.2 Overweight and Obesity

New Definitions:
Overweight - an adult with a BMI between 25.0-29.9 kg/m^2
Obesity - an adult with a BMI of 30 kg/m^2 or greater
Note: Because of these changes, readers may find earlier obesity/overweight figures that do not agree with those found in this report.

The three main factors that affect weight are: metabolism, food intake, and activity level. While some individuals may have underlying physical disorders that cause them to gain or lose too much weight, most people can control their weight by matching their food intake to their activity level. Even though an individual's Body Mass Index (BMI) is, for the most part, within his or her control, the percentage of people in the United States who are overweight or obese has been steadily and dramatically on the rise. Adult obesity in Louisiana rose from 16% in 1991 to 27% in 2004, with the largest jump seen in the 18 to 24 year old age group. Being overweight and/or obese substantially increases the risk of hypertension, high cholesterol, type II diabetes (adult onset), heart disease, stroke, gallbladder disease, osteoarthritis, and various cancers.[17]

The body mass index (BMI) is an index of weight relative to height, which is used to estimate the amount of fat a person has on his or her body. Prior to 1995, the World Health Organization (WHO) defined overweight as a BMI equal to or greater than 27.8 for males, and a BMI equal to or greater than 27.3 for females. However, as evidence mounted that indicated an increased risk of morbidity and mortality for individuals with a BMI of 25.0 or greater, WHO responded by redefining overweight and obesity. According to current definitions, a person is defined as overweight if his or her BMI is between 25.0 and 29.9 and obese if their BMI is greater than 30.0. Because of this change, readers may find earlier

17 Stunkard AJ, Wadden TA. (Editors) Obesity: Theory and therapy, Second Edition. New York: Raven Press, 1993.

obesity/overweight figures that do not agree with those found in this report and are therefore cautioned against comparing previously reported statistics with the numbers found here.

Overweight and obese adults are at increased risk for CVDs. Over the last decade (1991 - 2004), the% of overweight and/or obese Louisiana residents increased from 49% to 63%.

1.3 High Blood Pressure

High blood pressure, or hypertension, is a major risk factor for both heart disease and stroke. According to results from the 2004 BRFSS survey, nearly one in three adult residents (30.5%) of Louisiana suffers from high blood pressure. The proportion of Louisiana residents with undiagnosed hypertension is unknown. Nationally, only two thirds of people with high blood pressure know they have it, one half are receiving treatment, and one fourth are under control. High blood pressure is a major risk factor for both coronary heart disease (CHD) and stroke.[18] It is important to ensure adequate control of high blood pressure through exercise, weight management, and medication.

1.4 High Cholesterol

Elevated cholesterol is one of the strongest risk factors associated with CHD.[19] Cholesterol plays a direct role in the atherosclerotic process, the disease process that underlies heart disease and stroke, where cholesterol accumulates on the arterial walls, building plaque and restricting blood flow. Low-density lipoprotein (LDL), the “bad cholesterol,” clogs the arteries to the heart and increases the risk for heart disease. High-density lipoprotein (HDL), the “good cholesterol,” decreases the risk for heart disease. A high total cholesterol level increases the risk for heart disease. Lowering high total blood cholesterol levels can decrease the likelihood of death from heart disease.

The percentage of Louisiana adults 35 years of age and older who have not had their blood cholesterol checked within the previous five years was 28.5% in 2004. Of persons who had ever been checked, 32.8% reported having high cholesterol levels.

1.5 Physical Inactivity

Regular physical activity is associated with significant health benefits and has been shown to decrease mortality and morbidity due to several diseases. The benefits of regular physical activity include, but are not limited to; reduction in the rates of heart disease, blood pressure, stroke, diabetes, osteoporosis, colon cancer, and mood disorders such as anxiety and depression. Regular physical activity also helps maintain body weight, aids in the management of osteoarthritis, and reduces the risk of falls and

18 American Heart Association, Heart and Stroke Statistical Update, 2004. Dallas, TX: AHA, 2001.

19 American Heart Association, Heart and Stroke Statistical Update, 2004. Dallas, TX: AHA, 2001.

fractures.[20] Moderately intense physical activity such as a brisk walk or raking a lawn can provide the desired results.

Regular moderate or vigorous physical activity can reduce the risk for CVD. Healthy people 2010 recommends that adults should engage in vigorous-intensity physical activity 3 or more days per week for 20 or more minutes per occasion, or engage in moderate-intensity physical activities for at least 30 minutes on 5 or more days of the week. Only 35% of Louisianans met the recommendations in 2001. The proportion of those who met the recommendations increased to 40% in 2003, but it is still below the national level (47%).

1.6 Diet

Eating five or more servings of fruits or vegetables per day can help prevent heart disease, cancer, and other chronic conditions. In 2003, 84% of Louisianans reported that they did not consume at least five servings of fruits and vegetables per day.

2. DIABETES: MANAGEMENT

Diabetes mellitus (diabetes) is a serious chronic disease caused by either a shortage of, or a decreased ability to use, insulin, the hormone that allows glucose (sugar) to enter cells and be converted to energy. Uncontrolled, this deficiency leads to the damaging of vital organs, caused by the prolonged presence of glucose and fats in the blood. Persons who are obese, physically inactive, members of ethnic minorities (Blacks, Hispanic/Latino Americans, and American Indians), and those with a family history of diabetes or prior gestational diabetes, are at higher risk of acquiring diabetes.

Diabetes is a common and serious disease in Louisiana. It is costly not only in terms of the economic burden it imposes on the state, but also in terms of the human suffering it inflicts, including complications. Of all states, Louisiana has the highest age adjusted rate of death due to diabetes as the underlying cause (42.1/100,000) and has maintained this position since 1996 (BRFSS, 2004). Diabetes is also the leading cause of blindness in adults aged 20 to 74 and the most common cause of non-traumatic amputations and end-stage renal disease, accounting for approximately 40% of new cases of end stage renal disease nationwide (CDC, 2003).

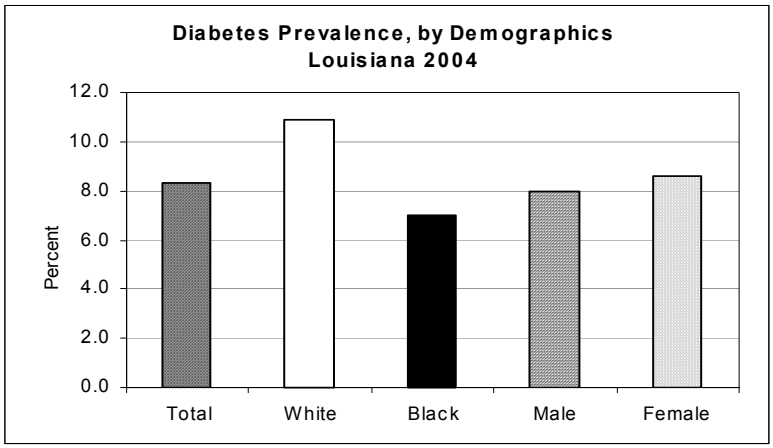
In 2001, approximately 16% (93,000) of Louisiana hospital discharges and 18% ($1.5 billion) of the costs associated with these discharges were attributable to people of all ages with diabetes as the principal or secondary diagnosis. This cost, which reflects estimates derived from known cases of diabetes, is likely an underestimate, given that about one third of all diabetics are undiagnosed.

20 U.S. Department of Health and Human Services. Physical Activity and Health: Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, 1996.

2.1 Prevalence

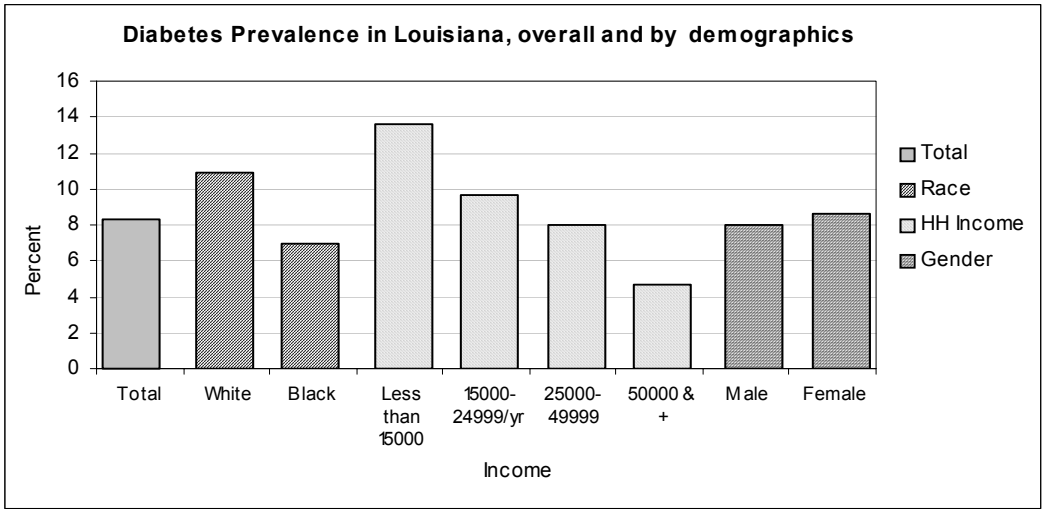
The overall prevalence of diabetes in Louisiana is 8.3% (BRFSS, 2004). There are, however, many demographic variables to account for when studying prevalence. Using BRFSS, these differences were identified for race, sex, age, and household income.

Data analysis showed that, in 2004, blacks had a higher prevalence of diabetes than whites (10.9% vs. 7.0%), and that adult women had a higher prevalence than men (8.6% vs. 8.0%). The likelihood of having diabetes increases with age among Louisiana residents, with the highest prevalence found among those 65 years or older (19.6%), and the lowest prevalence found in those under 45 years of age (2.4%). In terms of household (HH) income, the prevalence of diabetes is higher for adults in Louisiana from



Source: Louisiana Department of Health and Hospitals, Office of Public health, Chronic Disease Epidemiology Unit, BRFSS 2004

households with lower total incomes, and for those with lower educational attainment. For persons living in households with a yearly income less than $15,000, the prevalence of diabetes is approximately 13.6%. This prevalence steadily decreases as the yearly income rises with the lowest prevalence for those with annual income of more than $50,000 (4.7%) (BRFSS, 2004).



Source: Louisiana Department of Health and Hospitals, Office of Public health, Chronic Disease Epidemiology Unit, BRFSS 2004

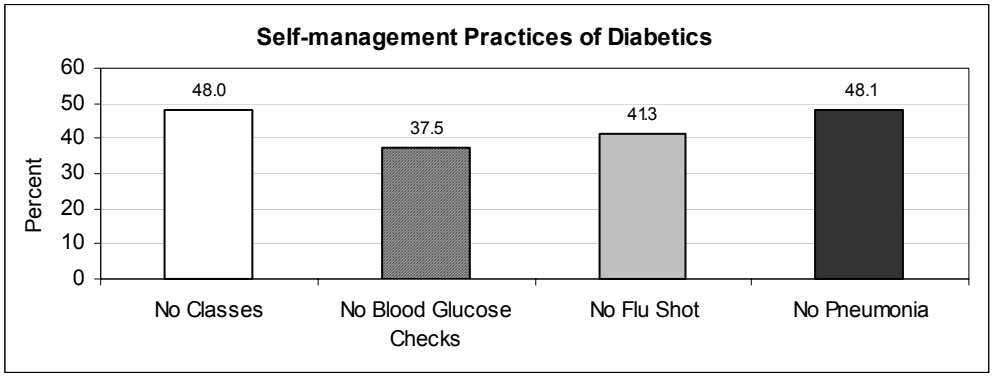
2.2 Preventive Practices

Reducing the burden of disease due to diabetes requires active and effective management of the disease, by both diabetics and those who treat them. For those affected by diabetes, following recommended preventive and curative practices is the best way to ensure a good quality of life. These practices include self-management classes, monitoring blood glucose levels, and vaccinations for both influenza and pneumonia.

2.2.1 Self-Management Courses

A thorough understanding of diabetes is critical to knowing how to properly manage the disease. It is important for diabetics to be consistent with care and up to date on the best practices for management. For this reason, it is recommended that diabetics and their families take classes that teach self-management. An estimated 48% of Louisiana diabetics, however, have not yet taken such a course (BRFSS, 2004).

Louisiana diabetics 65 years of age and older, who are most vulnerable to morbidity, are the least likely to have taken a self-management course. In addition, more white diabetics (51.9%) than black diabetics (43.8%) reported that they have never taken a class on how to manage their diabetes.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

2.2.2 Blood Glucose Monitoring

The most fundamental aspect of self-managing diabetes is keeping blood sugar levels within the normal range. Although diabetics are advised to monitor their blood glucose levels several times a day, it is crucial that they check the level, at least, once a day. When asked how often they checked their blood glucose levels in a day, 37.5% of Louisiana's diabetics responded that they failed to check, at least, once daily (BRFSS, 2004).

2.2.3 Influenza

Because diabetics are more likely than non-diabetics to suffer from complications of influenza (flu), it is recommended that they get an annual flu shot as a necessary precaution. In 2004, over half of Louisiana diabetics (58.7%) had received a flu shot within the last year. In terms of race, 48.9% of black diabetics and 35.5% of white diabetics reported that they had not received an annual flu shot. Approximately 65.8% of diabetics under the age of 45 and 46.5% of diabetics ages 45 to 64 had not received a flu shot.

2.2.4 Pneumonia

Like the flu vaccine, pneumonia vaccinations are important to the health of diabetics. Nationally, however, only about one in three adults with diabetes are vaccinated for pneumonia. A pneumonia shot every 10 years is recommended for anyone aged two years or older who might be at higher risk of getting pneumonia due to an existing chronic condition, such as diabetes. Unfortunately, 48.1% of diabetics in Louisiana reported never having received a pneumonia vaccination (BRFSS, 2004). Black diabetics were less likely to have ever received a pneumonia vaccination than white diabetics (45.2% vs. 42%). Those with annual household incomes less than $15,000 were more likely to have had a pneumonia vaccination than those with annual household incomes over $50,000.

2.3 Medical Office Visits

It is essential that persons with diabetes see a physician or other health professional specifically for their condition. Diabetes has the distinction of being one of the few chronic diseases that must be actively managed on a daily basis in order to be effectively controlled. The affected persons should perform the tasks addressed earlier, such as daily monitoring of blood glucose, and ensure that they receive the recommended standard of care from their healthcare professionals in terms of consultations, foot examinations, and eye examinations.

2.3.1 Hemoglobin A1c (HgA1c)

The HgA1c test is the most reliable method for determining average blood sugar levels over the three months prior to the test. Diabetics are advised to have this test once every three months. Since the test provides the best indication of blood sugar over the previous three months, health professionals can make the necessary determination on how to proceed with care, including insulin adjustment. BRFSS analysis shows that, of diabetics surveyed in 2004, only an estimated 61.1% reported that they had received even at least two HgA1c tests in the previous year. About 45.2% of blacks and 35.3% of whites responded that they had not had the test at least twice in the previous year. Diabetics in the highest income bracket ($50,000 and over) comprise the lowest proportion not having received an HgA1c annually (33.7%). Those with a yearly income of $15,000 to $24,000 have the highest proportion with 41.8% not receiving an HgA1C test at least twice annually.

2.3.2 Foot Examinations

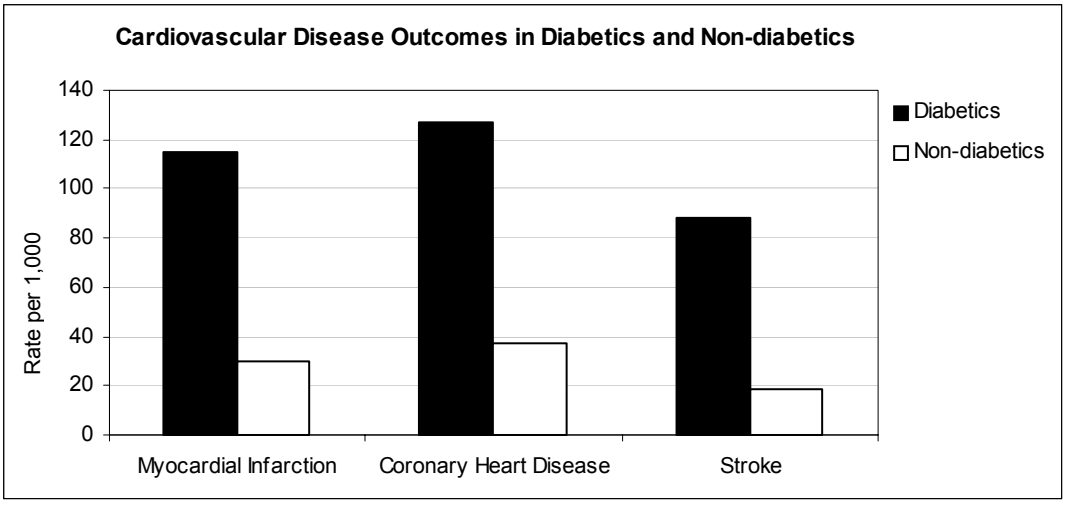
Diabetics are asked to check their own feet regularly and to have them checked by a health professional at least once a year. While self-examinations of the feet allow the patient to catch any sores or cuts that might progress if undetected, medical professionals have the proficiency to, among other aspects of complications, detect signs of nerve damage and prescribe appropriate measures. Overall, 29% of adult Louisiana diabetics did not receive a foot examination in the 12 months prior to the survey. The state's white diabetics are more likely than black diabetics to report not receiving a foot examination (31% and 26%, respectively).

2.3.3 Eye Examinations

Diabetes has been proven to be the leading cause of new cases of blindness in adults aged 20 to 74 years. Therefore, annual eye examinations by healthcare professionals provide the possibility of early detection for signs of retinopathy and allow appropriate measures to be taken. Overall, an estimated 28.8% of Louisiana diabetics did not have an eye examination in the previous year.

2.4 Co-Risk Factors

Because diabetes causes damage to many vital organs over time, diabetics are at higher risk than non-diabetics for morbidity and mortality. To assess the extent to which diabetes does increase the risk of morbidity, three outcomes were selected for analysis, comparing the rates (per 1,000) between diabetics and non-diabetics. Louisiana diabetics were found to have about four times the risk for myocardial infarction that non-diabetics have, five times the risk for coronary heart disease, and three times the risk for stroke.



Source: Louisiana Department of Health and Hospitals.
Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

Reducing the burden of disease due to diabetes requires monitoring diabetics on risk factors associated with other morbidity outcomes. Risk factors that may potentially speed the progression of disease in diabetics and impose excess morbidity include obesity, physical inactivity, hypertension, high cholesterol,

and tobacco use. The following section examines the distribution of some important risk factors among Louisiana diabetics.

2.4.1 Overweight/Obesity

Overweight and obesity continue to be an area of particular relevance in the state. 30% of Louisiana diabetics are overweight, and another 57% are obese. Hence, approximately 87% of all adult diabetics in Louisiana are overweight/obese. Because the maintenance of an ideal body weight depends on lifestyle choices over which every individual has some measure of control, this is an area with considerable opportunity for worthwhile impact. The consumption of proper foods in moderation is essential to weight control.

2.4.2 Physical Activity

Combined with a nutritionally balanced diet, moderate physical activity is critical for physiological balance and well-being. The 2003 BRFSS defines "any exercise" as participation, over the previous month, in any physical activities such as running, calisthenics, golf, gardening, or walking, outside of the duties of one's regular work. Nearly half (41%) of Louisiana diabetics reported that they had not exercised at all over the month prior to the survey.

The benefits of physical activity are greater when activity is regular and sustained. The BRFSS defines moderate physical activity as engaging in 30 minutes of moderate activities, five or more times per week, or 20 minutes of vigorous activity 3 or more times per week. In Louisiana, about 71.7% of diabetics do not engage in moderate physical activity as defined above.

2.4.3 Hypertension

In the absence of physical activity and a nutritious diet, many diabetics are in jeopardy of developing high blood pressure. The CDC reports that an estimated 60 to 65% of persons with diabetes have high blood pressure, placing them at increased risk for several morbidity outcomes, including heart attack and stroke. The overall rate of high blood pressure among Louisiana diabetics in 2004 was 69.3%. Of black diabetics in the state, 74.6% appear to be particularly affected by high blood pressure, relative to white diabetics (67.2%). Moreover, diabetics from households with the lowest total income have the highest rates of high blood pressure (79.4%).

2.4.4 Cholesterol

As with blood pressure, elevated blood cholesterol levels are associated with adverse cardiovascular outcomes for diabetics. Approximately 54% of all adult diabetics in Louisiana have high blood cholesterol. Broken into demographic groups, cholesterol prevalences are directly proportional to levels of education, those with less than a high school education having the largest prevalence of high cholesterol (61%) (BRFSS, 2004).

2.4.5 Tobacco Use

Tobacco use, even without the complication of other chronic diseases, is one of the most important risk factors for morbidity. Combined with the complications of other chronic diseases such as diabetes, it greatly increases the risk of stroke and cardiovascular health problems. The prevalence for smoking among diabetics is estimated to be 18.4% (BRFSS, 2004).

Some of the greatest disparities in current smoking among diabetics occur between gender and age. At 16.9%, female diabetics are less likely to smoke than males (20.2%) (BRFSS, 2004). In addition, younger diabetics are proportionately more likely than older diabetics to be current smokers. The relationship between age and current smoking among Louisiana adult diabetics shows a gradient decrease with age. The youngest group of Louisiana adult diabetics (less than 45 years of age) smokes at a rate (24.6%) that is more than the rate (21.8%) of the next age group (45-64 years), and more than two times the rate (10%) of the oldest age group (65 years and above). While diabetics are strongly advised not to smoke, smoking represents a risk factor that diabetics and non-diabetics alike should be encouraged to avoid.

While it has been shown that diabetes is a very serious and costly disease, it is often preventable and even manageable. Because diabetes management involves behavior modifications, self-management is very important to control. Surveillance systems such as the BRFSS and the Diabetes Prevention and Control Program are instrumental to identifying areas of need for increased emphasis on diabetes education in an effort to reduce the morbidity and mortality of those affected by the disease.

3. CANCER SCREENING

Cancer is a potentially fatal disease that affects millions of people in the United States every year. It is the second leading cause of death after cardiovascular disease[21]. Nevertheless, early detection of cancer will increase a person's chances of survival. The following discussion provides screening information for five of the most common forms affecting residents of the United States: breast, cervical, prostate, colorectal, and skin cancers.

3.1 Breast Cancer Screening

Except for skin cancer, breast cancer is the most commonly diagnosed cancer among women in the United States. It is second to lung cancer as the leading cause of cancer-related death. The American Cancer Society estimated that 39,600 women would die of breast cancer in 2002. Routine breast examinations by a health professional, or mammography and clinical breast examination (CBE) are the most effective ways of detecting breast cancer early and improving the chances of survival. All women

[21] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health statistics. Deaths: Leading Causes for 2000. NVSR Vol.50; No.6.

aged 50 and older should undergo mammography, with or without a CBE, every one to two years. Nevertheless, the United States Preventive Services Task Force (USPSTF) indicates that women may begin breast cancer screening at age 40 with some added benefit. Women should discuss these options with their health care provider.

In the 2004 BRFSS, among Louisiana women aged 40 and older, 25.7% reported they had not had a mammogram within the two years before the survey. Black women (26.0%) and white women (25.4%) had similar rates of reporting that they had not had a mammogram within the last two years. It is important to note that while white women are more likely to develop breast cancer, black women have a higher mortality rate from the disease. Clearly, it is vital that all women aged 40 and older, regardless of race, be screened regularly for breast cancer.

The percentage of women 40 years and older not receiving the recommended breast cancer screening has drastically decreased from 1991 to 2004. Currently in Louisiana, over 74% of women in this age group receive a mammogram, which meets and exceeds the Healthy Louisiana 2010 goal of having 70% of the women aged 40 and over screened within the preceding two years. Women in the lowest socioeconomic tier (i.e., with an income of less than $15,000 per year) are over twice as likely to be inadequately screened as women in the highest socioeconomic tier (annual income greater than $50,000).

3.2 Cervical Cancer Screening

The CDC recommends that, from the onset of sexual activity, but no later than their 21st birthday, women should receive a Papanicolaou (Pap) test annually to detect cervical cancer and precancerous lesions. After receiving normal results for three consecutive annual tests, physicians may decide to test less frequently. In the year 2002, the American Cancer Society projected that 13,000 new cases of cervical cancer would be detected. Early detection of cervical cancer through screening has decreased the number of deaths nationally from cervical cancer over the past 40 years. According to results from the 2004 BRFSS, approximately 15% of adult women in Louisiana did not receive a Pap test within the last three years. Black women in the state are more likely not to receive adequate screening for cervical cancer (15.3%) than White women (14.0%).

A high proportion of women who are 65 years of age and older (25%) were not screened within the last three years. Many older women do not realize that they are at risk for the disease. According to the American Cancer Society, the average age for a woman newly diagnosed with cervical cancer is 50 to 55 years old. Risk of cervical cancer does not decrease after age 40, so it is important for older women to be screened regularly.

3.3 Prostate Cancer Screening

Prostate cancer is the second leading cause of death due to cancers among men over the age of 45 years, and overall it is the fifth leading cause of death among men in that age group.[22] In 2001, 3,216 new cases of prostate cancer were diagnosed among men in Louisiana (SEER, Nov 2003). Furthermore, there were over 562 deaths due to prostate cancer in the state in 2001 (CDC Wonder).

There are no clear risk factors for developing prostate cancer; however, men with a family history of prostate cancer and black men appear to be at an increased risk of developing the disease. Also, although there are screening tests such as the Prostate Specific Antigen (PSA) and Digital Rectal Exam (DRE) to detect the presence of prostate cancer, there appears to be no clear consensus among the medical community about the reliability of these tests in detecting prostate cancer. Furthermore, the medical community is also divided on the issue of what constitutes recommended, adequate, and frequent male screening for the disease[23].

According to results from the 2004 Louisiana BRFSS, an estimated 35,000 Louisiana men 40 years of age or older (4.0%) reported being told by a healthcare professional that they have prostate cancer. Data from the 2004 BRFSS also show that approximately 379,000 men over the age of 40 years in the state (46.9%) have not been screened for prostate cancer with a PSA test in the last two years. Fifty two% of black men over the age of 40 years reported not having had a PSA test in the last two years, compared to 45.6 % of white men.

There are no known methods to prevent prostate cancer. Therefore, individuals in the high-risk groups should have periodic evaluations by a medical professional to detect early tumors and prevent the growth and spread of such tumors.

3.4 Colon Cancer Screening

Colorectal cancer, or cancer of the colon or rectum, is the second leading cause of cancer-related deaths in the United States and in Louisiana[24]. In 2001, there were 950 deaths due to colon cancer in Louisiana, with an estimated 2,600 new cases of colon and rectum cancer expected to be detected in the year 2002. Colorectal cancer occurs most often in people aged 50 and older and can affect both men and women. The risk of colorectal cancer may be higher than average for individuals with the following risk factors: a close relative who has colorectal polyps or cancer, a personal history of inflammatory bowel disease, and/ or a personal history of intestinal and colon polyps. A diet primarily from animal sources, physical inactivity, obesity, and smoking are also known risk factors for colorectal cancer[25].

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[22] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

[23] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Diseases. Prostate Cancer: Can we reduce deaths and preserve quality of life? AT-A-GLANCE-2000

[24] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics.

[25] U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Diseases. Colorectal Cancer: The Importance of Prevention and Early Detection. AT-A-GLANCE-2001

As with several other cancers, routine screening is known to help in early detection and treatment to prevent the progression of colorectal cancer. The USPSTF recommends initiating screening at age 50 for men and women at average risk for colorectal cancer, based on the higher incidence of cancer in this and older age groups, relative to the general population. In persons at higher risk (e.g., those with a first-degree relative who receives a diagnosis with colorectal cancer before 60 years of age), initiating screening at an earlier age is reasonable. Annual home blood stool tests for individuals over the age of 50, combined with a flexible sigmoidoscope examination every 5 years, are known to be effective in diagnosing early tumors. Results from the 2004 BRFSS show that nearly half of the adults over the age of 50 (43.0%) have not had either a home blood stool test or a flexible sigmoidoscope examination in accordance with the USPSTF guidelines. Of those who have not had the tests, an increased proportion was black relative to white (46.5% vs. 41.3%).

4. ASTHMA PROGRAM

4.1 Asthma in the Nation

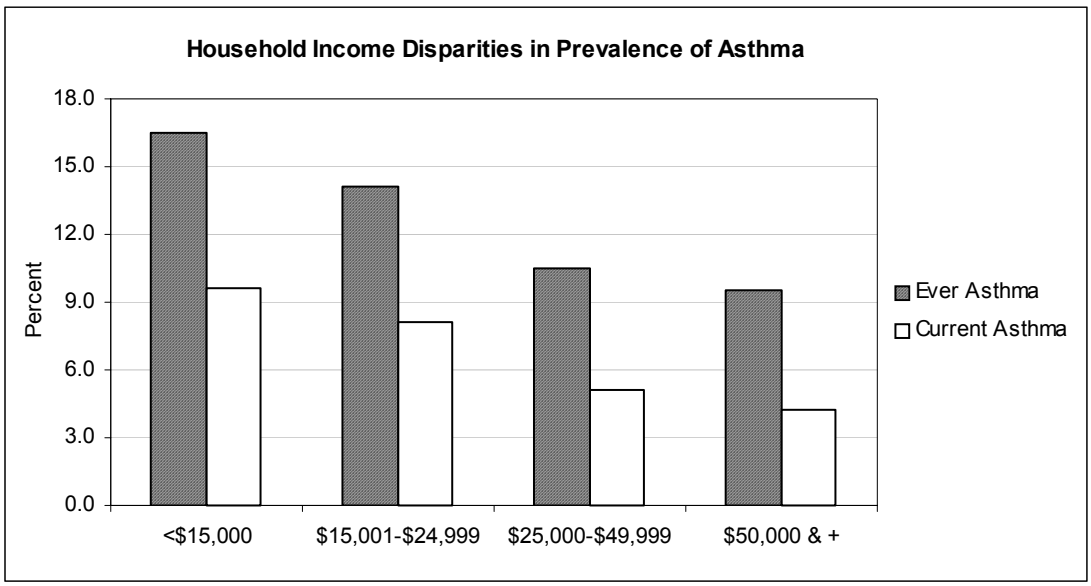
Asthma is a chronic respiratory disease characterized by wheezing and shortness of breath. In the last few years, the disease has become an emergent public-health concern in the United States. Asthma is the most common chronic disease facing children, accounting for 10.1 million missed days of school, and is the third-ranking cause of hospitalization among those younger than 15 years of age. Nationwide, approximately 4.8 million children under the age of 18 (7%) currently have. According to the Centers for Disease Control and Prevention, approximately 10.3% of adults in the United States in 2002 had ever been told that they had asthma, and 7.7% were current asthmatics.

4.2 Adult Asthma in Louisiana

In 2004, the BRFSS Optional Asthma Module was used to determine the prevalence of asthma in adults in Louisiana. This module included two questions about asthma that had been asked in previous years: 1) Did a doctor ever tell you that you had asthma? and 2) Do you still have asthma? Analysis showed that approximately 11.8% of adults in the state have had asthma at some time, and approximately 6.0% currently have asthma. This is an increase from 2000 when only 8% of respondents had ever had asthma and 5% currently had asthma.

Demographically, blacks were more likely than whites to report that they had asthma at some time in the present or past (13.5% vs.10.6%). When asked if they still had asthma, 7.5% of blacks and 5.4% of whites reported that they did at the time of the interview. BRFSS analysis also showed that there is a direct correlation between age and ever having asthma as well as current asthma. Survey respondents in the 18-24year age group had the highest prevalence of ever having asthma while the lowest prevalence occurred in those who are 65 years of age or older (13.4% vs. 10.7%). Similarly, 7.4% of those aged 18-24 currently had asthma in comparison to 4.8% of those 65 and older.

Of all demographic categories analyzed, the greatest disparity in asthma prevalence existed in income levels. As shown in the figure on the next page, adults in Louisiana who have a yearly household income of less than $15,000 are twice more likely to have suffered with asthma at some time in their lives than those in the highest income bracket of over $50,000 (16.4% vs. 9.5%). These results were consistent with the current asthma analysis where 9.6% of those in households with earnings of less than $15,000 yearly had asthma at the time and only 4.2% of those in households with yearly incomes above $50,000 had asthma at the time of the interview.



Source: Louisiana, Department of Health and Hospitals.
Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2004

4.3 Childhood Asthma in Louisiana

In an effort to measure the prevalence of asthma among children under the age of 18 years, a new Module was added to the BRFSS in 2002. The Optional Childhood Asthma Module asks if there are children with asthma in the home of the respondent. Survey participants who indicated that there were, in fact, children living in their homes were subsequently asked if one or more of the children had ever had asthma and if the child/children had asthma currently. Analysis revealed that approximately 43.1% of homes in Louisiana have children living in them and, of these, 10.7% have children with current asthma.

Houses in which the survey respondent was white have the lowest prevalence of children with asthma. At 8.4%, white households are in stark contrast to all other racial groups surveyed. The prevalence of childhood asthma was 13.5% among black households, 16.2% in Hispanic households, and 17.5% for households in which the respondent chose “Other” as their racial group. Those households with an annual income of less than $15,000 per year had the highest prevalence of childhood asthma (21.3%). In comparison, houses with an income of $50,000 per year or more have a prevalence of 8.1% for children in the house with asthma. Houses in which the survey participant is unemployed also have a high

prevalence of childhood asthma, at 21.8%. In homes where the respondent was retired, the prevalence was 18.4%, while, in homes where the respondent was employed, it stood at 6.4%.

4.4 Effect of Smoking on Childhood Asthma

Because the BRFSS is an adult survey and children are not questioned directly, the State of Louisiana Chronic Disease Epidemiology Unit added the International Study of Asthma and Allergies in Childhood (ISAAC) wheezing module to the 2001 Youth Tobacco Survey, a survey of public middle-school students age 12-16 years. An estimated 17.4% of students questioned were classified as current asthmatics, while 25.7% of the students reported having ever had asthma in their lives. The prevalence of asthma was found to be higher in female students than in males (19.6% vs. 15.6%) and slightly lower for whites than for blacks (16.8% vs. 18.0%). The most significant source of disparity in asthma prevalence was between students aged 12-14 and those aged 15-16. Further analysis showed that 17.8% of 12-14 year old students were current asthmatics, while only 12.8% of those 15-16 also had asthma. Of students who are current asthmatics, 30.7% are themselves smokers, 68.7% were likely to spend at least one day a week in the room with someone who smoked, 57.8% live with someone who smokes, 54.7% ride in the car with a smoker, and 39.3% has, at least, one close friend who smokes.

Association between Smoking and Current Asthma

Characteristic	Current Asthma	
	Yes	No
1. Current Tobacco Use (excluding smokeless)	30.7	22.8
2. In the same room with someone who was smoking (at least 1 day in the last week)	68.7	59.3
3. In the car with someone who was smoking (at least 1 day in the last week)	54.7	40.9
4. Live with someone who smokes	57.8	47.0
5. At least one of close friend smokes	39.3	33.7

Source: Louisiana, Department of Health and Hospitals, Office of Public Health, Chronic Disease Epidemiology Unit, BRFSS 2002

4.5 Asthma Mortality

The national mortality rate for asthma in 2002 was 2.0/100,000. Although Louisiana has one of the lowest state prevalences for asthma, a three year aggregate of mortality rates found that the state ranked 13th in death rates due to asthma. In the years 1996-1998, mortality rates for asthma in Louisiana were 2.4/100,000 for all citizens and 10.1/100,000 for those over the age of 65. In the City of New Orleans, the overall mortality rate attributable to asthma was 6.9/100,000. For Orleans Parish residents over the age of 65, the asthma mortality rate is 2.5 times the rate for the same age group in the state as a whole (27.5/100,000 vs. 10.1/100,000). Furthermore, it is more than three times the 1998 rate for the United States in the 65 and older age group (27.5/100,000 vs. 8.7/100,000).

Because there is no asthma-specific emergency room surveillance in the State of Louisiana, surveillance systems such as the BRFSS, YTS, and ISAAC make it possible to generate information and to develop interventions that will help control asthma in the state. Further studies on the prevalence of asthma in school aged children, as well as the association between smoking and asthma, are important in reducing the asthma mortality rates in Louisiana.

G. TRAUMATIC BRAIN INJURY

Traumatic Brain Injury (TBI) is one of the leading causes of death and disability to children and young adults in the United States and Louisiana. An estimated 5.3 million individuals, approximately 2% of the United States' population, are living with a disability resulting from a TBI.

An analysis of two years of data indicates that, annually in Louisiana, 3,400 individuals experience TBIs that require hospitalization. Several thousand more individuals will not recognize that they have sustained a preventable injury (as in closed head trauma from sports or falls) capable of causing long-term deficits. TBIs can have a deep impact on families and communities and they are resource-intensive, both financially and emotionally.

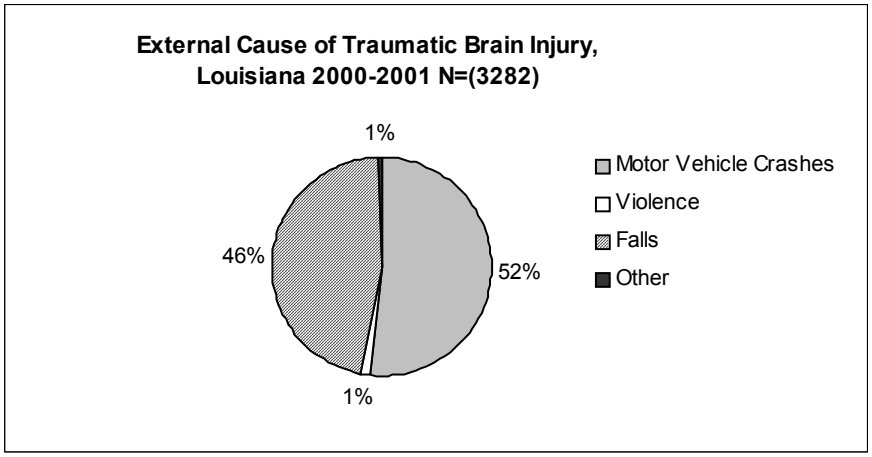
TBIs can be markers of inadequate prevention policies, correctable environmental hazards (e.g., uneven sidewalks that precipitate falls), and other injury-prevention opportunities. Alcohol-impaired driving, unsafe boating, unsafe bicycling, and violence can be assessed separately. Pedestrian injuries may be linked to poor signage, alcohol use, poor outdoor lighting, and unsafe pedestrian paths. Falls may be linked to home safety, work safety, playground safety, and other environmental obstacles. Violence injuries may be linked to gun use, aggression, alcohol use, and child abuse. These examples show how programs not particularly aimed at reducing brain injuries may use the same data to plan and evaluate prevention and intervention strategies.

The majority of TBIs are preventable. That fact, coupled with the seriousness and prevalence of their occurrence, makes TBIs a public health concern. The Louisiana State Legislature has established the Traumatic Brain and Spinal Cord Injury Registry, and has mandated the reporting of these events.

Traumatic Brain Injury Facts

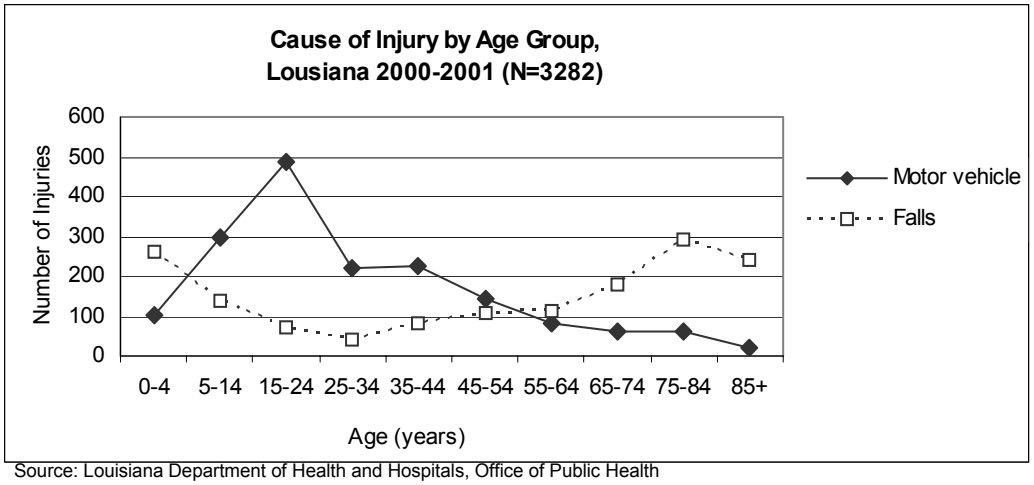
Males are twice as likely to experience a TBI as females. Consistent with national figures, the highest rates of TBI in Louisiana occur among persons aged 15 to 24 years and among the elderly. Motor vehicle crashes are the leading cause of TBI, followed by falls and violence. DHH-OPH's Region 7 (Shreveport area) had the highest 2-year cumulative TBI incidence rate; DHH-OPH Region 2 (Baton Rouge area) had the lowest. Additional studies of data from these regions to uncover any "protective factors" may lead to improved intervention strategies statewide.

52% of TBI cases are transportation or motor vehicle crash-related. This group includes car or truck passengers; pedestrians; bicyclists; passengers of All Terrain Vehicles (ATVs); motorcyclists, and other or unspecified persons. Falls were the second leading cause of overall TBIs (46.3%).



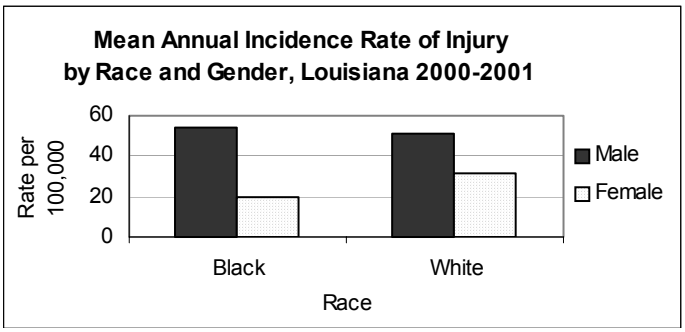
Source: Louisiana Department of Health and Hospitals, Office of Public Health
EMS/Injury Research and Prevention Program

Analyzing TBI cases by age group allows for the development of targeted interventions in sub-populations. Motor vehicle crashes were the leading cause of injury among youth from birth to 24 years of age. Fall-related TBIs, in turn, were the leading cause of injury among persons aged 75 and older.



Source: Louisiana Department of Health and Hospitals, Office of Public Health
EMS/Injury Research and Prevention Program

The following chart shows that males consistently had higher TBI incidence rates than females for the two-year period from 2000 to 2001. The rate for black males was higher (53.6 per 100,000) than the rate for white males (50.7 per 100,000). White females had a higher TBI rate (31.2 per 100,000) than black females (20 per 100,000).



Source: Louisiana Department of Health and Hospitals, Office of Public Health
EMS/Injury Research and Prevention Program

H. NONFATAL INJURY- RELATED HOSPITAL DISCHARGES

Injuries are the leading cause of death among Louisiana residents in the 1-44 year age group. While deaths only show part of the picture, injury hospitalizations reflect the more severe outcomes. Injuries are costly to society not only in terms of morbidity and mortality, but also in terms of treatment costs and years of productive life lost.

The Louisiana Hospital Inpatient Discharge data, compiled by the OPH Health Statistics program is a population based surveillance system. In addition to other conditions, it relays information on injuries serious enough to warrant hospitalizations and are, therefore, priority targets for prevention. All hospitals submit data through the Medicare Uniform Hospital Billing form (UB-92), which records the **E**xternal **C**ause of **I**njury **c**ode (**E code**). The data is cleaned and quality control checks are administered before the data is analyzed. The data is analyzed by State, OPH Region, and parish-level so that community-based injury risk factors and prevention methods may be monitored at the community level.

In 2001, there were a total of 29,583 injury related hospitalizations. The following table shows that falls were the highest cause (33%) of a nonfatal injury discharge followed by poisonings (13.9%) and motor vehicle traffic crashes (10.3%).

Nonfatal Injury Hospital Discharges by Cause (All Intents), Louisiana 2001		
Cause/Mechanism	**Total (All Intents)**	**Percent (%)**
Cut/Pierce	953	3.9
Drowning/submersion	52	2
Fall	8,354	33.9
Fire/Flame	237	1.0
Hot object/substance	284	1.2
Firearm	567	2.3
Machinery	202	0.8
MVT Occupant	2,539	10.3
MVT Motorcyclist	281	1.1
MVT Pedal cyclist	83	3
MVT Pedestrian	348	1.4
MVT Unspecified	373	1.5
MVT Other	32	0.1
Pedal cyclist, other	139	0.6
Pedestrian, other	34	0.1
Transport	521	2.1
Bites and Stings	697	2.8
Other natural/environment	218	0.9
Overexertion	378	1.5
Poisoning	3,426	13.9
Struck by, against	1,283	5.2
Suffocation	144	0.6
Other specified and classifiable	1,272	5.2
Other specified not elsewhere classifiable	729	3.0
Unspecified	1,478	6.0
Missing	4,954	
Total	**29,583**	**100.0**

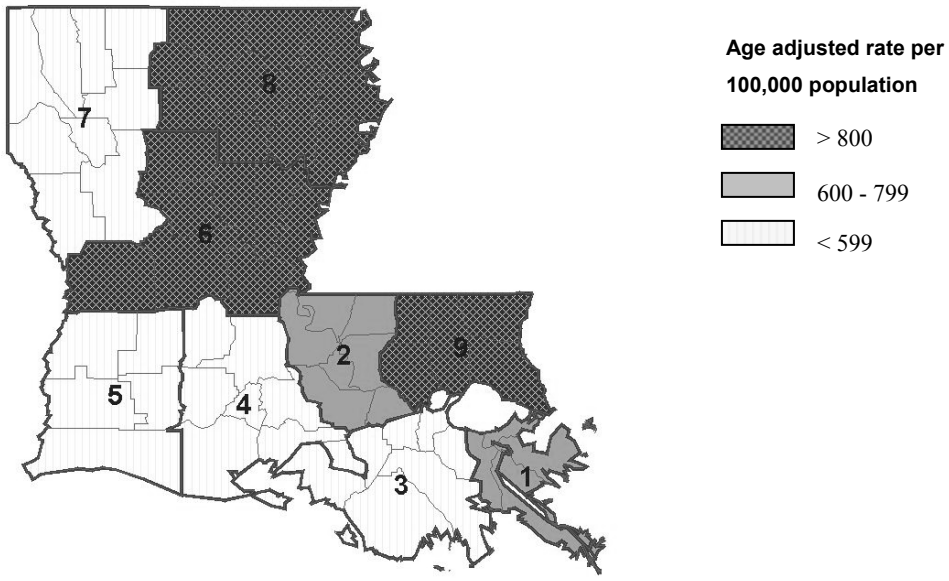
Source: IRP from LA OPH Health Statistics Program, Hospital Inpatient Discharge Data , 2001

The chart below shows that the age-adjusted rate of nonfatal injuries were high in OPH Region 6 (969.4/100,000) followed by Regions 8 (865.3/100,000) and Region 9 (835.6/100,000) and lowest in Region 5 (548.8/100,000).

Number, Rate and Age-adjusted rate of Nonfatal Injury Related Hospital Discharges by OPH Regions in Louisiana, 2001			
OPH Region	**Number**	**Rate/100,000***	**Age Adjusted Rate****
1	7,262	708.6	717.2
2	3,587	592.9	656.4
3	1,993	517.6	564.1
4	2,947	535.8	559.0
5	1,496	529.2	548.8
6	2,891	960.7	969.4
7	2,959	566.3	557.9
8	3,096	880.4	865.3
9	3,352	748.9	835.6
Total	**29,583**	**661.8**	

Source: IRP from LA OPH Health Statistics Program, Hospital Inpatient Discharge Data , 2001
* Rate per 100,000 population calculated using 2004 US Census Population Estimates
** Age adjusted rates/100,000 calculated using 2000 Census Population

Age Adjusted Rate of Nonfatal Injury related Hospital Discharges by OPH Regions, Louisiana 2001



The next table ranks the top ten causes of nonfatal injury-related hospital discharges by age group and intent. Among all injury related hospitalizations 80% were unintentional in nature. The most common events resulted from falls and motor vehicle traffic related injuries respectively.

10 LEADING CAUSES OF NONFATAL INJURY HOSPITAL DISCHARGES BY AGE GROUP (ALL INTENTS), LOUISIANA - 2001

	Age Groups (Years)										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	Unintentional Falls 126	Unintentional Falls 97	Unintentional Falls 117	Unintentional Falls 103	Unintentional MVT Occupant 808	**Suicide Poisoning 426**	Unintentional Falls 519	Unintentional Falls 627	Unintentional Falls 762	Unintentional Falls 5468	Unintentional Falls 8330
2	Unintentional Poisoning 75	Unintentional Poisoning 75	Unintentional MVT Occupant 53	Unintentional Other Transport 79	**Suicide Poisoning 502**	Unintentional MVT Occupant 371	**Suicide Poisoning 430**	Unintentional MVT Occupant 286	Unintentional MVT Occupant 167	Unintentional Unspecified 519	Unintentional MVT Occupant 2539
3	Unintentional Unspecified 54	Unintentional Bites& Stings 44	Unintentional MVT Pedestrian 52	Unintentional MVT Occupant 60	Unintentional Falls 239	Unintentional Falls 269	Unintentional MVT Occupant 396	**Suicide Poisoning 242**	Unintentional Unspecified 162	Unintentional Other Specified & Classifiable 342	**Suicide Poisoning 1773**
4	Unintentional Hot Object/ Substance 40	Unintentional MVT Pedestrian 36	Unintentional Bites& Stings 47	**Suicide Poisoning 58**	**Homicide Struck by, against 161**	Unintentional Poisoning 144	Unintentional Other Specified & Classifiable 205	Unintentional Other Specified & Classifiable 174	Unintentional Other Specified & Classifiable 101	Unintentional MVT Occupant 340	Unintentional Unspecified 1314
5	Unintentional Bites& Stings 35	Unintentional MVT Occupant 35	Unintentional Struck by, against 39	Unintentional Struck by, against 55	Unintentional Struck by, against 155	Unintentional Unspecified 111	Unintentional Unspecified 176	Unintentional Poisoning 154	Unintentional Poisoning 98	Unintentional Poisoning 261	Unintentional Poisoning 1173
6	Unintentional Other Specified & Classifiable 33	Unintentional Struck by, against 28	Tied[2] 26	Unintentional Bites& Stings 39	Unintentional Poisoning 151	**Homicide Struck by, against 104**	Unintentional Poisoning 166	Unintentional Unspecified 153	**Suicide Poisoning 73**	Unintentional Other Specif Not elsewhere Classifiable 110	Unintentional Other Specified & Classifiable 1150
7	Unintentional Other Specif Not elsewhere Classifiable 27	Unintentional Other Specified & Classifiable 25	Tied[3] 23	Unintentional Pedal Cyclist 38	**Homicide Firearm 124**	Unintentional Other Specified & Classifiable 101	**Homicide Struck by, against 152**	Unintentional Struck by, against 81	Unintentional Bites& Stings 58	Unintentional Struck by, against 102	Unintentional Struck by, against 726
8	Unintentional MVT Occupant 22	Unintentional Hot Object/ Substance 22	Unintentional Cut/Pierce 22	Unintentional Cut/Pierce 28	Unintentional Other Specified & Classifiable 119	Unintentional Struck by, against 100	Unintentional Bites& Stings 145	Tied[4] 80	Tied[5] 50	Unintentional Bites& Stings 95	Unintentional Bites& Stings 697
9	Unintentional Suffocation 19	Unintentional Drowning 14	Unintentional MVT Pedal Cyclist 19	Unintentional MVT Pedestrian 27	Unintentional Other Transport 115	Undetermined Poisoning 83	Unintentional Struck by, against 107	**Homicide Struck by, against 73**	Unintentional Struck by, against 43	Unintentional Other natural environmental 82	**Homicide Struck by, against 548**
10	Unintentional Struck by, against 16	Tied[1] 10	Unintentional Unspecified 13	Unintentional Poisoning 26	Unintentional MVT Unspecified 106	Unintentional Other Transport 82	Undetermined Poisoning 106	Unintentional Cut/Pierce 68	Undetermined Poisoning 42	Unintentional Overexertion 77	Unintentional Other Transport 521

Tied[1]-UnintentionalCut Pierce/Other specified not elsewhere classifiable **Tied[2]**- Pedal cyclist other/ transport
Tied[3]: Unintentional Poisoning/Other specified elsewhere classifiable **Tied[4]**-Undetermined Poisoning/Bites & Stings **Tied[6]**-UnintentionalCut Pierce/Overexertion

Source: IRP using LA OPH Health Statistics Program, Hospital Inpatient Discharge Data , 2001

Reports

The Injury Research and Prevention Program can generate specific tables, reports, and analyses by cause of injury, residency, and a variety of demographic factors upon request. The 2001 nonfatal injury-related hospital discharge report is available from the EMS/Injury Research and Prevention Program on the following website www.oph.dhh.state.la.us.

III. HEALTH ASSESSMENT PROGRAMS

A. IMMUNIZATION COVERAGE

Background

Vaccines are among the most effective and reliable methods to prevent and control disease. Every year, they prevent countless serious illnesses and thousands of possible deaths. About 100 million vaccine doses are given annually in the United States, most of them to infants and children as part of their routine immunization schedule. A single dose of some vaccines gives nearly complete protection. With others, a series of doses spread over months or years is needed for the best results.

Children in particular are beneficiaries of the protection from infectious diseases that vaccines offer. Currently, there are twelve diseases from which children are routinely protected through the use of standard childhood immunizations: diphtheria, tetanus, pertussis (whooping cough), polio, measles, mumps, rubella (German measles), hepatitis B, HAV, HiB, MCV4, RVV, varicella (chickenpox), and pneumococcal (pneumococcal pneumonia).

Two vaccines which protect from bacterial meningitis are *Haemophilus influenzae type B vaccine* and *Meningococcal Conjugate vaccine.* Drastic reductions in the occurrence of these serious diseases have taken place since the introduction of vaccines. For example, there were 894,134 cases of measles reported in the United States in 1941, but only 86 cases reported in year 2000. Louisiana has had no reported cases of measles since 1996.

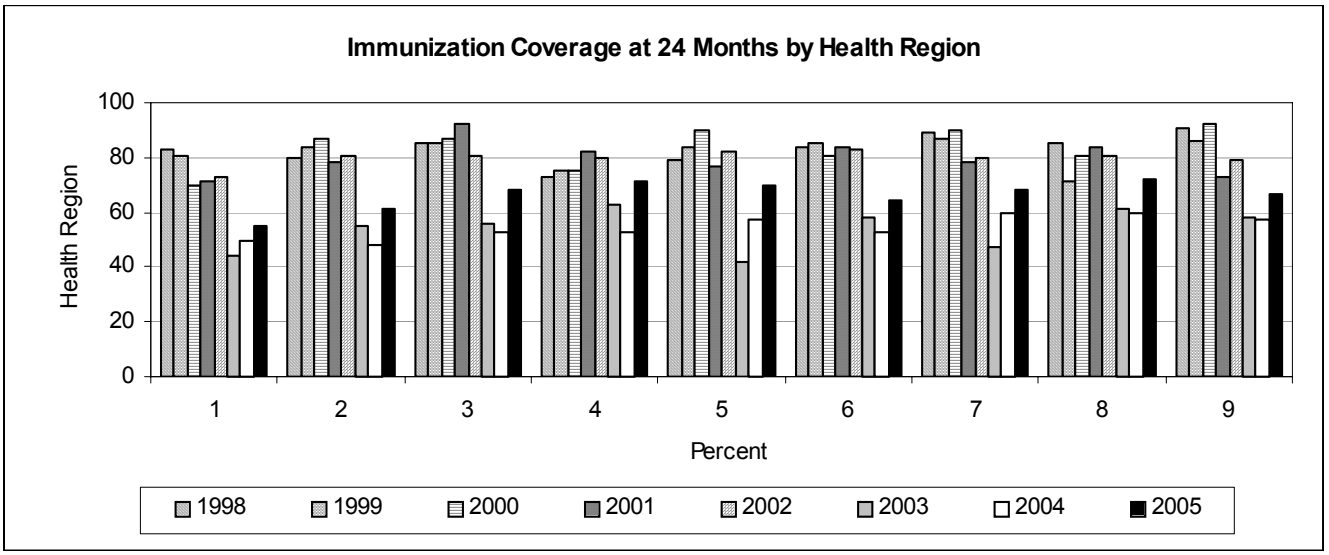
In addition to being reliable and effective, vaccines are also some of the most cost-effective medical procedures available. The vaccine-preventable diseases addressed in standard childhood immunizations are very serious illnesses and very expensive to treat. Vaccines are relatively inexpensive and very effective. Cost estimates show that each dollar spent on immunization saves $12 in direct medical and hospitalization costs. These estimates do not include attendant costs, such as workdays lost by family members, costs for outbreak control, or the burden of lives lost to these severe diseases. A prime example is measles, which leads to the hospitalization of approximately 10% of those who become ill. Even with excellent medical care, approximately 1- 2 cases out of every 1,000 cases dies, usually from complications with measles.

However, diseases that are prevented by routine childhood immunizations have not disappeared. Pertussis is spread by direct contact such as coughing on others who are not immune. In countries

where childhood immunizations against this disease have been stopped, large outbreaks of whooping cough have occurred.

The number of pertussis cases reported annually in Louisiana has ranged from 10 to 21 cases since 2000. Diphtheria, another dangerous infectious disease which has been controlled through childhood immunization, has not been observed in Louisiana since 1972. However, in recent years, epidemics of diphtheria have occurred in Eastern Europe and Asia. Without immunization, diphtheria and other vaccine-preventable diseases may be re-introduced to Louisiana and contribute to an increasing number of cases.

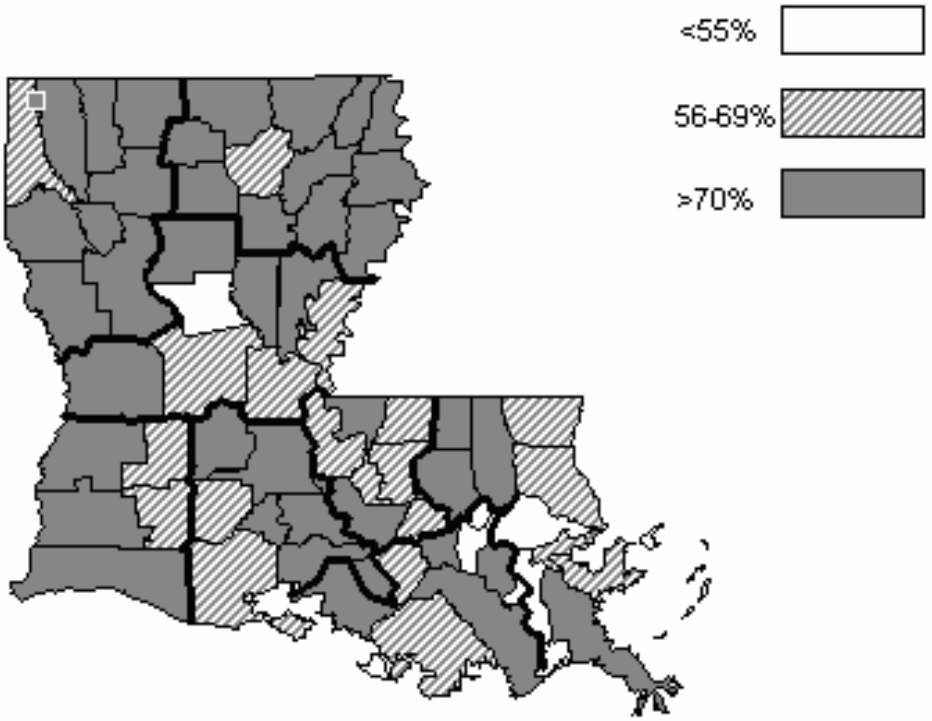
The Immunization Program of the Office of Public Health (OPH) conducts periodic assessments to determine the immunization coverage rates throughout the state. As the graph below indicates, rates of coverage have generally been increasing steadily between 1996 and 2005, though there have been variations between the nine OPH administrative regions over the years and a significant decrease reflected statewide in 2003.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Immunization Program

The map below and table on the following pages display the percent of immunization coverage at age 24 months among those served by parish health units. St. John the Baptist Parish had the lowest immunization coverage rate at 47%, while East Carroll Parish had the highest rate at 94%.

Percent of Immunization Coverage of Children 24 Months of Age Served in Public Clinics, Louisiana 2005



Immunizations: Percent Up-To-Date at Age 24 Months* Louisiana 2005	
Clinic	**%UTD 2005 Results**
Region I	
Orleans-Edna Pilsbury	68
Orleans-Mandeville Detiege	71
Orleans-Mary Buck	57
Orleans-Katherine Benson	59
Orleans-Helen Levy	59
Orleans-St. Bernard Gentilly	N/A
Orleans-Ida Hymel	64
St. Bernard	58
Jefferson-Marrero	44
Plaquemines	76
Jefferson-Metairie	60
Region II	
Ascension	65
West Baton Rouge	62
West Feliciana	83
Iberville	91
East Feliciana-Clinton	65
Pointe Coupee	67
E. Baton Rouge	63
Region III	
St. James	78
Lafourche-Galliano	86
Lafourche-Thibodaux	76
Terrebonne	66
St. Mary	78
St. John	47
Assumption	66
St. Charles	81
Region IV	
Evangeline	80
St. Landry	76
St. Martin	75
Acadia	53
Vermilion	67
Lafayette	83
Iberia	83
Region V	
Allen	67
Calcasieu-Sulphur	72
Calcasieu-Lake Charles	73
Jefferson Davis	62
Beauregard	80
Cameron	78
Region VI	
Catahoula	80
LaSalle	85
Rapides	61
Grant	55
Winn	84
Vernon	76
Concordia	62
Avoyelles	69

Immunizations: Percent Up-To-Date at Age 24 Months* Louisiana 2005	
Clinic	**%UTD 2005 Results**
Region VII	
Red River	79
Claiborne	71
Webster-Springhill	78
DeSoto	76
Natchitoches	78
Bienville	83
Sabine	70
Webster-Minden	71
Bossier-Bossier City	71
Caddo	61
Region VIII	
Morehouse-Bastrop	79
Franklin-Winnsboro	71
West Carroll-Oak Grove	82
Ouachita-Monroe	65
Caldwell	87
Tensas-St. Joseph	86
Lincoln	72
Jackson-Jonesboro	76
East Carroll	94
Union	83
Richland-Rayville	78
Ouachita-West Monroe	63
Madison	88
Region IX	
St. Helena	80
Washington-Franklinton	68
Washington-Bogalusa	69
Tangipahoa	76
St. Tammany	63
Livingston	76

*Up-to-date includes 4 DTAP, 3 OPV or IPV, and 1 MMR
N/A: Not Applicable - no longer an OPH Parish Health Unit
Source: Louisiana Department of Health and Hospitals Office of Public Health, Immunization Program

B. INFECTIOUS DISEASE SURVEILLANCE

Disease Surveillance

Surveillance of infectious diseases, chronic diseases, and injuries is essential to understanding the health status of the population and planning effective prevention programs. The history of reporting and tracking of diseases that pose a risk to public health in the United States dates back to more than a century ago. Fifty years ago, morbidity statistics published each week were accompanied by a statement: "No health department, state or local, can effectively prevent or control diseases without the knowledge of when, where, and under what condition cases are occurring." Today, disease surveillance remains the primary tool for the gathering of information essential to controlling disease spread in the population.

Achievement of the CENTERS FOR DISEASE CONTROL AND PREVENTION, Healthy People 2010 Objectives, depends in part on the ability to monitor and compare progress toward the objectives at the federal, state, and local levels. Infectious disease surveillance activities are a primary function of the programs within the DEPARTMENT OF HEALTH AND HOSPITALS (DHH), OFFICE OF PUBLIC HEALTH (OPH). Many OPH programs exist to conduct disease surveillance for the State of Louisiana. A sampling of these programs includes the INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM, the SEXUALLY TRANSMITTED DISEASES CONTROL PROGRAM, the TUBERCULOSIS CONTROL PROGRAM, the HIV/AIDS PROGRAM, and the IMMUNIZATIONS PROGRAM.

Disease surveillance involves the collection, tabulation, and evaluation of pertinent data, and the dissemination of the information to all who need to know. This process is a very important aspect of public health because its purpose is the reduction of morbidity (i.e., disease occurrence). The immediate use of surveillance is for disease control; the long-term use is to assess trends and patterns in morbidity.

Surveillance also facilitates epidemiologic and laboratory research, both by providing cases for more detailed investigation or case-control studies, and by directing which research avenues are most important. Reports of unusual clusters of diseases are often followed by an epidemiological investigation to identify and remove any common source exposure or to reduce other associated risks of transmission.

Notifiable Diseases

Reporting of notifiable diseases to public health agencies is the backbone of disease surveillance in Louisiana and nationwide. The Sanitary Code, State of Louisiana, Chapter II, entitled "The Control of Diseases," charges the BOARD OF HEALTH (i.e., DHH/OPH) to promulgate a list of diseases that are required to be reported, who is responsible for reporting those diseases, what information is required for each case of disease reported, what manner of reporting is needed, and to whom the information is reported. Reporting of cases of communicable diseases is important in the planning and evaluation of

disease prevention and control programs, in the assurance of appropriate medical therapy, and in the detection of common-source outbreaks. Surveillance data gathered through the reporting of notifiable diseases are used to document disease transmission, quantify morbidity, estimate trends, and identify risk factors for disease acquisition.

DHH routinely follows up on selected disease cases, either directly or through the individual's physician or other health care provider. Tracking and follow-up are done to ensure initiation of appropriate prophylactic therapy for contacts of persons with the infectious condition and appropriate preventive measures for the community. All disease tracking/follow-up reports are confidential and constitute an essential element in monitoring and maintaining the health of the public in Louisiana. Through participation in disease-reporting, physicians and other health care providers are integral parts in ensuring that public health resources are used most effectively. Reporting for a number of infectious diseases is mandatory as listed in the Sanitary Code.

Bioterrorism Surveillance

The INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM has developed several systems to identify disease syndromes associated with bioterrorism agents prior to their confirmation, which may take several days.

Early detection of a bioterrorism event is considered essential. Most diseases caused by a bioterrorism agent are rapidly fatal, but may be treatable in the early stages or even preventable with timely administration of antibiotics or vaccinations. If the disease is transmissible from person to person, early intervention is the best measure to prevent the spread of disease. People affected by a bioterrorism agent may present themselves at emergency rooms, be transported by emergency medical service (EMS), consult a dermatologist, or be examined by a coroner. An animal may even be the first to be affected since many of the bioterrorism agents are, in fact, primarily affecting animals.

The bioterrorism-surveillance systems in place are:

(1) An emergency room syndromic surveillance, a web-based reporting system for emergency departments;
(2) An emergency medical services syndromic surveillance, a web-based reporting system for emergency medical services;
(3) An intensive care syndromic surveillance system, also web based;
(4) a veterinary disease reporting system, another web-based system;
(5) a call-in notification system with dermatologists;
(6) a call-in notification with the coroners; and

(7) a web-based syndromic surveillance automatically mining data entered by emergency-room physicians and conditions at the emergency rooms. This project is piloted in the Medical Center of Louisiana at New Orleans.

Infectious Disease Outbreak Investigations

Infectious diseases are transmitted by a variety of methods: human to human via oral/fecal route (ingestion of the organism), exposure to blood, airborne and droplet routes and direct person-to-person contact; vectors such as mosquitoes and ticks; and animal to human (zoonotic). In Louisiana, outbreaks of a wide variety of infectious diseases have occurred including Norovirus, gastroenteritis, rotavirus, hepatitis A, salmonellosis, shigellosis, perfringens food poisoning, pertussis, and West Nile encephalitis, among others. The most compelling reason to investigate a recognized or suspected outbreak of disease is that exposure to the source(s) of infection may be continuing; by identifying and eliminating the source of infection, OPH can prevent additional cases. Another reason for investigating outbreaks is that the results of the investigation may lead to recommendations or strategies for preventing similar outbreaks in the future. Other reasons for investigating outbreaks are the opportunity to describe new diseases and learn more about known diseases; evaluate existing prevention strategies, e.g., vaccines; teach and improve research on epidemiology; and address public health concern about the outbreak.

The effectiveness of the investigation is in large part determined by how quickly and thoroughly investigative activities are initiated. Historically, all infectious disease outbreak investigations were initiated and managed through the OPH'S INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM. This program, however, is now relying on a statewide regional network of epidemiologists (Regional Disease Surveillance Specialists and Regional Epidemiologists) assisted, if need be, by additional staff such as a nurse, sanitarian, and/or disease intervention specialist, among others. Each OPH administrative region thus has an Infectious Disease Rapid Response Team (ID-RRT), which the Infectious Disease Epidemiology Program provides training to. The training comprises basic epidemiologic principles, outbreak investigation methodology, computer analysis and interpretation of data, presentation of results, and selection of the appropriate disease control methods. Each team member brings a unique set of skills/knowledge that is very important in conducting outbreak investigations. Activities are coordinated and supervised by the INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM, and guidance and assistance are provided as needed. The ID-RRT members conduct most of the field activities, and both the INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM and the regional teams analyze the data. Recommendations are provided and guidance given for instituting appropriate disease control measures.

Outbreak investigations, an important and challenging component of epidemiology and public health, can help identify the source of ongoing outbreaks and prevent additional cases. Even when an outbreak is over, a thorough epidemiologic and environmental investigation often can increase the public health

community's knowledge of a given disease and prevent future outbreaks. Outbreak investigations also provide epidemiologic training and foster cooperation between the clinical and public health communities. Most outbreaks are handled in a timely manner with effective outcomes. Additionally, since these staff members are located in the communities, they are in a better position to identify potential outbreak situations than are staff members housed in the OPH central office. The concept of using public health staff from different disciplines and cross training them for a common, collaborative purpose sets a precedent for similar efforts dealing with other public health issues, and reflects the agency's goal of developing a streamlined, cost effective, integrated workforce. One unexpected benefit has been the increased local visibility creating positive impressions with the public and the media.

Diseases reported in the OPH surveillance program include: arthropod-borne encephalitis (including West Nile neuro-invasive disease); aseptic meningitis; campylobacteriosis; *E. coli 0157:H7* and hemolytic-uremic syndrome; giardiasis; *Haemophilus influenzae* (invasive disease); hepatitis A, B, and C; legionellosis; Lyme disease; malaria; *Neisseria* meningitidis (invasive disease); pertussis; rabies (animal and human); salmonellosis; shigellosis; *Streptococcus pneumoniae* (invasive infection in children less than 5 years of age); varicella (chickenpox); and *Vibrio* infections. There are many more reportable diseases in Louisiana but their numbers are extremely small.

Surveillance also focuses on three antibiotic-resistant microorganisms: vancomycin resistant enterococcus (VRE), methicillin-resistant *Staphylococcus aureus* (MRSA), and drug-resistant *Streptococcus pneumoniae* (DRSP).

The following are two examples describing surveillance and epidemiologic response to these diseases:

Surveillance for West Nile and other encephalitides

All health care providers are required to immediately report suspected cases of arboviral encephalitis to OPH. When a suspect case is reported, an epidemiologist evaluates the case and attempts to obtain confirmation. Once confirmed, information about the distribution of new cases is compiled without any identifiers. This information is then widely disseminated to parishes, regional public health staff, hospitals and private practitioners, local health government, and mosquito control programs. This information is the most useful guide for preventive measures against arboviral encephalitis.

Surveillance for meningococcal meningitis and invasive disease

Once a suspect case of meningococcal meningitis is reported, an epidemiologist calls the physician, laboratory specialist or hospital infection control practitioner to obtain confirmatory evidence and to establish a rapid control effort in order to prevent the spread of the illness. All close contacts are identified, interviewed by telephone or in person, and given prophylaxis. These preventive activities are carried in close collaboration with the medical providers of the case. All cases are fingerprinted with

pulse field electrophoresis techniques (PFGE) to identify strains that may be potentially more virulent and alert the medical community and the public about their presence.

Selected 2004 Results of Infectious Disease Surveillance in Louisiana

- West Nile neuro-invasive diseases totaled 84 cases in Louisiana in 2004. It is estimated that about 70,000 Louisiana residents had been infected since the importation of West Nile virus to the state in 2001. There were sporadic cases throughout the state and intense foci in the areas around Baton Rouge, Shreveport, and Bossier City.
- For the past 5 years, reported cases of salmonellosis ranged from 700 to 800 per year. The incidence rate is 20 cases per 100,000, reaching up to 60 cases per 100,000 in infants up to one year of age.
- The number of shigellosis cases peaked in 2002, and decreased since then, following a pattern of cyclical changes. Children under the age of 10 years accounted for 45% of the cases.
- The number of *Vibrio* cases reported in 2004 was 38 cases, well within the range of 30 to 40 per year reported for the past 10 years. The main *Vibrio* species reporting around 10 cases each are *Vibrio parahemolyticus*, *Vibrio vulnificus,* and *Vibrio cholerae* non-O1; all other *Vibrio* species combined provided about 10 cases. Of the reported *Vibrio* cases with known exposures, contact with saltwater or raw seafood drippings and seafood consumption are the reported exposures.
- The state hepatitis A rate of 2.0 per 100,000 is only about half that of the national rate. A survey estimated that 25% of young adults have been infected with this virus.
- The number of acute cases of hepatitis C reported in 2004 was 53. It is estimated that 80,000 people in Louisiana are infected with the virus.

Reports

The bimonthly *Louisiana Morbidity Report* and the *Epidemiology Annual Report* are published by the OPH INFECTIOUS DISEASE EPIDEMIOLOGY PROGRAM. Both publications present information and statistics describing the status of reportable diseases in the state.

C. SEXUALLY TRANSMITTED DISEASE (STD) AND HIV/AIDS SURVEILLANCE

Contracting a sexually transmitted disease (STD) can have serious consequences. Examples of STD related consequences include: neurological, cardiovascular, and other terminal disorders, pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer, fetal and infant death, birth defects and mental retardation in children born to infected mothers.

The DHH-OPH'S STD CONTROL PROGRAM and HIV/AIDS PROGRAM work to: 1) conduct surveillance to determine the incidence and prevalence of STDs and HIV/AIDS; 2) monitor STD and HIV/AIDS trends; 3)

collect data on the location and referral of persons with or suspected of having an STD, in order to facilitate medical examination and provide early treatment; and 4) conduct partner notification to limit the spread of disease.

2004 National Rankings

- Primary and secondary syphilis rates in Louisiana ranked the highest in the nation in 2004.
- Gonorrhea rate ranked 2nd highest in the nation in 2004.
- Chlamydia rate ranked 3rd highest in the nation in 2004.
- Louisiana ranked 5th highest in AIDS case rates among the states and 11th highest in the number of AIDS cases reported in 2004.

2004 and 2005 Disease Statistics

Please refer to the STDs and HIV/AIDS sections in "Chapter II: Morbidity."

Reports

The STD CONTROL PROGRAM and the HIV/AIDS PROGRAM maintain program databases, and generate specific analyses and reports by cause, location, and demographic factors for individuals, communities, and agencies. The HIV/AIDS PROGRAM also publishes the *HIV/AIDS Annual Report*, monthly reports, and nine annual regional reports, all of which are available to the public.

D. TUBERCULOSIS (TB) SURVEILLANCE

The DHH-OPH TB CONTROL PROGRAM conducts active surveillance for tuberculosis in the state. Regional staff interact with area physicians, hospitals, and laboratories in the course of their duties. All known or suspected cases of tuberculosis are investigated to assure that transmission of the disease is contained. Currently, the TB Control Program in Louisiana is working with CDC to enhance surveillance activities. An improved methodology is being implemented to facilitate reporting and tracking.

2004 and 2005 Disease Statistics

Please refer to the Tuberculosis section in "Chapter II: Morbidity."

E. ALCOHOL & DRUG ABUSE PROGRAM: INTRAVENOUS DRUG USE TREATMENT, STD, TB, AND HIV/AIDS SCREENING

National statistics show that more than 70 conditions requiring hospitalization (most notably cancer, heart diseases, and HIV/AIDS) have risk factors associated with substance abuse. One out of every five dollars Medicaid spends on hospital care is attributable to substance abuse (U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, 1997 Fact Sheet). The same report shows that injecting-drug use is the primary mode of transmission of HIV among women and is responsible for 71% of AIDS cases among women.

The lifetime cost of taking care of one AIDS patient is approximately $85,000. The U.S. SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION estimates that over five million persons in the United States were in need of treatment for severe drug abuse problems in 1998. Of these an estimated 2.9 million (almost 60%), have not received treatment for their addiction. The size of this treatment gap has remained relatively unchanged over the past eight years, ranging from 54% to 68%[1].

As part of the Louisiana's State Demand Need Assessment Studies, the DHH OFFICE FOR ADDICTIVE DISORDERS (OAD) collaborated with the Research Triangle Institute in North Carolina and the Louisiana State University (LSU) Health Sciences Center in New Orleans to publish an Integrated Population Estimates of Substance Abuse Treatment Needs Study in August 1999. This work was supported by the CENTER FOR SUBSTANCE ABUSE TREATMENT (CSAT). The study showed that 10.2% of Louisiana adults, or 318,857 persons, were found to be in need of substance abuse treatment. The DHH/OPH region with the highest number of persons needing services was Region 1 (Orleans, Jefferson, Plaquemines, and St. Bernard parishes), while the region with the fewest number of individuals needing treatment was Region 6 (Avoyelles, Catahoula, Concordia, Grant, LaSalle, Rapides, Winn, and Vernon parishes).

Epidemiology

The Community Epidemiology Work Group (CEWG) is a national network of epidemiologists and researchers who meet twice a year to discuss current and emerging substance abuse problems. A State Epidemiology Work Group (SEWG) on drug abuse held a meeting in Baton Rouge, Louisiana on September 23, 2003. The meeting included representatives from all ten Office for Addictive Disorders administrative regions. A summary of findings outlined the following trends:

Alcohol, cocaine/crack, and marijuana abuse continue to be the most serious substance abuse problems in Louisiana. There are, however, indicators of other drug problems emerging and spreading in areas throughout the state.

The abuse of heroin has been increasing in some parishes and there is concern that this problem could easily spread to other areas. Increased use of "other opiates" include prescription drugs such as Dilaudid, Vicodin, Percodan, Darvon, and OxyContin.

There is growing evidence that methamphetamine production and abuse are increasing in Louisiana. An increase in methamphetamine production and distribution was reported in different areas of the state, including East Baton Rouge and Rapides parishes and areas in Region V.

[1] CSAT by Fax, August 30, 2000, Vol.5, Issue 13

Alcohol abuse indicators continue to dominate in Louisiana, with the drug accounting for more treatment admissions in 2002–2003 than any other substance. In Region III, alcohol treatment admissions continue to increase, from 35% of all treatment admissions in 2000, to 39% in 2001, to 42% in 2002. While alcohol continues to be the most frequently used drug within Region IV, treatment programs in the region report a decrease in adolescent alcohol use in the past year. Driving while intoxicated (DWI) arrests remain high throughout the state. In 2002, for example, there were 1,154 DWI arrests in Region V. East Baton Rouge Parish Region II, has the highest rate of DWI arrests/citations in the entire state.

Cocaine/crack indicators continue at very high levels throughout Louisiana. In Region I, cocaine/crack remains the most frequently reported illicit drug among emergency department visits and treatment admissions, but cocaine indicators appear to have stabilized. Cocaine dominates as the drug of choice for adults seeking inpatient treatment in Region II; cocaine treatment admissions increased by 11% there in 2001. In Region VII, cocaine represents 26.5% of treatment admissions, and the drug accounts for the majority of drug-related arrests. Cocaine treatment admissions are down in Region X.

Marijuana remains a top illicit drug of abuse in Louisiana. It continues as a major problem among youth, particularly in Region IX, where it accounts for 81.1% of all youth treatment admissions. Additionally, students in Region IV report increased marijuana use during the last year.

Indicators of the abuse of **amphetamines and methamphetamines** in Louisiana continue to increase. In Region VII, there were 47 admissions for amphetamine/methamphetamine abuse in fiscal year (FY) 2002–2003, compared to no such admissions the previous year. Similarly, in Region II, treatment admissions for amphetamine abuse increased by 45.5% between FYs 2000 and 2001, while in Region VI, methamphetamine indicators increased among both adult and juvenile users.

Prescription opiates (e.g., oxycodone, hydrocodone, and street methadone) remain a problem in many parishes, and their use is spreading to others. In Region II during the most recent reporting periods, treatment admissions of persons indicating use of “other opiates” increased by 76%, and narcotics-related arrests increased by 12%. Other opiate treatment admissions also increased in Region IX, where they accounted for 10.1% of admissions in 2002–2003. Other opiates, including synthetic opioids, were mentioned by 15.7% of youth treatment admissions in Region IX as a secondary/tertiary substance. In Region X, it was reported that there has been an increase in the abuse of OxyContin and other prescription opiates, as well as “street” methadone.

The State of Louisiana Communities that Care Youth Survey: Student Use of Alcohol and Cigarettes

This report summarizes findings from the Louisiana Caring Communities Youth Survey (CCYS), a survey of 6th, 8th, 10th and 12th grade school students, conducted in the fall of 2004. The survey was designed to assess adolescent substance use, antisocial behavior, and the risk and protective factors that predict

these behaviors. In this report, the results are presented for each grade along with comparisons to the results from the 2001 and 2002 surveys.

According to the CCYS, the substances that are most commonly used by Louisiana's students in their lifetime are: alcohol and tobacco products (6th through 12th graders), marijuana (10th and 12th grade students), and inhalants (6th and 8th graders). Preliminary results indicate that there is an upward trend in the use of sedatives and ecstasy for 2004. Detailed information on the CCYS completed in 2004 can be found at http://www.dhh.louisiana.gov/publications.asp?ID=1&CID=6.

Intravenous Drug Users Treatment

DHH-OAD policy gives intravenous drug users (IDUs) statewide priority admission status to programs (contract and state) and treatment modalities. Block grant requirements mandate that IDUs be admitted to treatment programs within 14 days after request for admission. Interim services are provided within 48 hours if comprehensive care cannot be made available upon initial contact, with a waiting period of no longer than 120 days. OAD offers outreach services statewide using the Indigenous or Behavioral Model, or other models. Activities include education, prevention, condom distribution, clean needle demonstrations, medical evaluations, and referrals.

STD, TB, and HIV/AIDS Screening

In addition to the treatment of problems of addiction, OAD makes testing available for STDs, TB, and HIV to each individual receiving treatment. Testing is offered, either directly or through arrangements with other public or nonprofit private entities, through a Qualified Service Organization Agreement (QSOA) and a Memorandum of Understanding (MOU) between OPH and OAD. This system includes the provision of the necessary supplies by OPH's STD CONTROL, TB CONTROL, and HIV/AIDS PROGRAMS for onsite STD, TB, and HIV testing of OAD clients. Early intervention services include screening, testing and pre- and post-test counseling.

Individuals testing positive for HIV are referred to the DHH-OPH clinics for further evaluation and appropriate testing. Once a client is identified as an HIV patient in the DHH-OPH system, he or she is referred to the local consortium and/or directly to a charity hospital outpatient clinic, under the auspices of DHH-OPH. Besides referrals to public agencies, clients can be referred to other HIV supportive services that are available in the community. OAD utilizes this referral network to access additional services for substance abuse clients diagnosed with HIV/AIDS. OAD has established a working relationship with the referral entities and is able to monitor the needs of clients who have been referred. OAD also provides ongoing counseling to its clients regarding HIV prevention and treatment, self-help groups, and information and referral services.

OAD participates in the Statewide HIV Community Planning Group (SCPG) and two subcommittees, Nominations and Special Needs, at the regional level. The statewide CPG responds to requests from CDC regarding funding and statistical data from the state regarding HIV and STD infections. The group also submits a three year plan to CDC regarding HIV prevention interventions to be utilized in the state.

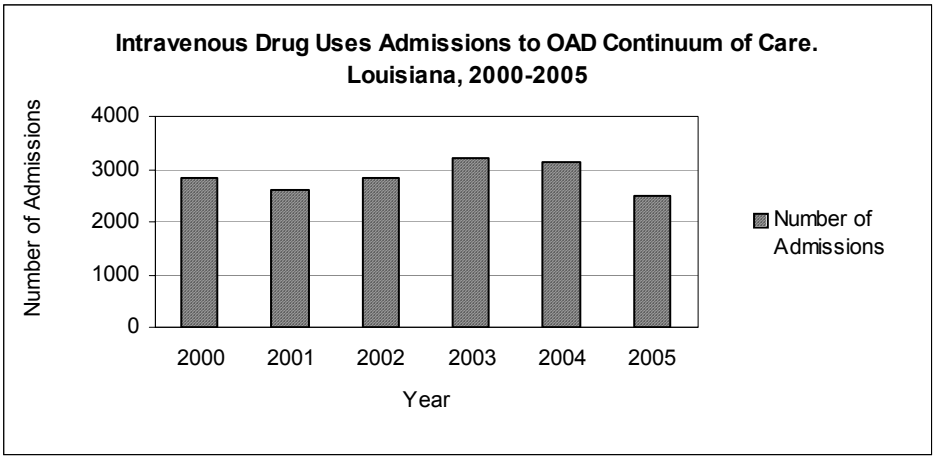
The goal of the statewide group is to identify interventions that will assist in preventing future infections with HIV and STDs among Louisiana's residents. The statewide CPG met four times in 2005 to discuss updates to the regional and statewide plans. The statewide CPG prioritized target populations are: Persons infected with HIV, Men who have sex with men, High risk heterosexuals, Intravenous drug users, Special populations (e.g., the incarcerated, trans-genders, the homeless, migrant workers and persons with Hepatitis C) and Mothers with/at risk for HIV. The regional CPG is composed of community persons interested in the eradication of HIV and its focus is to provide advisory consultation and/or information to the statewide CPG regarding HIV/STD data in the region.

The SCPG composition is representative of each region and individuals with expertise in education, substance abuse, health, and public health; special at-risk populations (e.g., youth, persons who are HIV infected, AIDS patients, Latinos, blacks, Native Americans, women, individuals with a varied sexual lifestyle); and representatives from the DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS, the DEPARTMENT OF EDUCATION, and DHH'S OAD. The regional CPG meets monthly and the statewide committee meets quarterly. Accomplishments for last year included the establishment of a 3-year state plan that was submitted and approved by the CDC, the hosting of two well-attended STD/HIV Annual Conferences, and the achievement of parity in the composition of the committee.

2001-2006 Program Statistics

Intravenous Drug Users (IDUs)

OAD'S Management Information System (MIS) program reports that there were 2,502 IDU admissions to the OAD continuum of care for state fiscal year (SFY) for 2006 (10% of total admissions); 3,094 admissions for SFY 2005 (13% of total admissions); 3,148 admissions for SFY 2004 (9% of total admissions); 3,211 admissions for SFY 2003 (11% of total admissions); 2,826 for SFY 2002 (9% of total admissions); and 2,666 for SFY 2001 (9% of the total admissions).



Source: Louisiana Department of Health and Hospitals, Office of Addictive Disorders

HIV/AIDS

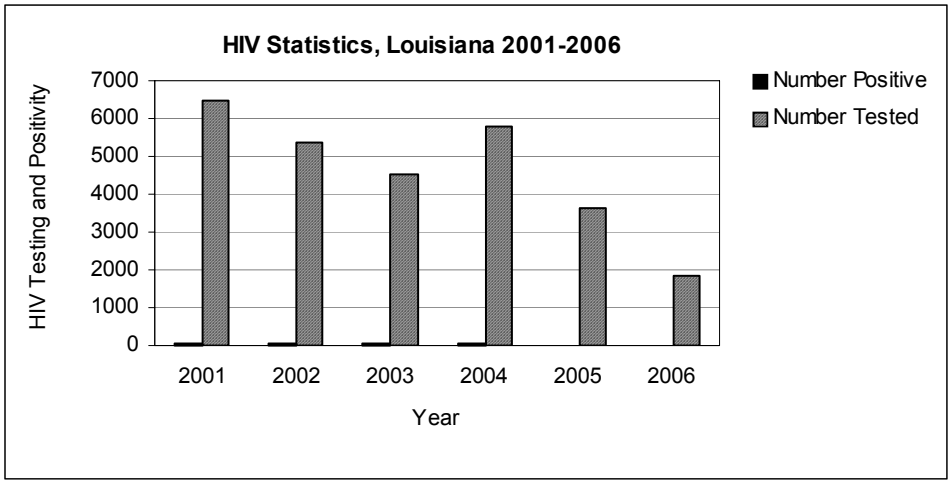
According to the Office of Public Health (OPH), Louisiana ranked 6th highest in state AIDS case rates and 10th in the number of AIDS cases (CDC HIV/AIDS 2002 Surveillance Report (Vol. 14)); new cases of HIV/AIDS were detected in 62 of Louisiana's 64 parishes during calendar year (CY) 2002. The highest rates of newly-detected HIV/AIDS cases were in Iberville, Orleans, Catahoula, and East Baton Rouge parishes. Additionally, the New Orleans region had the highest number of HIV/AIDS cases detected in 2002, and 44% of all persons living with HIV in Louisiana live in this area. However, in 2002, as in past years, the Baton Rouge region surpassed the New Orleans region in the rate of new HIV/AIDS cases.

An Executive Summary from the Louisiana HIV/AIDS 2003 Annual Report[2] indicates that, at the end of 2003, 15,326 persons in Louisiana were known to be living with HIV/AIDS. In 2003, 915 new AIDS cases and 1,106 new HIV cases were diagnosed. The report highlights that there are persons living with HIV in every parish in Louisiana, and this number continues to increase each year. New cases of HIV/AIDS were detected in 56 of Louisiana's 64 parishes in 2003. During that year, 74% of newly diagnosed HIV/AIDS cases and 73% of newly diagnosed AIDS cases were among black persons. The 2003 HIV detection rate for black persons was over six times higher than that of white persons and the largest proportion of cases detected (42%) was attributed to men who have sex with men (MSM), after adjusting for unreported risk. For black persons, high risk heterosexual activity has remained the leading exposure category, while, among white persons, the predominant exposure to HIV is among MSM. In Louisiana, the New Orleans area had the highest number of HIV/AIDS cases detected in 2003. During the past 5 years, prior to 2003, the Baton Rouge region has had the highest HIV/AIDS detection rate (number of new cases per 100,000 population), however, in 2003, the New Orleans and Baton Rouge regions had the same HIV/AIDS detection rate (number of cases per population of the region). Among the large cities in the nation, the metropolitan Baton Rouge Area ranked 8th and the metropolitan New Orleans area ranked 11th in AIDS case rates in 2003. The Centers for Disease Control & Prevention's (CDC's) HIV/AIDS Surveillance Report 2003 shows Louisiana with a rate of 23.2 cases per 100,000 and keeps it ranked 10th in the nation.

Historically, OPH statistics show that, in CY 2001, 6,474 OAD clients were tested for HIV and 40 (<1%) positive results were recorded; in CY 2002, 5,371 HIV tests were administered and 65 (<1%) yielded positive results; in CY 2003, 4,533 tests were conducted and 42 (<1%) were positive. In SFY 2004, according to OAD set-aside report, 4,533 clients were tested for HIV and 42 (less than 1%) tested positive; In SFY 2005, according to OAD set-side report, 3,656 clients were tested for HIV and 14 (less than 1%) of those tested had positive results; the SFY 2006 OAD set aside reports indicate 1,823 clients were tested for HIV and 25 (2%) results were positive. During SFY 2006, OAD conducted 2,569 Pretest counseling sessions, 1,230 Post Test counseling sessions, and provided 18,183 services. The SFY 2005

[2] Louisiana HIV/AIDS Annual Report – 2002, Geographic Distribution of HIV/AIDS, pg. 14

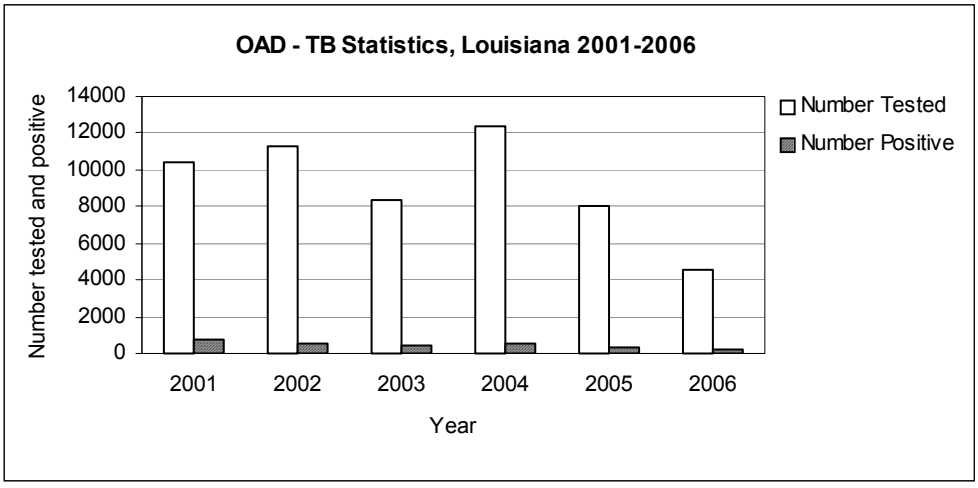
to SFY 2006 statistics will be reviewed in the future, since data sources for those years may have being either under- or over-reported because of hurricanes Katrina and Rita.



Source: Louisiana Department of Health and Hospitals, Office of Addictive Disorders

Tuberculosis

Historically, according to OAD Set Aside Reports, there were 10,431 clients tested for TB during SFY 2001, of which 740 (7%) were positive; 11,305 clients were tested in SFY 2002 and 591 (6%) yielded positive results; 8,406 tests were performed in SFY 2003 and 461 (6%) were positive. OAD tested 12,327 clients for TB which yielded 546 positive results (4%) in SFY 2004; 8,084 clients were tested for TB in 2005, of which 307 (4%) yielded positive results. During SFY 2006, OAD tested 4,567 clients for TB and 208 of the tests (5%) were positive. An estimated number of 27,358 services were provided in SFY 2005. OAD provided approximately 30,000 TB services during SFY 2006. Statistical data for SFY 2005 and SFY 2006 will be reviewed in the future to ensure data integrity in view of the impact of hurricanes Katrina and Rita in data collection and reliability.



Source: Louisiana Department of Health and Hospitals, Office of Addictive Disorders

F. Statewide Child Death Review Panel

The State Child Death Review Panel conducts oversight meetings with investigative agencies on unexpected deaths involving children under 15 years old. Additionally, cases of Sudden Infant Death Syndrome (SIDS) are also reviewed. The Panel, a multi-disciplinary group of professionals, identified a total of 251 unexpected, largely injury-related child deaths in 2002. The State Panel is presently supporting the development of local Parish Panels. The development of these "local" Panels will allow agencies directly involved in death investigations to collaborate on strategies for preventing child deaths under similar circumstances in the future.

Reports

Each year, the Panel submits a mandated Report to the Legislature when the latter is in session. Beginning in 2000, the Panel added a new section to the Report, which focuses on All-Terrain and Off-Road Vehicle Deaths. Although the number of ATV-related deaths in children under 15 was less than 10 in both 2001 and 2002, the Panel did identify an increase in the total number since 2000. The Panel will continue to educate the public on the circumstances surrounding these deaths in an effort to decrease the number of all child deaths in the future.

On a positive note the Panel reports that there was a decline in the three leading causes of child injury deaths in 2002. The leading causes of child injury death in 2002 were: Motor Vehicle Crashes (60 cases, a decrease of three cases from 2001), Airway Obstruction/Suffocation Deaths (29 cases, a decrease of only one case from 2001), and Fire and Burn deaths (26 cases, a decrease of ten cases from 2001).

A report on the outcome of this surveillance project is available from the EMS/Injury Research and Prevention Program (http://www.dhh.louisiana.gov/offices/page.asp?id=233&detail=5557).

G. Personal Flotation Devices

The combination of natural bodies of water, swimming pools, and numerous drainage canals in Louisiana contributes to higher-than-average numbers of injuries and deaths from drowning. Staff from the Injury Research and Prevention Program performed an observational survey of boaters in conjunction with the Department of Wildlife and Fisheries.[3] The results of the survey showed that only a small percentage of boaters used personal flotation devices.

Reports

A report on this survey, accompanied by recommendations, is available from the EMS/Injury Research and Prevention Program (http://www.dhh.louisiana.gov/offices/?ID=233).

[3] MMWR. May 25, 2001 / 50(20); 413-4.

H. Injury Mortality Database

In 2004, the most recent year in which injury mortality data are available, 970 residents of Louisiana died as a result of a motor vehicle crash (rate 21.5 deaths per 100,000). As is the case nationally, males died at a higher rate then females (male 30.0 per 100,000, or 658 deaths, for males vs. 13.4 per 100,000 or 312 deaths for females). Firearm use resulted in 896 deaths (19.8 per 100,000), while poisonings were responsible for 555 deaths (12.3 per 100,000), in 2004.

The Injury Mortality Database, maintained by the Injury Research and Prevention Program, organizes death certificate information on all injury-related deaths in the state. The database is extracted from the DHH-OPH Vital Records electronic death files dating back to 1986. The information is used to examine trends in the occurrence of specific injuries or groups of injuries and to identify and track the injury experiences of different at-risk groups. It provides important data for the planning and evaluation of interventions, public policy development, resource planning, and identification of emerging problems.

Reports

The Injury Research and Prevention Program can generate specific tables, reports, and analyses by cause of death, residency, and a variety of demographic factors, upon request. Injury mortality information is also available on the Internet through the CDC's Web-based Injury Statistics Query and Reporting System (WISQARS).

I. Injury Morbidity Information from Hospital Discharge Data

Newly available hospital discharge data allow the injury epidemiologists to perform analyses of general injury morbidity. These data can anchor the development of injury prevention initiatives, resource planning, and identification of higher risk groups. Special training for community injury prevention specialists and advocates, EMS and emergency room staff, and other injury control personnel can be based on these findings. The 2001 report on nonfatal injury-related hospital discharges is available from the EMS/Injury Research and Prevention Program on the following website
http://www.dhh.louisiana.gov/offices/page.asp?id=233&detail=6675

J. Louisiana Adolescent Health Initiative

In September 1995, the Louisiana Adolescent Health Initiative (AHI) was launched. AHI facilitates a coordinated, multi-disciplinary approach to adolescent health care, disease prevention, and health promotion in the state. The goal of the initiative is to provide Louisiana adolescents with the opportunity to grow and prosper in a healthy, nurturing, and safe environment. AHI is reaching this goal by increasing coordination and collaboration among internal programs and external agencies, infusing adolescent

voices in planning and policy-making efforts of the state, and providing an infrastructure that enables local communities to more effectively and efficiently address adolescent health needs.

The collection of data and dissemination of information is an essential part of AHI. Providing information on adolescent health statistics and on current adolescent health activities is a priority. DHH-OPH serves as a central repository for such information. The use of statewide teen health questionnaires and statewide adolescent focus groups, coupled with the collection of adolescent health statistics, provides parents, communities, politicians, and policy-makers with a clear picture of adolescent health in Louisiana.

Currently, there are many state and local projects that emphasize different aspects of adolescent health. Some focus on teenage pregnancy or teen parenting, while others may focus on HIV/AIDS, tobacco control, conflict resolution, cardiovascular health, or the maintenance of school-based health clinics. AHI allows for the planning, development, implementation, and evaluation of these activities in a coordinated, collaborative manner. In addition, it broadens the scope of cooperation to include the DHH-Office of Mental Health (OMH), Office of Addictive Disorders (OAD), the Office of Youth Services, and the Department of Education, among others. Such team-building efforts are necessary to merge the work of all agencies working toward the common goal of ensuring optimal health and well-being for all of Louisiana's youth.

AHI: Activities to Date:

- Directed the Teen Talk 2000 Focus Group Project to nearly 300 Louisiana youth in all 9 OPH Regions;
- Planned and coordinated the 2000, 2001, and 2002 Safe Summer Violence Prevention Youth Rallies;
- Produced the AHI Website that is updated annually;
- Administered quarterly statewide Adolescent Health Initiative Steering Committee Meetings, bimonthly Body-Wise Nutrition & Obesity Prevention Program Meetings, monthly Louisiana Youth Suicide Prevention Meetings, and monthly Louisiana Young Women's Health Summit Meetings;
- Increased coordination with over **150** internal DHH-OPH programs and external agencies involved in public health, public policy and social welfare;
- Provided technical assistance to local, statewide, and national adolescent health coalitions that are performing comprehensive adolescent activities (Let's Talk Month Activities, National Day to Prevent Teen Pregnancy, National Month to Prevent Teen Pregnancy, National Week to Prevent Suicide, Yellow Ribbon Youth Suicide Prevention Week, and National Women's Health Week Activities);
- Featured in multiple Louisiana newspapers, TV stations, and national newsletters;
- Plans and coordinates the Body-Wise Nutrition and Obesity Prevention School Program at Lusher Extension Middle School, servicing over **300** youth annually;

- Formed and chairs the Louisiana Youth Suicide Prevention Task Force, and trained **1150** multi-disciplinary professionals in all 9 OPH regions who participated in the LA Suicide Prevention Gatekeeper Trainings;
- Planned and administered Multi-Parish Planning Summits that were conducted in 5 areas of the state in order to bring together 50 participants per meeting, representing various disciplines from within the schools and the community (previously trained Gatekeepers will be reconvened and updated on the Louisiana Suicide Prevention Plan);
- Planned and coordinated the 1st and 2nd Louisiana Young Women's Health Summits (YWHS) held at the New Orleans Superdome in March 2003 and May 2005, which featured partners from many different state and local agencies. A total of **750 participants** attended the Young Women's Health Summits, 450 participants in 2005 and 300 participants in 2003. Topics included teen pregnancy, domestic violence, HIV/AIDS, media and body image, substance abuse, nutrition and physical activity, education/goal setting and African dance. In 2005, the 1st Parent Training Workshop occurred and its purpose was to teach parents effective ways to talk to their teens about sexuality. Seventy five adults who were parents, mentors, and/ or teachers attended. They were highlighted in over 10 media outlets and invited to the Governor's Mansion to take pictures. Various state proclamations, senate, house and mayoral awards were given for the Summit's efforts and highlighted by the National Office on Women's Health as the 1st local YWHS in the nation. In attendance were young women, their adult chaperones and various speakers from 4 other states. Two outcomes of the Louisiana YWHS were the Dallas Teen Fashion Show and the Houston Young Women's Health Summit;
- Provided technical assistance and expertise to the CDC/Suicide Prevention Resource Center/Children's Safety Network-Federal Region VI & IV's Suicide Prevention Bi-regional Federal Conference by participating in monthly conference calls, facilitating sessions, organizing Tulane student volunteers, and presenting the Louisiana Strategic Plan to Prevent Youth Suicide; and
- AHI celebrated its 10 Year Anniversary Week Celebration that occurred August 8, 2005-August 12, 2005. There were a total of **225** people in attendance from diverse backgrounds, groups such as state agencies, community-based organizations, after school programs, churches, youth leaders, state politicians and others. The week's activities included teen pregnancy prevention presentations, college and university state training, a community appreciation/educational summit, young women's leadership legislative luncheon (with a 6 key women legislative panel) made up of state senators, state representatives and city councilwomen, youth led and youth organized-youth health bill of rights were given to all legislators and community partners, also an Office of Public Health Appreciation for all internal OPH partners who have supported AHI over the years were all a part of the AHI 10 Year Anniversary Week's activities.

AHI: Continuing Activities:

- Produces, distributes and annually updates the Louisiana Adolescent Data Book, which includes a statistical compilation of adolescent health indicators;

- Produces, distributes and annually updates the Louisiana Teen Pregnancy Prevention Directory, which includes a listing of statewide programs that provide counseling and medical services to help teens prevent pregnancy;
- Produces and distributes annually the Louisiana Adolescent Health Fact Sheet, which gives an accurate account of the health status of Louisiana adolescents;
- Collaborates with other state and national adolescent projects (National Campaign to Prevent Teen Pregnancy, Advocates for Youth, Louisiana Teen Pregnancy Prevention Task Force, and New Orleans Mayor's Children Service's Collaborative);
- Serves as an Adolescent Specialist on many statewide Adolescent Task Forces;
- Gives AHI presentations at national (e.g., *Healthy People 2010*), statewide, and local conferences;
- Plans and coordinates the Louisiana Young Women's Health Summits;
- Assisted the Office on Mental Health in submitting a suicide prevention grant application to the federal government; and
- Serves as the State Women's Health Coordinator and Region VI –Adolescent Health Expert to the Region VI Office on Women's Health Alliance.

L. Environmental Epidemiology and Toxicology

The DHH-OPH Section of Environmental Epidemiology and Toxicology (SEET) promotes reductions in disease morbidity and mortality related to human exposure to chemical contamination. SEET responds to public health needs across the state related to environmental health issues.

In recent years, there has been an increase in public awareness of the acute and chronic health effects of chemicals in the environment and a greater demand for SEET to investigate these effects. SEET attempts to address residents' concerns by:

- Identifying toxic chemicals in the environment that are likely to cause health effects;
- Evaluating the extent of human exposure to these chemicals and the adverse health effects caused by these exposures;
- Making recommendations for the prevention/reduction of exposure to toxic chemicals and the adverse health effects caused by these exposures; and
- Promoting a better public understanding of the health effects of chemicals in the environment and of the ways to prevent exposure.

Activities conducted by SEET include:

Epidemiological and Toxicological Investigations

- Public Health Assessment/Health Consultation Program
- Pesticide Surveillance Program
- Occupational Health Surveillance Program
- Disease Cluster Investigations Program
- Louisiana Environmental and Health Effects Tracking Program

- Health/Fish Consumption Advisories Program
- Chemical Event Exposure Assessment

Environmental Health Advisories (See "Chapter IV: Preventive Health Outreach")

- Mercury in Fish

Environmental Health Education (See "Chapter IV: Preventive Health Outreach")

- Health Effects Related to Pesticide Exposure
- Mercury in Fish
- Health Professional Education Sub-Program
- Private Water Well Brochure
- Indoor Air Quality Education

Environmental Health Emergency Response Programs (See "Chapter IV: Preventive Health Outreach")

- Environmental Public Health Emergency Preparedness and Response
- Chemical Terrorism
- Poison Control Center Notifications Sub-Program
- Geographical Information System (GIS) Program
- Hazardous Substances Emergency Events Surveillance Project

Other projects as described below are representative of those coordinated by SEET.

Public Health Assessment/Health Consultation Program

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5752

Health assessors complete extensive Public Health Assessments or shorter Health Consultations for hazardous waste sites in Louisiana. A Public Health Assessment is an evaluation of all relevant environmental information, health outcome data, and community concerns about hazardous waste sites. It identifies populations potentially at risk and offers recommendations to mitigate exposures. A Health Consultation is a response to a request for information and addresses specific public health issues that could arise as a result of human exposure to hazardous materials. Based on the above documents, health studies, environmental remediation, health education, exposure investigation, or further research may be recommended. SEET also (1) develops fact sheets and other handouts to provide health information to communities near hazardous waste sites, (2) responds to individual requests for toxicological and medical information, and (3) makes presentations in public meetings and availability sessions.

As of June 5, 2006, there were 154 confirmed inactive and abandoned hazardous waste sites in Louisiana, and 437 similar potential sites, according to the Louisiana Department of Environmental

Quality (LDEQ). Currently, SEET is evaluating the public health impact of 18 of these sites. The potential for further involvement and/or work with additional sites is very likely.

Hurricanes Katrina and Rita

As a result of hurricane activity in 2005, SEET has performed a multitude of tasks in order to assist affected communities and provide environmental health and safety information. SEET continues to collaborate with the U.S. Environmental Protection Agency (EPA) and the Agency for Toxic Substances and Disease Registry (ATSDR) to answer resident's questions about mold, indoor air, safety, and site-related contaminants resulting from a major oil spill at the Murphy Oil Refinery in Chalmette (St. Bernard Parish). In addition, SEET is evaluating the impact that the hurricanes may have had on 16 current and deleted National Priority List (NPL) sites throughout Louisiana. SEET will assess sample data for each site to determine whether contaminants detected at levels of concern may present a hazard to human health. Additionally, SEET is analyzing parish-wide environmental data from St. Bernard and Orleans parishes to determine the potential for adverse health effects resulting from contaminants in sediments deposited by floodwaters.

Devil's Swamp Lake

The Devil's Swamp Lake site, which is located in Baton Rouge (East Baton Rouge Parish), was proposed to the EPA National Priorities List on March 8, 2004. SEET has examined historical data related to this site and found several contaminants detected in animal tissue and/or sediment including polychlorinated biphenyls (PCBs), hexachlorobenzene (HCB), hexachlorobutadiene (HCBD), tetrachlorobenzene, and pentachlorobenzene. The Devil's Swamp Lake site is included in the Louisiana Department of Health and Hospitals' Health/Fish Consumption Advisory Program. Currently, it is recommended that no more than two fish meals per month be consumed from fish caught in the lake, and recreational visitors should refrain from swimming in the area. SEET has conducted two separate site visits of the area, one by motor boat and another on foot, which evidenced some recreational hunting and fishing activities.

In cooperation with ATSDR, SEET has completed an Initial Release of the Public Health Assessment for Devil's Swamp Lake, and a Public Comment Version is in review. A Final Version of the Public Health Assessment will be completed in 2006. Health education will be conducted at this site throughout the year to inform community members of the risk associated with site-related contaminants.

Marion Pressure Treating Company

From 1964 to 1989, the now-defunct Pressure Treating site north of Monroe (Ouachita Parish), Louisiana used a creosote injection process to treat wood products such as railroad ties, fence posts and utility poles. Wood treatment facilities such as this one are the largest source of creosote in the environment. Creosote is a synthetic chemical which contains many compounds, particularly polycyclic aromatic hydrocarbons (PAHs). SEET has reviewed all media from the site including groundwater and biota data sampled from the Marion site. Investigations have determined that groundwater and biota pathways pose no human health hazard to residents. SEET recently completed soil and sediment investigations in early

2006. Neither site-related soil nor sediment poses a human health risk to residents who live near the Marion Pressure Treating site.

Eunice City Lake

In May 2000, a train carrying a variety of chemicals derailed near the Eunice City Lake northwest of the city of Eunice (St. Landry Parish) in Central Louisiana. Concern arose about possible contamination of the lake following the derailment. An initial round of fish sampling showed that no advisory on fish consumption needed to be considered. A second round of fish sampling was performed in May 2002 to rule out the potential of bioaccumulation. SEET reviewed the 2002 data and identified PCB congeners as the contaminants of concern in fish tissues. These contaminants, which were not present in the train's cargo, may have been due to combustion products from the derailment or to some other source such as nearby roadways. SEET determined that consumption of fish caught in the Eunice City Lake presents no public health hazard. SEET will continue to provide technical assistance to the residents of Eunice as needed.

North Ryan Street Yard (Gulf State Utilities)

The North Ryan Street Utilities Yard (Gulf State Utilities (GSU)) site is located in the city of Lake Charles in Calcasieu Parish in southwest Louisiana. Prior to 1926, coal gasification operations resulted in coal tar deposits in the adjacent wetland area. After 1926, the wetland area of the property was used as a landfill for waste materials such as transformers, oils and debris. By 1980, the landfill was filled to capacity and covered with shells and soil.

In September 1988, LDEQ issued a compliance order to GSU to conduct remedial activities at the site. Samples collected from Calcasieu River sediment during an EPA Site Investigation in 1992 revealed that contaminants attributable to the facility were being released to the Calcasieu River. A 1998 EPA Remedial Investigation and Engineering Evaluation/Cost Analysis Investigation Report identified PAHs, copper, and lead as the contaminants of concern (COCs). Public drinking water supply wells located on and near the site were not contaminated.

In 1995, SEET conducted a site visit and presented site information to the Calcasieu Task Force. An initial release PHA was completed in 1996, and the public comment version of the PHA was completed in FFY02. SEET is currently completing the final version of the PHA. Health education outreach and technical assistance will take place as necessary.

Pesticide Surveillance Program

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6679

Health-Related Pesticide Incident Report Program

The Health-Related Pesticide Incident Report (HRPIR) Program is a statewide surveillance program designed to investigate and evaluate adverse health effects related to acute pesticide exposure. In addition to investigating pesticide exposure complaints, SEET maintains a statewide database. Pesticide

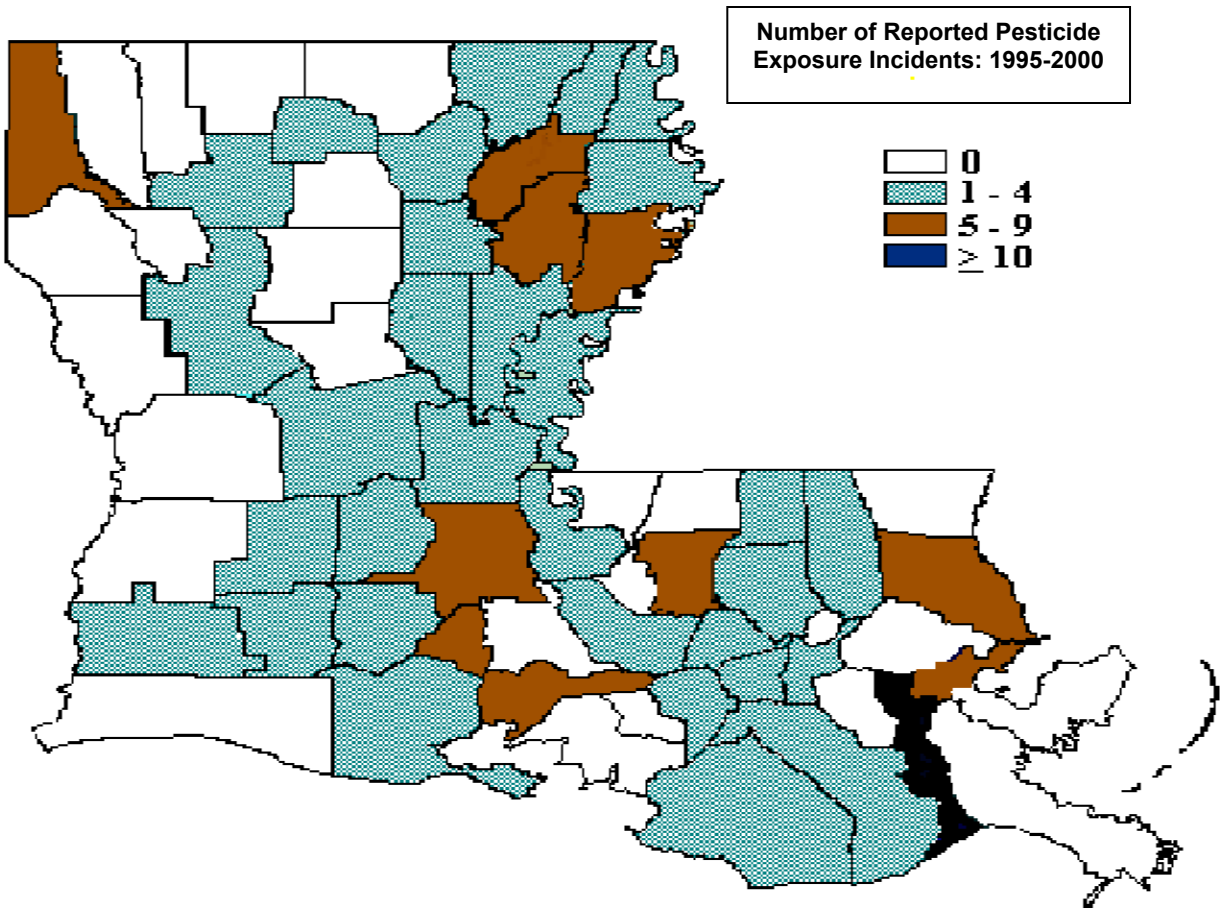
exposure complaints are obtained from two sources: the Louisiana Department of Agriculture and Forestry (LDAF) and the Louisiana Poison Control Center (LAPCC). Complaints obtained from LDAF are jointly investigated by LDAF and SEET. Investigations involve the collection and review of environmental and health data relevant to the pesticide exposure incident. A written summary of the findings is provided to the complainant.

Poison Control Center Notifications Sub-Program

Since October 2002, SEET has been receiving all pesticide-related calls from the Louisiana Poison Control Center (LAPCC). Case reports obtained from the LAPCC are reviewed and entered into the pesticide surveillance database. Only cases reporting pesticide exposure and health effects are included in the database; cases with unclear exposure histories or no reported symptoms are not included. Most LAPCC cases are investigated solely by SEET. Those incidents that occur on the job or in a public place are referred to LDAF for follow-up.

Cases obtained from LDAF and LAPCC are evaluated to determine short-term and long-term health effects related to pesticide exposure. Cases are classified using standardized pesticide exposure criteria developed by the Centers for Disease Control and Prevention (CDC). Classification categories consider the level of certainty of exposure, documentation of health effects, and the plausibility of reported health effects based on the known toxicology of the pesticides.

Figure: Health-Related Pesticide Incidents (HRPIs) by Parish: October 1995 - September 2000



Summary of HRPIs Reported In Louisiana From October 1995 Through September 2000.
Louisiana Department of Health and Hospitals, Office of Public Health,
Section of Environmental Epidemiology and Toxicology. February 2002.

Louisiana's Registry of Pesticide Hypersensitive Individuals Sub-Program

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6679

LDAF and SEET established a statewide Registry of Pesticide Hypersensitive Individuals. The registry's purpose is to enable hypersensitive individuals to receive prior notification of pesticide applications in the vicinity of their homes. With prior notification, individuals can take necessary precautions to protect themselves from inadvertent pesticide exposure. There is no charge for inclusion in the registry, although a physician licensed to practice medicine in Louisiana must certify that the registrant is hypersensitive to pesticides. The registry is updated annually and provided to all licensed applicators and pest control operators (PCOs). Applicators and PCOs are requested to notify registrants prior to making a pesticide application to a property within 100 feet of, or adjacent to, the registrant's property. Notification by applicators and PCOs is voluntary, and there is no penalty for non-compliance.

Occupational Health Surveillance Program

In August of 2005, SEET was awarded a 3-year grant from CDC's National Institute for Occupational Health and Safety (NIOSH) to develop a statewide Occupational Health Surveillance Program. The grant's purpose is to strengthen the state's capacity to conduct population-based surveillance of specified occupational health indicators using existing data systems. The occupational health conditions identified by NIOSH for study are non-fatal work related injuries and illnesses, work-related hospitalizations, fatal work-related injuries, work-related amputations, hospitalization for work-related burns, work-related musculoskeletal disorders with days away from work, carpal tunnel syndrome, hospitalization from or with pneumoconiosis, mortality from or with pneumoconiosis, acute work-related pesticide-associated illness and injury reported to poison control centers, incidence of malignant mesothelioma, and elevated blood lead levels among adults. Work on this project began in January of 2006.

Disease Cluster Investigations

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5721

SEET provides Louisiana residents with information on chemicals or other factors (environmental or naturally occurring) that could potentially be associated with a reported disease cluster. In some cases, comparative rates of the disease are tabulated. SEET also works closely with the Louisiana Tumor Registry (LTR) at the Louisiana State University Health Sciences Center in New Orleans to address public concerns about cancer rates throughout the state. During the 2005 calendar year, SEET was notified about or responded to approximately 5 reports of disease clusters throughout the state. In an effort to increase the effectiveness of the program, SEET has drafted Cancer Cluster Investigation Guidelines along with the LTR to address Louisiana residents' concerns.

Public Outreach Sub-Program

SEET provides public outreach services concerning disease clusters throughout the state, such as environmental public health education on cancer.

Louisiana Environmental & Health Effects Tracking (LEHET) Program

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6502

The Louisiana Environmental & Health Effects Tracking (LEHET) Program is a collaborative effort of SEET and LDEQ to develop environmental public health tracking in Louisiana. The LEHET is funded through a three-year cooperative agreement with the CDC's Environmental Public Health Tracking Program. This program fulfills the mandate of Louisiana Act 666 to investigate ways to develop an Environmental Health Surveillance System.

The purpose of this program is to demonstrate and evaluate methods for linking data from ongoing, existing public health surveillance systems with data from existing surveillance systems for human exposure and environmental hazards. The national effort to develop an environmental public health tracking program will ultimately lead to the standardization of how both public health and environmental data are collected and potentially used. With the full support of the CDC and other cooperative agreement states, Louisiana will be one of the nation's leaders in developing and maintaining environmental public health surveillance systems.

LEHET consists of several components: 1) the LEHET Working Group; 2) the LEHET Community Consortium and, 3) the LEHET Wood Preservation and Treatment Site Pilot Project. The LEHET Working Group is comprised of public health professionals, researchers from universities and technical experts from state agencies. This group provides technical input for the pilot project and for data collection and analysis. The LEHET Community Consortium is drawn from community and environmental organizations, professional associations, industry groups, universities, and state and federal public health and environmental agencies. This group provides suggestions for projects and assists in the development, communication and dissemination of environmental public health information for citizens and other interested parties. The LEHET pilot project focuses on linking environmental, exposure, and health data from wood preservation and treatment sites. Working in partnership with LDEQ and the OPH Safe Drinking Water Program, groundwater and drinking water data are being compiled from areas near abandoned or inactive wood preservation and treatment facilities throughout the state. Groundwater and drinking water data will be tracked along with bladder, lung, and all cancer sites data provided by the Louisiana Tumor Registry. Ultimately, the results will demonstrate methods and benefits of linking environmental and health data, and help to reduce the risk of preventable exposures to environmental contaminants.

Health/Fish Consumption Advisories Program

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5749

SEET issues fish consumption advisories in consultation with state environmental agencies when chemicals or heavy metals in sport fish reach levels that could potentially harm the public.

Mercury in Fish

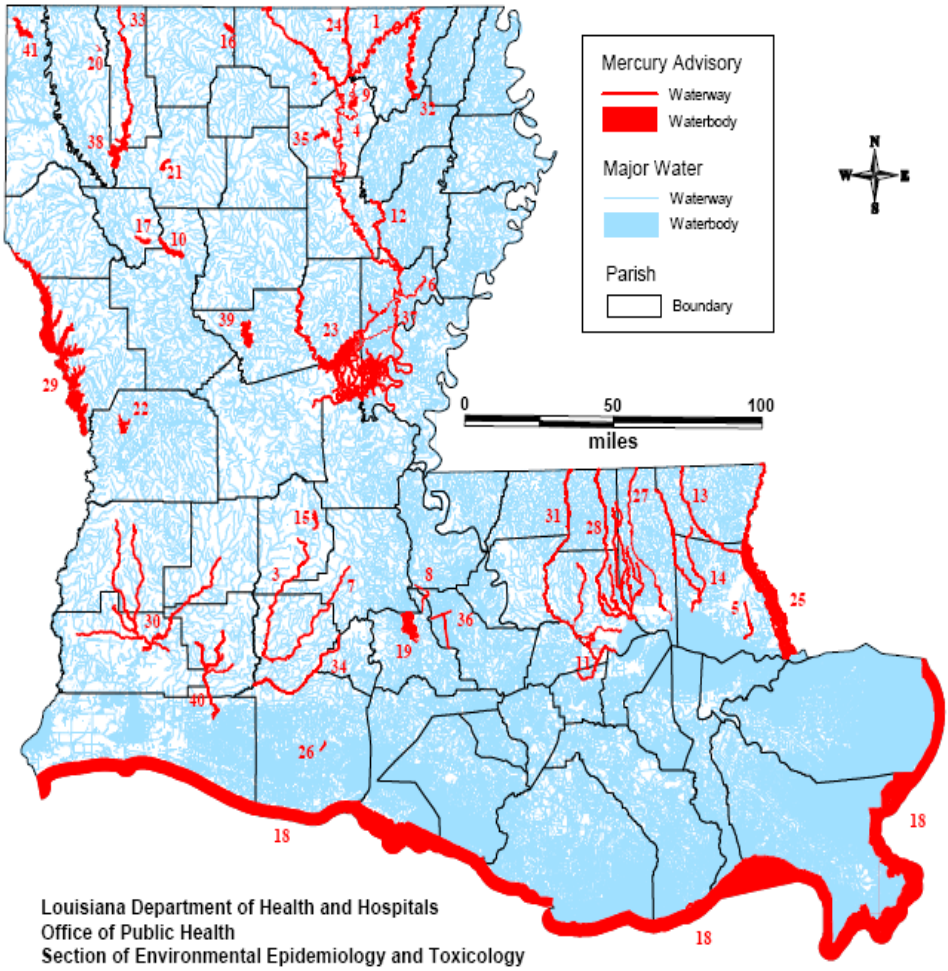
SEET works with the LDEQ and the Louisiana Department of Wildlife and Fisheries (LDWF) to assess the extent of mercury contamination in fish. Methylmercury, a compound present in fish tissue, can cause birth defects and neurological problems when present at high levels. LDEQ samples fish from water bodies that are selected based on water quality, usage, and SEET recommendations. SEET then conducts a public health risk assessment, and, if warranted, the State Health Officer issues a fish consumption advisory for specific species of fish. Of nearly 500 water bodies tested to date, 41 health advisories for fish containing mercury have been issued. These advisories cover at least 66 freshwater bodies in or traversing 43 parishes, and include an advisory on king mackerel, cobia, greater amberjack, and blackfin tuna for parishes along the Gulf of Mexico.

Population-based Blood Mercury Services Sub-program

In 1998, 313 individuals from selected parishes in Louisiana participated in a blood mercury screening. Ninety-eight% of the study participants were within an expected range of mercury blood levels. The remaining 2% exhibited slightly elevated mercury levels and were advised to decrease fish consumption.

The 1998 blood mercury services screening revealed that a small percentage of the participants had a slightly elevated blood mercury level. These individuals were from Ouachita and Morehouse parishes. In 2003, SEET returned to northeast Louisiana to offer additional blood mercury screening for commercial fishers and their families, as well as others who eat fish caught in local water bodies. Seventy-seven individuals from Morehouse, Union, and Ouachita parishes participated in the screenings. Sixty-eight percent of those participants had a blood mercury level within the expected range, while 25% exhibited slightly elevated mercury levels and were advised to decrease fish consumption. The remaining 7% were advised to seek a medical evaluation because their blood mercury level was elevated.

Louisiana Mercury Fish Consumption Advisories



The Louisiana Department of Health and Hospitals/Office of Public Health/ Section of Environmental Epidemiology and Toxicology (SEET) cannot guarantee the accuracy of the information contained on this map and expressly disclaims liability for errors and omissions in its contents.

LOCATION	NUM
Amite River Drainage Basin	31
Bayou Bartholomew	1
Bayou Bonne Idee	32
Bayou Chene and Bayou Lacassine	40
Bayou De Loutre and Associated Lakes	2
Bayou des Cannes	3
Bayou DeSiard	4
Bayou Dorcheat	33
Bayou Liberty	5
Bayou Louis and Lake Louis	6
Bayou Plaquemine Brule	7
Bayou Queue De Tortue	34
Big Alabama Bayou	8
Black Bayou Lake (Caddo)	41
Black Bayou Lake (Ouachita)	9
Black Lake	10
Blind River	11
Boeuf River	12
Bogue Chitto River	13
Bogue Falaya and Tchefuncte Rivers	14
Calcasieu River Drainage Basin	30
Cheniere Lake	35
Chicot Lake	15
Corney Lake	16
Grand Bayou Reservoir	17
Gulf of Mexico	18
Henderson Lake Area	19
I-10 Canal and Work Canal	36
Iatt Lake	39
Ivan Lake	20
Kepler Creek Lake	21
Lake Bistineau	38
Lake Vernon	22
Little River/Catahoula Lake Area	23
Ouachita River	24
Pearl River	25
Seventh Ward Canal	26
Tangipahoa River	27
Tew Lake	37
Tickfaw River Drainage Basin	28
Toledo Bend Reservoir	29

Chemical Event Exposure Assessment

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6704

SEET responds to requests for information and investigations from the public and government agencies regarding health effects of known and suspected toxic substances in the environment. Some of these inquiries develop into comprehensive health investigations involving interagency workgroups. In addition, SEET receives daily notifications of Poison Control Center cases that involve exposure to chemicals and maintains a database with the details of each exposure. Those incidents that occurred on the job or in a public place are referred for follow-up.

M. VITAL STATISTICS

Vital statistics data provide a body of information that serves as the foundation for monitoring the health and well-being of Louisiana residents. These data are collected via birth, death, fetal death, abortion, marriage, and divorce certificates. Collection and processing of vital statistics information is the responsibility of DHH-OPH's VITAL RECORDS REGISTRY.

A large number of health status indicators rely on vital statistics data. These indicators include infant death rates, numbers of low birthweight infants, percentage of mothers lacking adequate prenatal care, teen birth rates, homicide and suicide rates, rates of death from AIDS, and motor-vehicle injury death rates, among many others. Vital statistics data are used in both the public and the private sectors to identify health needs in the population and to target effective health interventions. Vital statistics health status indicators are also used to measure achievement of the CDC'S Healthy People 2010 objectives.

The role of the STATE CENTER FOR HEALTH STATISTICS (CHS) is to analyze vital statistics data and distribute findings to government programs, community organizations, universities, and interested members of the general public. The Center accomplishes this through publication of the annual *Louisiana Vital Statistics Report*, the *Louisiana-Health at a Glance* poster and through response to ad hoc requests for data and information. CHS is also responsible for compiling information from the different DHH programs to create the legislatively mandated annual *Louisiana Health Report Card*.

2004 Statistics

Please refer to "Chapter I: Population and Vital Statistics."

Reports

Reports and data tables published by CHS, including the annual *Louisiana Health Report Card: Louisiana Vital Statistics Report,* and the *Louisiana-Health at a Glance* poster, may be viewed and downloaded by the public at the Center's internet website:

http://www.oph.dhh.state.la.us/recordsstatistics/statistics/page0cda.html?page=117

CHS also maintains databases of births, deaths, fetal deaths, abortions, marriages, and divorces, which it uses to respond to data requests from communities, agencies, and the general public through generation of ad hoc reports and analyses.

N. STATE HEALTH CARE DATA CLEARINGHOUSE

Act 622 of the 1997 Regular Legislative Session (Louisiana Revised Statutes 40:1300.111-1300.113) defined the STATE HEALTH CARE DATA CLEARINGHOUSE as the entity responsible for the collection of health care and health industry-related data. The Act charges the CLEARINGHOUSE with responsibility for creating population-based health care data registries that will offer Louisiana and its health care providers their first opportunity to plan and operate systematic intervention strategies that address morbidity and the antecedents of death.

In prioritizing the mandates of the HEALTH CARE DATA CLEARINGHOUSE (which is housed within the Center for Health Statistics (CHS)), the OFFICE OF PUBLIC HEALTH considered the various health information data streams already in existence and the data collection experiences of some 36 other states, and determined that Louisiana would benefit most by focusing initial data collection efforts on hospital inpatient discharge data. As a result, the **Louisiana Hospital Inpatient Discharge Database (LAHIDD)** was designated as the registry containing inpatient discharge data submitted to DHH/OPH by hospitals within Louisiana.

In addition to the inpatient discharge database, the CLEARINGHOUSE also plans to work with hospitals and other facilities to develop a statewide hospital outpatient emergency room database and other data sets which will provide a more complete picture of the health of Louisiana residents and help address the urgent concerns regarding the increasing threat of bioterrorism.

History

The rulemaking process enabling the development of LAHIDD, which involved the participation of public and private stakeholders, was completed in the fall of 1998. The following three milestones depict the legislative and regulatory history of the project:

- House Bill 1462 passed in May 1997; signed by the Governor in July as Act 622.
- Rules committee formed in DHH/OPH in November 1997.
- Rules governing LAHIDD published in July 1998.

An extensive survey of all hospitals in the state regarding their database systems and their discharge data submission capacities was conducted from late 1997 to early 1998. As a result of this survey, a comprehensive submittal guide was created and mailed out to hospitals in October 1998. In December

1998, hospitals began submitting data on discharges occurring between January and June 1998 and quarterly thereafter, from January 1999.

Purpose

LAHIDD underlies the commitment of DHH/OPH to the practice of sound public health by expanding the state's ability to carry out its three Core Public Health Functions:

- Assessment of community health status and resources;
- Assurance of availability and provision of necessary, high-quality, effective services; and
- Development of health policy that accurately addresses community needs.

The LAHIDD data will help DHH/OPH accomplish its functions by:

- Enhancing Disease Surveillance and Reporting

  LAHIDD provides a unique resource for the investigation of the progression of morbidity in the population and helps to identify at-risk populations within the community. LAHIDD data can be enriched through linkage to other DHH/OPH databases and can be further enhanced by information gathered by the state's other surveillance programs (e.g., Injury Research and Prevention, Behavioral Risk Factor Surveillance). Linking LAHIDD data to these other population-based databases will enable the development of effective prevention policies targeted at at-risk populations. For DHH/OPH programs such as Tuberculosis and HIV, these data can be used to track patient treatment and to evaluate the completeness of programmatic surveillance.
- Assessing Healthcare Utilization

  Many areas in Louisiana are experiencing rising healthcare costs and shortages of health professionals. These costs and shortages make it essential that patients, healthcare professionals, hospitals, and third-party payers have the necessary information to:
- evaluate health care needs and
- identify the appropriate and efficient utilization of health services.

  Ultimately, evaluation of needs and identification of appropriate and efficient utilization of health services requires an understanding of:
- the patterns and trends in the availability, utilization, and costs of health care services and
- the underlying patterns of disease that necessitate these services.

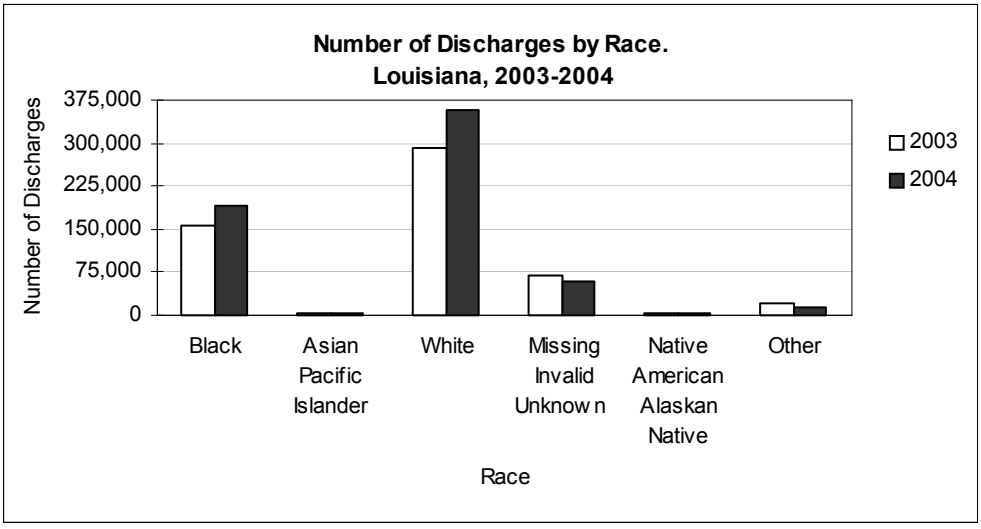
  Through LAHIDD, the STATE HEALTH CARE DATA CLEARINGHOUSE provides information needed to make these determinations. It is different from other sources of data in that LAHIDD is Louisiana's only comprehensive, population-based repository for hospital inpatient data while the DHH/OPH has been the state's repository for mortality data. LAHIDD contains information needed to measure and evaluate morbidity and hospital charges associated with inpatient stays in the state. It also contains information on the diagnoses of those treated, the procedures performed, and the hospital charges for those procedures.

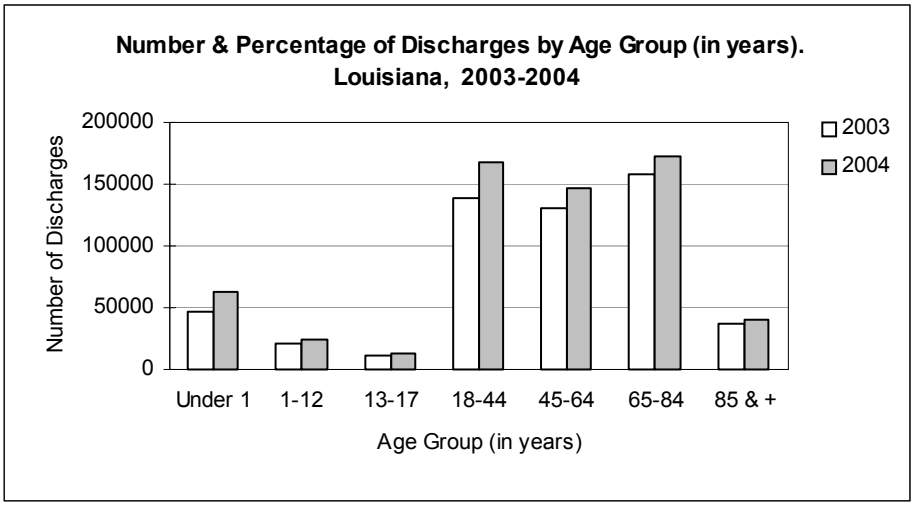
The detailed information available in LAHIDD enables the state to identify specific geographic areas and populations in need of improved access to healthcare and health education. While maintaining LAHIDD confidentiality restrictions, identification of healthcare needs can be accomplished by tracking:

- utilization of hospital care for specific diagnoses and procedures in targeted populations and geographic areas and
- hospital charges for services provided to targeted populations and in geographic areas.

In 2003, CHS published the first LAHIDD Report and distributed copies to the Legislature. The report described patient trends throughout Louisiana and inpatient care in the state during the period 1998-2000, along with cost of hospitalization. The next reports were published in 2004 (containing LAHIDD data for the years 2001-2002) and 2005 (containing LAHIDD data for the year 2003).

Demographics





No. of Discharges by Gender & Age Group (years), LA 2004							
Gender	**<1**	**1-12**	**13-17**	**18-44**	**45-64**	**65-84**	**85 &+**
Female	29,655	10,912	8,430	122,950	76,354	98,628	28,738
Male	32,579	13,918	4,464	44,573	70,082	73,156	12,237
Unknown	9	0	0	2	0	3	0
Total	**62,243**	**24,830**	**12,894**	**167,525**	**146,436**	**171,787**	**40,975**

Missing Values: Female = 5, Male= 4, Unknown= 1

Top 15 Principal Diagnoses by Discharges, LA 2004				
Principal Diagnosis	**Discharges**	**Rate**	**LOS**	**Charges**
Liveborn	48,797	108.3	4.1	8,751
Congestive heart failure, non-hypertensive	23,292	51.7	5.3	22,117
Coronary Atherosclerosis & other heart diseases	22,673	50.3	3.5	38,036
Pneumonia (except by TB or STDs)	21,619	48	5.9	20,167
Nonspecific chest pain	13,886	30.8	1.9	10,478
Rehabilitation Care, prostheses & devices	13,685	30.4	13.4	28,461
Fluid and electrolyte disorders	13,123	29.1	3.5	9,435
Skin, subcutaneous tissue infections	12,876	28.6	4.6	11,847
Affective disorders	12,577	27.9	8.5	10,936
Urinary tract infections	11,469	25.4	4.8	14,006
Complications of birth & puerperium	10,961	24.3	2.9	8,704
Cardiac dysrhythmias	10,628	23.6	3.5	21,022
Other complications of pregnancy	10,245	22.7	2.5	6,958
Complication of implant or graft	9,984	22.2	6	37,743
Acute cerebrovascular disease	9,388	20.8	6.4	26,146

Discharges=No. of Discharges; Rate per 10,000 LA population, U.S. Census Bureau estimate 2004; LOS= Average Length of Stay in days; Charges= Average Charges in dollars; Total Discharges for 2004 = 626,700

Top 15 Principal Procedures by Discharges, LA 2004				
Principal Procedure	**Discharges**	**Rate**	**LOS**	**Charges**
Low Cervical Cesarean Section	20,151	44.7	3.7	11,585
Circumcision	16,370	36.3	2.8	3,542
Other Manually Assisted Delivery	15,716	34.9	2.4	6,982
Left Heart Cardiac Catheterization	10,760	23.9	3.4	23,484
PTCA *	10,407	23.1	2.9	42,576
Transfusion of Packed Cells	8,789	19.5	6	20,562
Esophagogastroduodenoscopy	7,792	17.3	5.4	20,645
Total Abdominal Hysterectomy	7,717	17.1	2.8	15,863
Venous Catheterization	7,480	16.6	10.3	37,397
Repair of Obstetric Laceration	6,762	15	2.3	6,502
Hemodialysis	6,465	14.3	6.1	22,255
Prophylactic Vaccine Administration	6,391	14.2	2.7	2,780
Episiotomy	5,829	12.9	2.3	6,410
Total Knee Replacement	4,955	11	4.4	38,755
Laparoscopic Cholecystectomy	4,917	10.9	4.5	26,461

Discharges=No. of Discharges; Rate per 10,000 LA population, U.S. Census Bureau estimate2004; LOS=Average Length of Stay in days; Charges=Average Charges in dollars ; PTCA=Percutaneous Transluminal Coronary Angioplasty.*

Hospital Discharges by Primary Payers, LA 2004					
Primary Payer	**Discharges**	**Rate**	**Females**	**Males**	**Charges**
CHAMPUS	6,177	13.7	4,013	2,164	10,119
Medicaid	146,510	325.1	99,149	47,354	190,213
Medicare	234,142	519.5	134,704	99,434	575,131
No Charge	46	0.1	23	23	0
Private	190,408	422.5	115,554	74,852	391,903
Self Insured	3,777	8.4	1,953	1,824	5,416
Self Pay	17,425	38.7	7,937	9,486	27,791
Workers Comp.	3,036	6.7	652	2,384	8,125
Unknown	25,179	55.9	11,687	13,492	32,961
Total	**626,700**	**1,390.6**	**375,672**	**251,013**	**1,241,658**

Discharges= Total No. of Discharges; Rate per 10,000 LA population, U.S. Census Bureau estimate 2004; Charges= Total Charges in 10,000 dollars; Missing values: Medicaid=7, Medicare=4, Private=2, Self Pay=2

IV. PREVENTIVE HEALTH OUTREACH, SERVICE, AND EDUCATION PROGRAMS

The Department of Health and Hospitals (DHH), Office of Public Health (OPH) provides Louisiana residents with a variety of Preventive Health Outreach Programs targeted to assure the health of its most vulnerable citizens: infants and children; adolescents; women; families; and persons suffering from infectious and chronic diseases, violence and injury, substance addictions, and mental impairment. The programs detailed in this chapter provide services to thousands of Louisiana residents and are essential to the health of the state as a whole.

Programs Targeting: Infants, Children, Adolescents, Women, and Families

A. Maternal and Child Health Program

The Maternal and Child Health (MCH) Program is dedicated to identifying health problems and developing solutions to improve the health of women of childbearing age, pregnant women, infants, children, and adolescents. This goal is accomplished through the provision of needed preventive health care services for the population in general as well as those who have limited access to preventive services due to financial or geographic barriers, or lack of service providers.

Through parish health units and contract agency sites statewide, the Maternity Program offers pregnancy testing, prenatal care, and nutrition education/counseling. In some locations, comprehensive prenatal care is provided to women who are unable to access such services elsewhere in their communities. The prenatal care includes regular physical assessments, laboratory tests, counseling and education on physical and behavioral issues, and home visiting when indicated. HIV education for all patients and HIV screening and counseling are provided for those who choose to participate.

In state fiscal year 2005, 4,101 pregnant women initiated or received comprehensive prenatal care, while 42,398 pregnant women received prenatal and nutrition counseling and education in conjunction with the Women, Infants, and Children (WIC) Program services. Over 16,250 women came to the health units for pregnancy tests only. The total number of maternity related visits was 85,204. The Maternity Program also provides prenatal care in areas of the state with access problems through contracts with the Louisiana State University Health Sciences Center and Community Health Centers. Through these contracts, 916 women received prenatal and postpartum care in 6,836 visits. The MCH Program also supports the Partners for Healthy Babies Campaign, which is a public awareness and education media effort to promote healthy prenatal behaviors, early prenatal care, and a toll-free telephone hotline for information and referral for health and related services.

Preventive health services to infants and children offered by the Child Health Program include periodic health screening through parish health units statewide. These services may involve a medical history and physical examination; immunizations; assessment of growth; assessment of developmental status; laboratory screening for phenylketonuria (PKU), congenital hypothyroidism, sickle cell disease, anemia, urinary tract problems, and lead poisoning; screening for vision, hearing, or speech problems; and parental counseling and education. Nutritionist and social services are available in addition to medical and nursing services. In state fiscal year 2005, 87,163 infants, children, and adolescents were seen in a total of 152,771 visits. Over 2,373 children received 2,907 comprehensive screenings, and 11,057 children received 13,665 health counseling and follow up services.

Infant Mortality Reduction Initiatives have been established in each region to examine the causes of fetal and infant death through a formal review process, and recommendations to address the need for prenatal and infant health interventions will be made by these community coalitions. Injury prevention coordinators address prevention of unintentional injuries, which are the leading cause of death among children. Car, pedestrian, bicycle, playground, and water safety are addressed through education and public awareness events. Prevention of injury from fires and suffocation are also targeted.

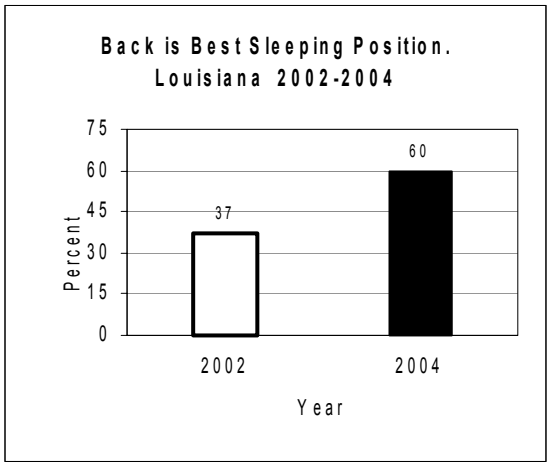
SUDDEN INFANT DEATH SYNDROME (SIDS)

The DHH-OPH Sudden Infant Death Syndrome (SIDS) Counseling and Risk Reduction Program is designed to increase public awareness on the topic of SIDS and to provide education to reduce the risk of SIDS deaths. The SIDS Program developed media messages aimed at encouraging parents of infants to place healthy babies on their backs for sleeping and promoting a safe sleep environment. Educational materials promoting the new revised 2005 American Academy of Pediatrics (AAP) guidelines regarding SIDS risk-reduction have been developed and distributed to populations at risk. These materials include: flyers that provide basic SIDS information; a healthcare provider tip sheet to provide risk-reduction information for physicians and nurses; and posters that promote back sleeping. Grief counseling is made available to all families who have experienced the death of an infant due to SIDS. The SIDS risk-reduction community outreach and education initiative has continued; activities included the following:

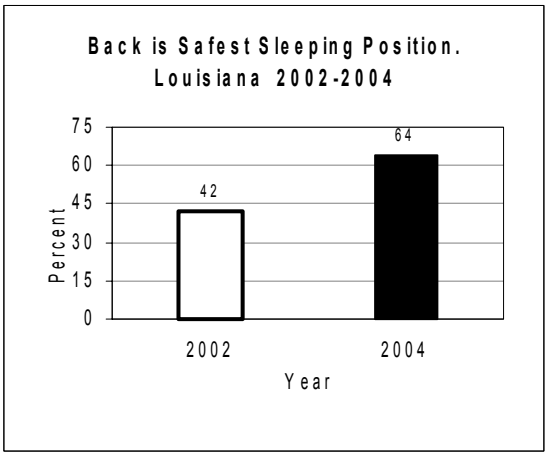
- Developed new media to educate the community on SIDS risk reduction.
- Provided professional education in-service training to birthing hospital staff, childcare providers, nurses, and other healthcare providers.
- Provided SIDS education through faith-based organizations.
- Distributed educational materials on SIDS risk-reduction to hospitals, physicians, childcare providers, and community groups statewide.

Since the initiation of SIDS risk-reduction efforts, a baseline quantitative 10-minute telephone survey was conducted in 2002, with a follow-up survey in 2004, to measure awareness of SIDS and its risk factors. Data were gathered from a representative sample of Louisiana women (n=400) who were 18-29 years of

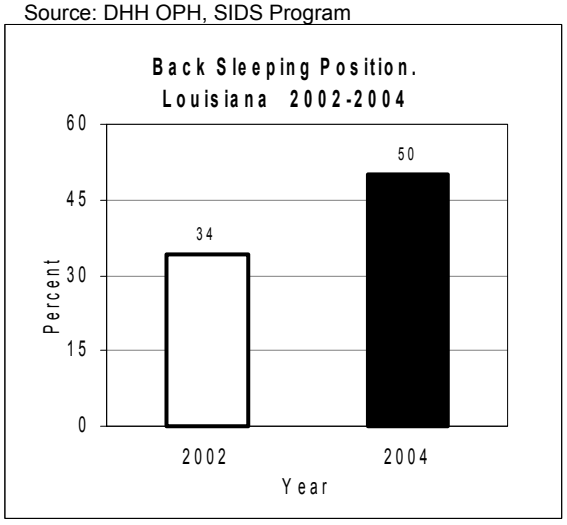
age, had an annual household income of $29,000 or less, and resided in either urban and rural areas in the state. Data from this sample show that, from 2002 to 2004, there was an increase in the number of Louisiana women who believe back sleeping is safest, and is best for infants, and who place infants to sleep on their backs. There was a decrease in the number of women who place soft bedding (i.e., pillows or comforters) in a baby's sleeping area. The following are selected findings from the 2004 SIDS follow-up telephone survey:



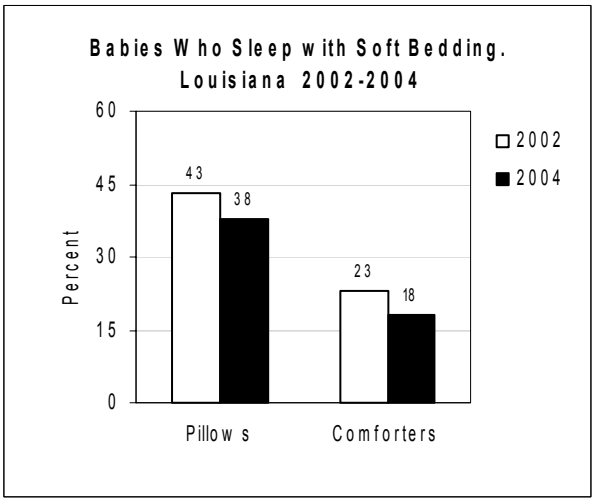
Source: DHH OPH, SIDS Program



Source: DHH OPH, SIDS Program



Source: DHH OPH, SIDS Program

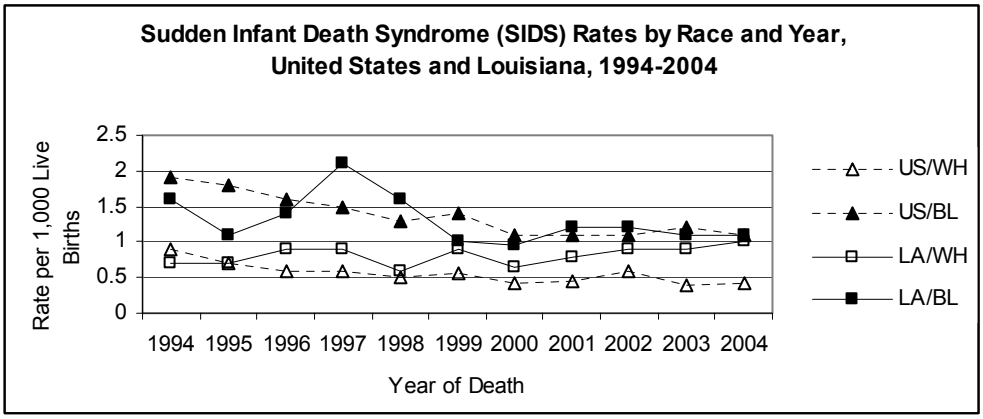


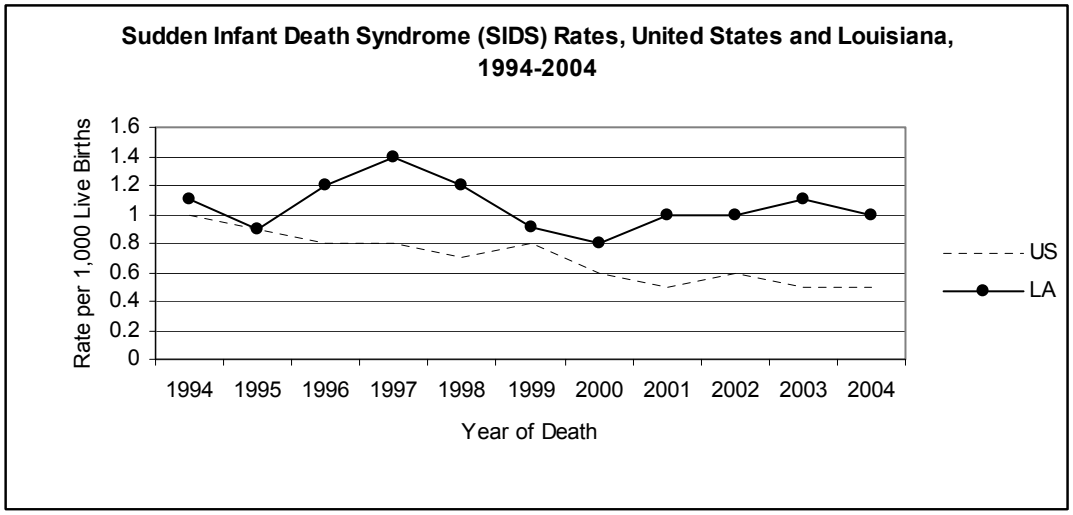
Source: DHH OPH, SIDS Program

In addition to public and professional education and grief counseling, standard data are collected on each case with the hope of identifying preventable circumstances that are associated with unexpected deaths in infancy. Cases are assessed for SIDS risk factors, ethnic-racial trends, and geography-specific trends. A program to improve the investigation of unexpected infant deaths through the training and certification of death-scene investigators was begun in 1996. Over 275 investigators from coroner offices and law enforcement have been trained in conducting death-scene investigations in cases of unexpected deaths in infants.

SIDS was the second leading cause of unexpected child death in Louisiana in 2004. That year, there were 66 deaths from SIDS in the state, equivalent to a death rate of 1.0 per 1,000 live births. Between 1990 and 1995, rates in Louisiana were roughly comparable to the national rates. From 1996 through 2004, the SIDS rate in Louisiana was higher than the national rate. However, over the past decade, the SIDS rate has decreased from 1.3 deaths per 1,000 births to 0.8 deaths per 1,000 births.

Blacks were more likely to die from SIDS than whites in 2002 (29 deaths among blacks for a rate of 1.1 deaths per 1,000 live black births vs. 37 deaths among whites for a rate of 1.0 deaths per 1,000 live white births). For many years, there has been a disparity between SIDS rates by race, both at the national level and in Louisiana. However, the disparity between ethnic groups in Louisiana has decreased over the years from 2.5 in 1998 to 0.9 in 2004.





LOUISIANA PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (LAPRAMS)

Overview

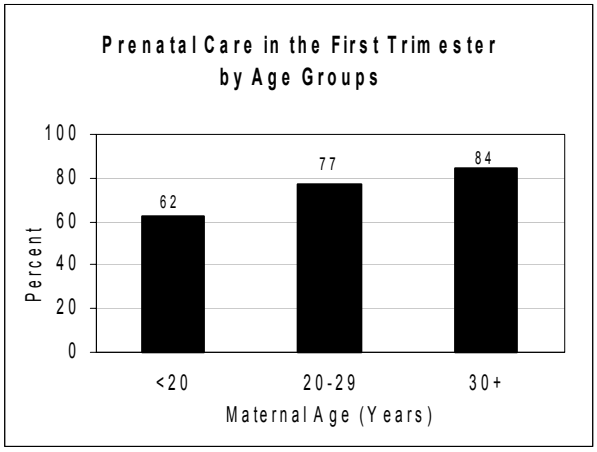
The Louisiana Pregnancy Risk Assessment Monitoring System (LaPRAMS) is an ongoing, population-based surveillance system designed to identify and monitor selected maternal behaviors that occur before and during pregnancy and during a child's early infancy. It is a joint effort between the OFFICE OF PUBLIC HEALTH (OPH) and the CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC). CDC, the OPH VITAL RECORDS REGISTRY, the STATE CENTER FOR HEALTH STATISTICS, and the TULANE UNIVERSITY SCHOOL OF PUBLIC HEALTH AND TROPICAL MEDICINE provide technical assistance to LaPRAMS. CDC, along with the OPH FAMILY PLANNING and MATERNAL AND CHILD HEALTH programs, provide funding for the project.

LaPRAMS data are collected from a representative random sample of new mothers by means of mail surveys and telephone interviews. Louisiana women who have had a recent live birth are randomly selected to participate in the system. Since data collection was initiated in October 1997, 20,389 women have received the LaPRAMS questionnaire. In 2003 alone, 2,397 women were selected to receive the questionnaire. Since LaPRAMS is based on a representative sample, the data collected by this survey represent information that can be generalized to the whole State of Louisiana. Information provided by LaPRAMS includes: medical and physical factors; socioeconomic status; prenatal maternal experiences and behaviors (e.g., cigarette smoking, alcohol use, and physical abuse); prenatal care counseling; use and barriers to prenatal care; content and quality of care; complications during pregnancy; birth control use before and after pregnancy; sources of prenatal care and payment of delivery; and postpartum maternal experiences and behaviors.

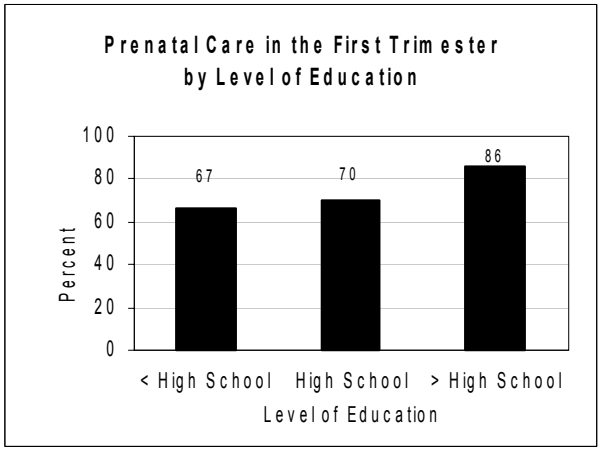
Results

The following are selected findings based on LaPRAMS 2003 data.

- ***Early initiation of prenatal care*:** Seventy-seven percent of women reported initiating prenatal care during the first trimester of their pregnancy. The *Healthy Louisiana 2010* target for initiation of prenatal care in the first trimester is 90%. The socio-demographic characteristics of women entering prenatal care during the first trimester are shown below.

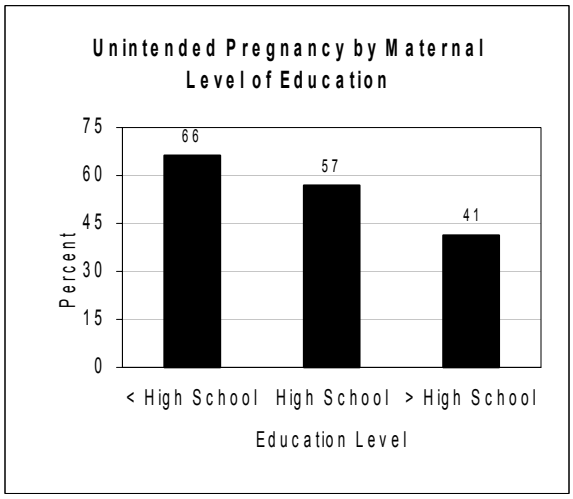


Source: DHH-OPH, LaPRAMS 2003

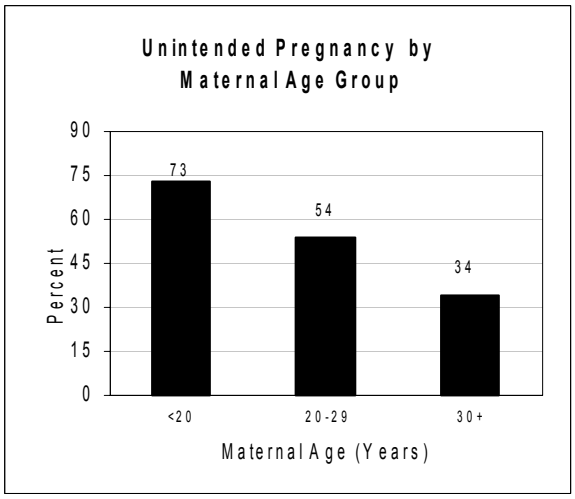


Source: DHH-OPH, LaPRAMS 2003

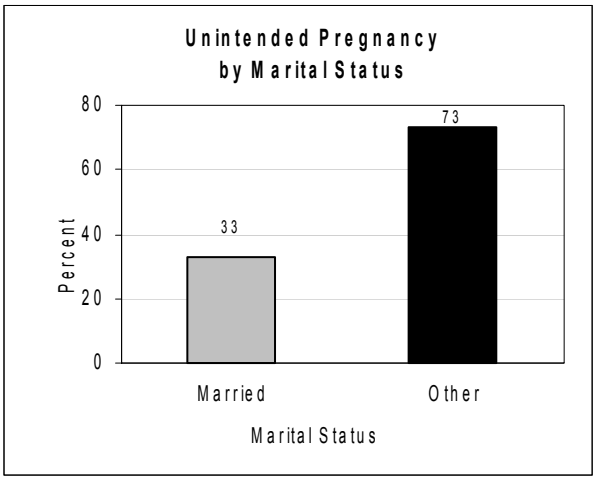
- ***Unintended pregnancies*:** Fifty-two percent of women reported that their pregnancies were unintended. Unintended refers to the timing of the pregnancy, i.e., whether the woman desired the pregnancy to be at some time in the future or not at all. The *Healthy Louisiana 2010* target for unintended pregnancies is 30%. The socio-demographic characteristics of women reporting an unintended pregnancy are shown below.



Source: DHH-OPH, LaPRAMS 2003



Source: DHH-OPH, LaPRAMS 2003

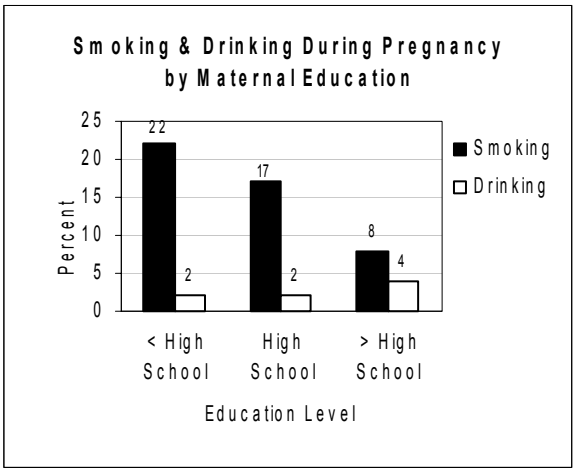


Source: DHH-OPH, LaPRAMS 2003

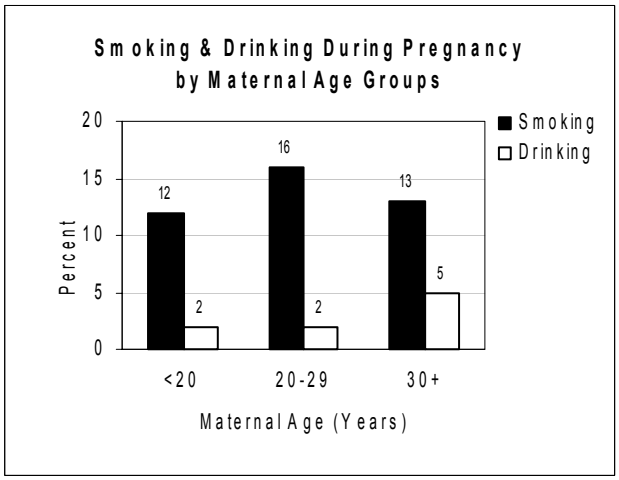
Birth control use: Forty-eight percent of women surveyed were using birth control when they became pregnant; the remaining 52% were not. Reasons for not using birth control include not minding pregnancy, thinking that they were infertile, and/or husband or partner not wanting to use birth control.

- ***Cigarette smoking before, during, and after pregnancy*:** Twenty-five percent of women reported that they had smoked during the three months before pregnancy. The percentage decreased during pregnancy to 15% but increased to 22% at 3-6 months after delivery. The *Healthy Louisiana 2010* target for women, in general, is 15%, and 1% for pregnant women specifically.

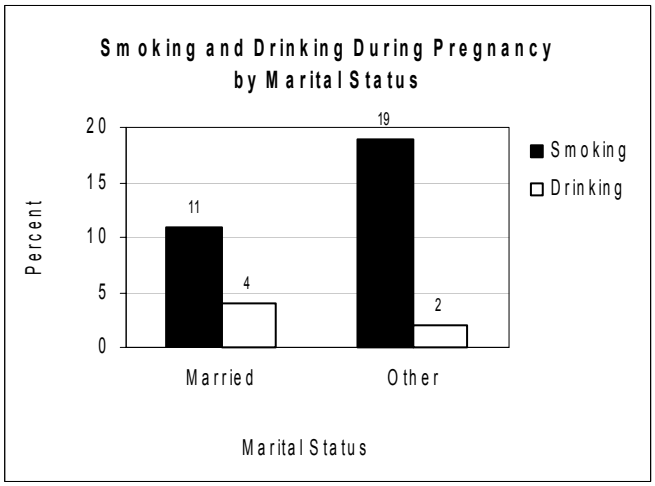
- ***Alcohol consumption before and during pregnancy*:** Forty-seven percent of women reported that they drank alcohol during the three months before pregnancy, and 3% reported that they drank alcohol during the last trimester of their pregnancy. The *Healthy Louisiana 2010* target for pregnant women is 6%.



Source: DHH-OPH, LaPRAMS 2003

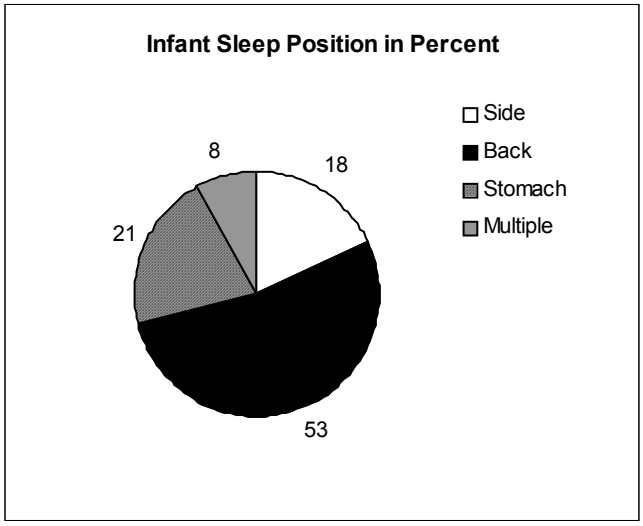


Source: DHH-OPH, LaPRAMS 2003



Source: DHH-OPH, LaPRAMS 2003

***Infant sleep position*:** Among women surveyed, 53% placed the baby on its back, 18% placed the baby on its side, 21% placed the baby on its stomach, and 8% report placing their infants in multiple sleeping positions. Research shows that placing a baby on the back to sleep reduces the risk of Sudden Infant Death Syndrome (SIDS).



Source: DHH-OPH, LaPRAMS 2003

- ***WIC participation*:** Fifty-six percent of women reported being on the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) during their pregnancy.

- ***Breastfeeding*:** Ten percent of women breastfed their infants for six months. However, 51% reported that they initiated breastfeeding. The *Healthy Louisiana 2010* target for breastfeeding during the early postpartum period is 75%. Women with the highest prevalence of breastfeeding at six months in Louisiana were white, 30 years of age or older, had 13 years or more of education, and were married. Less than 1% of mothers less than 20 years of age breastfed their infants for 6 months. The same holds true of mothers with less than a high school education. Two percent of unmarried mothers breastfed their infants for six months.

Data from LaPRAMS are used to supplement information from vital records and to generate information for planning and assessing perinatal health programs around the state. Findings from the data are used to develop programs designed to identify high-risk pregnancies. In addition, LaPRAMS data continue to enhance the understanding of maternal behaviors and the relationship between these behaviors and adverse pregnancy outcomes, such as low birth weight and infant mortality.

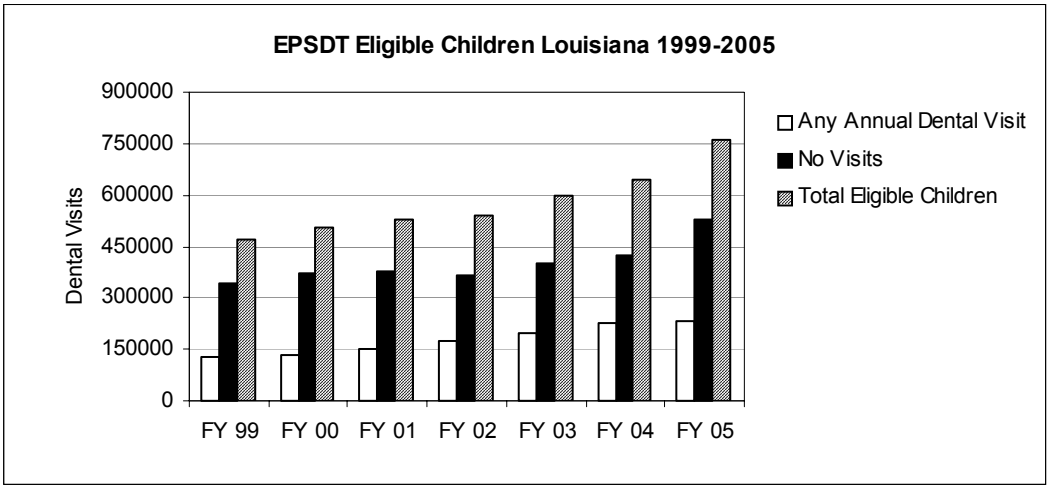
Oral Health Assessment

The Oral Health Program aims to improve the oral health status of the residents of Louisiana. Poor oral health in children can have far-reaching consequences, including pain and suffering from infections, absence from school, malnutrition, and diminished sense of self-esteem. Dental decay is the most

common disease affecting children. In addition, poor periodontal health has been linked to diabetes, cardiovascular disease, stroke, and adverse pregnancy outcomes. The Oral Health Program of the Office of Public Health, Maternal and Child Health Program, addresses the oral health status of Louisiana's children and pregnant women.

The Oral Health Program collected data by school nurses on 871 3rd-grade students from 7 parishes in the state. Thirty-nine schools participated in the dental screenings. Of the screened children, 37.3% had untreated dental caries; 63.5% had previous dental caries experience; only 18% had dental sealants; and 38.5% had to be referred to dentists for treatment. Data collected by school nurses in 1998 for 3rd graders showed that 38% of the children had untreated dental caries and the prevalence of dental sealants among the children was 22%. This trend indicates a decline in sealant utilization since 1998. The *Healthy Louisiana 2010* objective for dental sealants states that 50% of children should have sealants on their permanent molars.

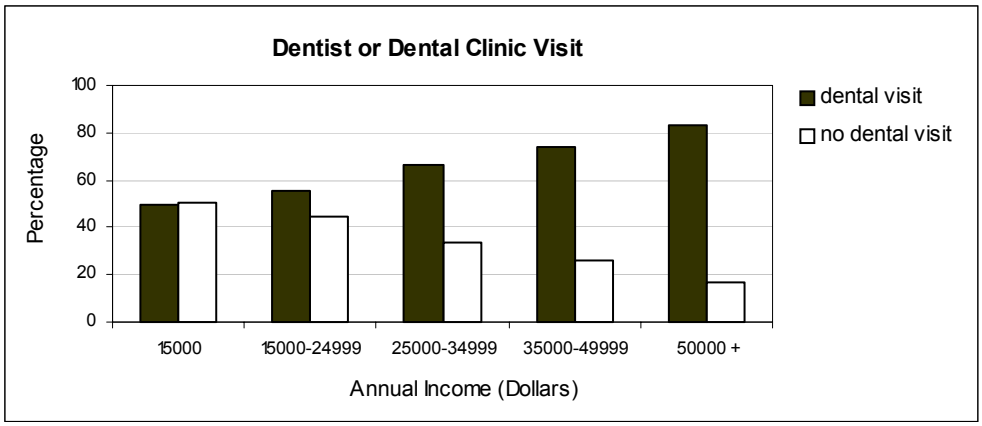
Medicaid claims data show that, as the enrolled total number of Medicaid/LACHIP eligible children in Louisiana has increased, more children are receiving at least one dental visit per year. Statistics show that the percentage of children receiving an annual dental visit has remained constant at approximately 26% from 1998 through 2002. Between 2003 and 2004, the proportion of Medicaid eligible children who received at least one dental visit increased to 32% and 34.8%, respectively. However, a decrease in dental visits to 30.8% in 2005 is evident. This decrease may be explained by the diminished oral health workforce that has become apparent due to hurricanes Katrina and Rita.



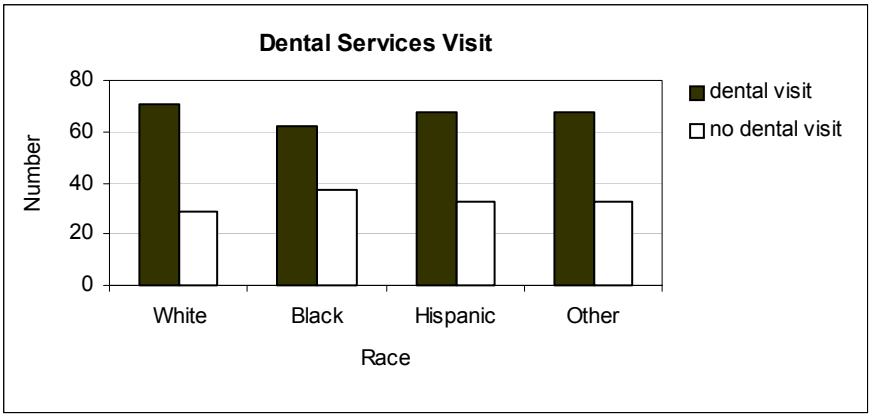
Behavior Risk Factor Surveillance System: 2004 Dental Data

- 68.2% of the population surveyed reported visiting a dentist
- 50.4% of Louisiana residents with an annual income of less than $15,000 per year did not visit a dentist or dental clinic

- 17.2% of Louisiana residents with an annual income of more than $50,000 per year did not visit a dentist or dental clinic
- Hispanics were more likely to visit a dentist than blacks
- 31.4% of the population aged 65 years and above have lost 6 or more teeth



Source: Behavior Risk Factor Surveillance System 2004



Source: Behavior Risk Factor Surveillance System 2004

Over 50 years of scientific research has demonstrated the efficacy of community water fluoridation in reducing tooth decay, regardless of age and socioeconomic status. The Oral Health Program is committed to preventing dental disease through increased community water fluoridation efforts. Approximately 46% of Louisiana residents have access to community-fluoridated water, which is well below the *Healthy People 2010* objective of 75% of the population receiving optimally fluoridated water. The Oral Health Program is currently working with the City of Crowley to provide funding and technical support to implement community water fluoridation by October 2006. The program also assisted community leaders in the town of Walker in securing an ordinance for fluoridation of their water system. They will receive funding for equipment next fiscal year. In Coushatta, the Fluoride Program is assisting local health entities in the promotion of community water fluoridation. Fluoridation will be available to an estimated 46.5% of the population with the funding of equipment in Crowley.

With the help of the Louisiana Dental Association, the Fluoride Program secured a house study resolution in the Legislature. This measure will allow for statewide promotion and expose legislators to the benefits of community water fluoridation.

A study of Louisiana Medicaid data by the CDC[1] showed that the average dental treatment costs for Medicaid eligible children living in non-fluoridated areas were twice as high as the average treatment costs for Medicaid-eligible children living in fluoridated areas. The study also showed that Medicaid-eligible children living in non-fluoridated areas were three times as likely as Medicaid-eligible children living in fluoridated areas to receive dental treatment in a hospital operating room.

The Oral Health Program, in collaboration with the Louisiana Medicaid Program, has implemented a dental program for pregnant women that provides dental services to this vulnerable population. Current research has linked untreated periodontal disease in pregnant women to as much as a seven-times greater risk of delivering a preterm low birth weight infant than pregnant women without periodontal disease.

The Oral Health Program, in cooperation with the Louisiana State University Health Sciences Center (LSUHSC) School of Dentistry, continues to provide tobacco cessation training to LSUHSC dental students and dental hygiene students. This training provides necessary information and practical experience with pharmacological agents used to alleviate tobacco cravings. These future dental health care providers will then be able to counsel patients on the benefits of not smoking and the risks associated with tobacco usage, as well as offer the necessary tools to help these patients become tobacco-free.

Child Care Health Consultant Program

The MATERNAL AND CHILD HEALTH PROGRAM of the OFFICE OF PUBLIC HEALTH coordinates the activities of the Child Care Health Consultant Program. By combining professional health experience with knowledge and training in childcare, consultants work to support, assist, and solve problems with childcare providers in order to improve the safety and quality of childcare. Consultants serve as a source of education, guidance, and support to childcare facilities; provide technical assistance; act as a health resource and referral point; and provide access to health care information. This program also has the advantage of bringing together a multi-disciplinary network of both public and private health professionals from a variety of settings to address local community needs. There are 117 health professionals who have been trained and are approved by the DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF PUBLIC HEALTH.

[1] Centers for Disease Control and Prevention. "Water Fluoridation and Costs of Medicaid Treatment for Dental Decay -- Louisiana, 1995-1996" Morbidity and Mortality Weekly Report. 48; 34 (Sept. 1999): 753.

PARTNERS FOR HEALTHY BABIES

For state fiscal year 2005, the statewide Partners for Healthy Babies Project continued its outreach through multi-media channels, including a website, to encourage pregnant women to seek out early prenatal care and practice healthy behaviors during pregnancy. Attention was focused on appropriate weight gain during pregnancy, good oral health, and not smoking. During the same fiscal year, the Partners for Healthy Babies toll-free helpline received approximately 2,050 calls and made referrals to medical and social services statewide. The project also conducted extensive research with Louisiana women statewide to assist with program planning and future campaign direction.

HOME VISITATION PROGRAMS

Nurse-Family Partnership: Helping First-Time Parents Succeed

The Nurse Family Partnership program (NFP) targets first-time mothers of low socio-economic status. Home-visiting nurses follow well-developed guidelines that require weekly or bi-weekly visits to the family from prior to twenty-eight weeks of pregnancy until the infant is two years of age. This model, developed by Dr. David Olds and colleagues, was chosen by MCH because of its proven effectiveness as a preventive intervention. Clinical trials and longitudinal studies have shown that NFP reduced by 79% the verified reports of child abuse and neglect, reduced by 31% the number of subsequent births, and increased by 83% the rates of labor force participation, resulting in improvements in adolescent and parent behavior 15 years later. Furthermore, the latest follow-up study revealed improved school readiness in the children, including improvements in language, cognition, and attention.

Since 1999, the NFP has been available in Region IV (Iberia, St. Martin, and Vermilion parishes) and Region VIII (Franklin, Jackson, Morehouse, and Richland parishes). Services were expanded to Region III (Terrebonne and Lafourche parishes) and Region V (Calcasieu, Beauregard, Jefferson Davis, and Allen parishes) in the spring of 2000. In 2002, via partnerships with local, state, and community organizations, NFP was expanded to Region II (East Baton Rouge Parish), Region VI (Rapides Parish), and Region VII (Caddo Parish). During calendar year 2003 the MCH PROGRAM expanded the NFP program to include all nine regions of the state, for a total of 19 out of 64 parishes. Half or partial teams were developed in Region I (Jefferson Parish), Region IX (St. Tammany Parish), and Region VIII (Ouachita Parish); additional nurses were added to make full teams in Regions III, V, and VI. Two additional teams in Regions IV and V developed through grants and private case management organizations, and services are being added in adjacent parishes within Regions whenever possible. At present, the NFP program is available in 31 parishes, with the eventual goal to have NFP available in all parishes of the state. Since the inception of the program through June 2006, the Office of Public Health NFP nurses have provided nearly 82,038 visits to 4,059 families. Currently, the focus is on providing services to teenage mothers, with availability for older mothers as space allows.

A randomized-controlled study of the program in one region of Louisiana was conducted by the Tulane School of Public Health and Tropical Medicine, supported by funds from OPH, the Office of Mental Health, and the Children's Trust Fund. Results from this study (completed in summer 2002) indicated that women who participated in the NFP program, compared to those who received usual community care, had 52% fewer premature births, 22% fewer low birth weight babies, a 43% reduction in depression symptoms during pregnancy, and a 33% reduction in subsequent pregnancies by the time the child was 14 months of age. Infants experienced 35% fewer hospitalizations, and 50% fewer emergency room visits. Currently, the Louisiana program is working to link NFP statewide data to birth certificate data in a matched case-control study to further explore the impact of the program on birth outcomes.

Provider Training for Parenting Education & Child Abuse Prevention Intervention

MCH has trained nursing and social work staff in Infant Mental Health in all nine OPH regions of the state, as well as staff from the New Orleans Health Department. This 30-hour training, completed in five separate sessions, is designed to improve the staff's knowledge and skills in the early recognition of factors and conditions which place the infant and caregiver at risk for immediate, as well as long-term, problems in social, emotional, and cognitive growth and development. Continuing education credit for nurses is provided. To date, more than 550 public health and other providers have received this training; the goal is to train all nurses, social workers, and other staff involved in maternal and child health clinical programs around the state, as well as all nurses involved in the Nurse Family Partnership program. The training continues to be offered on a semi-annual basis for new MCH staff, as well as for nurses and staff who work in the Nurse Family Partnership Program. Through the Early Childhood Coordinated Systems (ECCS) initiative, MCH will broaden availability of this and other trainings in infant mental health to include early childhood providers throughout Louisiana.

The MCH Program also provides training in Keys to Caregiving, a parenting education program developed at the University of Washington through the Nursing Child Assessment Satellite Training (NCAST) program. Keys to Caregiving originally was developed for hospital nurses to provide information to new parents about newborn behavior, communication, the infant's capacity for relationships from birth, and strengthening the parent-infant relationship, but its usefulness extends well beyond the newborn period. This material is extremely well received by staffs who work directly with infants and their caregivers. Keys to Caregiving is part of the required Nurse Family Partnership staff training; it is also offered to MCH nurses in maternal and child clinical settings who have completed the Infant Mental Health training. Continuing education credit for nurses and social workers is offered for both Infant Mental Health and Keys to Caregiving.

B. IMMUNIZATION PROGRAM

The Shots for Tots Program was developed by the Immunization Program of the Office of Public Health to improve immunization levels among infants and toddlers. The program has four major methods, as detailed below, to improve immunization levels: (1) service and delivery; (2) parent/provider information and education; (3) assessment; and (4) coordination and oversight.

- Service and delivery are enhanced by increasing the number of locations where immunizations can be received, reducing the barriers for families, encouraging evening and weekend immunization clinics, and improving communication among providers.
- Information and education are provided to health care providers and to parents. Health care providers are kept informed of immunization updates and the correct use of vaccines. Parents are educated about the importance of having their children immunized on time.
- Assessment is used to provide feedback to providers regarding their immunization practices, both from the program's perspective and the client's perspective.
- Coordination and oversight establish a central point of responsibility to help improve all of the methods listed above.

Shots for Tots has improved access to immunizations, decreased cost to families, improved public awareness of the need for immunizations, and educated health care providers about proper immunization practices. The following chart illustrates the effectiveness of the Shots for Tots Program. Since its inception in 1992, the program has increased by 25% the immunization levels among two-year-old children receiving care at parish health units (PHUs) in Louisiana through 2002. The impact of PHU closures, lack of immunization opportunities due to on-demand/appointment only system, lack of flexible immunization clinic hours, inability to immunize managed care children without a referral, absorbency issues within the private sector, and not providing simultaneous immunizations have synergistically impacted the immunization levels among two-year-old children in 2003, resulting in the lowest immunization level since the inception of the Shots for Tots Program. A steady improvement since 2004 has been noticed, but the rates are still reflecting the impact of the aforementioned issues. More education, information, and quality assurance visits will be conducted to ensure immunization best practices and simultaneous administration of vaccines. The Immunization Program will continue to work with its coalitions comprised of physicians, nurses, voluntary agencies, political leaders, churches, and community organizations. These diverse groups have come together specifically to improve immunization coverage in Louisiana, and the coalition will continue to work and oversee the Shots for Tots plan as progress is made toward achieving improvements.

Immunization Levels Among Two-Year-Old Children Receiving Care at Parish Health Units Louisiana, 1992-2005	
1992	55%
1993	59%
1994	64%
1995	75%
1996	79%
1997	81%
1998	82%
1999	80%
2000	83%
2001	80%
2002	78%
2003	47%
2004	54%
2005	66%

Source: Louisiana Department of Health and Hospitals, Office of Public Health, Immunization Program

C. HEARING, SPEECH, AND VISION PROGRAM: INCLUDING SOUND START PROGRAM FOR THE EARLY IDENTIFICATION OF HEARING IMPAIRMENTS IN INFANTS

The goal of the HEARING, SPEECH AND VISION PROGRAM (HSVP) is early identification of communication disorders. A child's vision, hearing, and language development are critical milestones for lifelong learning. Early intervention has profound benefits for infants and toddlers with any of these disorders. Additionally, these interventions contain costs of special education and other services provided by the state.

During the year 2005, HSVP continued to work collaboratively with public agencies and private providers to avoid duplication of services. Many services offered previously by OPH staff will be provided by community agencies. The DEPARTMENT OF EDUCATION and private providers will provide vision screening. HSVP offers training to personnel and loan of vision and hearing screening equipment to schools.

The HSVP audiologists continue to work to ensure audiological services are available in all areas of the state through Children's Special Health Services, the private sector and other public agencies. In order to increase the provision of hearing aid services by private providers, the department worked closely with Medicaid and successfully raised the reimbursement rates for hearing aids. This will make services available closer to the child's community.

The SOUND START PROGRAM (SSP) under HSVP made great strides during 2005. In 1999, the Legislature mandated UNIVERSAL NEWBORN HEARING SCREENING (UNHS). Since that time, the

SSP has worked to insure that hospitals comply with the law. In 2004, 95.9% of newborns had hearing screening prior to hospital discharge. In 2005, 97% of newborns were screened prior to discharge (based on January to July, pre-Katrina data). In 2005, hospitals continued to comply with the mandate, despite the hurricane's devastation to the state's electronic birth certificate (EBC) system and the newborn hearing screening database. Due to the success of this screening initiative, the SSP is now emphasizing follow-up and tracking components of the program to ensure that each child is not only screened, but receives appropriate referrals for follow-up and intervention as well. Two federal grants have been awarded to expand universal newborn hearing screening and intervention in Louisiana, with an emphasis on improving follow-up and tracking of infants who do not pass the hospital screening. The program encourages community and private sector involvement, which allows unique regional emphasis while maintaining statewide compliance and coordination.

D. CHILDREN'S SPECIAL HEALTH SERVICES

CHILDREN'S SPECIAL HEALTH SERVICES (CSHS) is a program that provides services for eligible children and families with serious disabilities that significantly limit major life activities. These children have complex medical conditions that may be rare, severe, or disabling and require pediatric subspecialty services on an ongoing basis. Some of the products and services provided by CSHS are medications, durable medical equipment, home health care, physical therapy, hospital care, parent training, care coordination of services in the community, and services to assist young adults as they transition to adult services. There are nine regional CSHS clinics throughout the State of Louisiana.

A 2002 national maternal and child health survey ranked Louisiana second in the nation for population of children with special health care needs (CSHCN), with 16% of its children having a special health care needs versus 12% at the national level. Twenty-three percent of households in Louisiana have at least one child with a special health care need. The proportion of CSHCN in Louisiana without a primary care provider in Louisiana is 12%. Thirty-two percent of this population has not been insured in the past 12 months, versus 11% at the national level.

CSHS provides services to CSHCN, many of whom have complex, severe, medically disabling conditions such as congenital heart defects, cystic fibrosis, cleft lip and palate, cerebral palsy, and neurological disorders. These conditions often require complex medical care including numerous surgeries, hospitalization, and costly drug therapy. Because of the cost-efficient manner in which CSHS provides these services, the cost of treating these children and providing support to their families is very low. Although this program provides medical services to children with disabilities and chronic medical conditions, it also prevents these problems from becoming worse and more costly to treat. The program enables the children to achieve their full potential in life and to become contributing citizens of Louisiana. In 2005, CSHS provided 17,431 clinic visits to 5,126 children.

Since 2001, CSHS has been involved in the Medical Home Project in association with the Louisiana Chapter of the American Academy of Pediatrics, Louisiana State University Health Sciences Center, Tulane University School of Medicine, Children's Hospital, community agencies, and groups concerned with children with special needs. This project has gained widespread support for training primary care physicians to provide a "medical home" for CSHCN.

Louisiana Birth Defects Monitoring Network

Birth defects are the leading cause of infant mortality in the United States, accounting for more than 20% of all infant deaths each year. The Louisiana Birth Defects Monitoring Network (LBDMN) is dedicated to tracking the number and types of birth defects that occur in Louisiana children, and to being an active partner in support of birth defects education and prevention efforts.

In January 2005, LBDMN met a key program goal with the start of active data collection. Field staff members are now making regular visits to birthing and pediatric hospitals to gather information on children affected by birth defects and related conditions. Currently, data collection covers the three major metropolitan areas of the state plus Calcasieu and Cameron parishes. A report summarizing results from the first full year of data collection is projected to be ready for release in late 2006.

EarlySteps

Part C of the Individuals with Disability Education Act (IDEA) requires states to develop a coordinated system of interagency services and supports for infants and toddlers with a developmental delay or medical conditions likely to cause a disability or developmental delay. EarlySteps is Louisiana's Part C System for infants and toddlers from birth to 3 years of age and their families. Previously, the Louisiana Department of Education was the lead agency for the statewide Early Intervention System (formerly known as Childnet). On July 1, 2003, the Louisiana Department of Health and Hospitals (DHH) became the lead agency. The national goal is for states to serve 2 percent of children from birth to 3 years of age (approximately 5,074 children) in the Part C System. On December 1, 2002, Louisiana reported 2,483 children served. This number increased to 3,498 by December 1, 2003 and 4,545 by December 1, 2004. It is estimated that approximately 5,850 children in Louisiana may be eligible for Part C services due to a disability or developmental delay. EarlySteps is continuing to conduct ongoing outreach to identify children who may be eligible.

EarlySteps provides the following 16 services: Audiology, Speech-Language Therapy, Occupational Therapy, Physical Therapy, Special Instruction, Assistive Technology, Service Coordination, Medical Evaluation, Health Services, Nursing Services, Vision Services, Social Work Services, Psychological Services, Family Training, Nutrition Services, and Transportation. Services are provided in the child's everyday environment such as the home, childcare center, or other community settings. EarlySteps has

successfully enrolled 1,882 service providers as of May 2005 and conducts comprehensive statewide trainings to ensure that quality services are provided to families.

E. NEWBORN HEEL STICK SCREENING AND FOLLOW-UP

DHH-OPH's Genetic Diseases Program, in collaboration with the State Central Public Health Laboratory, operates a statewide Newborn Heel Stick Screening and Follow-up Program in accordance with pertinent legislation and rules (R.S. 40:1299.1., et seq and LAC 48: V. 6303). Screening for Phenylketonuria (PKU) initiated the newborn screening program in 1964, with screening for other diseases being added through the following years. The current official panel includes the following diseases: PKU, congenital hypothyroidism, hemoglobinopathies (sickle cell disease), biotinidase deficiency, galactosemia, argininosuccinic aciduria (ASA), citrullinemia, homocystinuria, maple syrup urine disease (MSUD), and medium chain acyl coA dehydrogenase deficiency (MCAD). Also, through a universal testing pilot begun on August 1, 2006, the testing panel was expanded to the core panel of 27 diseases recommended by the American College of Medical Genetics (ACMG). These diseases will become an official part of the newborn screening panel in January of 2007 with testing for cystic fibrosis being added in July. The program's mission of early detection coupled with immediate referral for specialized medical care of an infant with any of these disorders will prevent many, and in some disorders, all of the serious clinical sequelae. Benefits to Louisiana residents and savings to the state have been substantial over the years as described below:

- Every year, on average, three infants with PKU and 16 infants with congenital hypothyroidism are detected and treated early. Given the early initiation of specialized care, these children can live normal lives instead of suffering mental retardation and requiring expensive supports.
- There are approximately 80 infants with sickle cell disease detected and referred into specialized care each year. Before the standard of care included newborn screening, penicillin, and other aspects of specialized care, 30 percent of the children with sickle cell disease would not reach their third birthday. Recently, the case fatality rate has been within the range for that of the general population for this age group.

The following table provides statistics from the Newborn Screening Program for detection of all diseases included in the panel before the expansion. The table shows the number of infants detected with a genetic disorder by disease and by race for each calendar year from 2000 through 2005.

NEWBORN SCREENING DETECTION STATEWIDE FROM 2000 TO 2004										
	2000		2001		2002		2003		2004	
DISEASES	White	Non-white	White	Non-white	White	Non-white	White	Non-white	White	Non-white
CONGENITAL HYPOTHYROIDISM*	6	3	12	5	11	18	25	16	22	25
PHENYLKETONURIA (Classical PKU)	2	0	3	1	4	0	2	1	1	0
SICKLE CELL DISEASE (SS,SC,S-THAL)	0	87	0	73	0	76	0	79	1	96
BIOTINIDASE DEFICIENCY	0	0	0	0	2	0	3	0	1	0
GALACTOSEMIA (Classical)	0	0	0	0	2	0	0	0	1	1
TOTAL BIRTH	**38,467**	**29,806**	**37,284**	**28,337**	**36,605**	**28,150**	**37,066**	**27,623**	**37,066****	**27,623****

*Definition for congenital hypothyroidism: patient requiring thyroid replacement medication for adequate thyroid functioning.
* *Provisianal data from Vital Records

F. LOUISIANA CHILDHOOD LEAD POISONING PREVENTION PROGRAM (LACLPPP)

The DHH-OPH Louisiana Childhood Lead Poisoning Prevention Program (LACLPPP) is designed to identify and prevent lead poisoning in children between 6 months and 6 years of age through screening, case management, surveillance, health education, and primary prevention initiatives.

Childhood lead poisoning is a reportable disease. The Louisiana Childhood Lead Poisoning Prevention Program Rule (LAC 48:V.7001-7007) requires health providers to report a case of lead poisoning (that is, a case in which the blood-lead level is 15 micrograms per deciliter (µg/dl) or higher) within 48 hours to ensure that the child receives the necessary medical and environmental services. In addition, the rule requires laboratories to report all blood lead levels, regardless of whether or not they are elevated. The information received is used for case management and surveillance. The rule also allows DHH to designate areas as high-risk for lead poisoning and to mandate screening in those areas. Designation of those areas is reviewed and updated on an annual basis.

Statewide lead poisoning prevention services at parish health units began in 1981. In 1998, funding was received from the Centers for Disease Control and Prevention, which enabled the program to establish the Louisiana Childhood Blood Lead Surveillance System (CBLSS) and to become a fully comprehensive, population-based program. The grant also enhanced patient case management and allowed the program to expand its target population from children screened at parish health units to all children, including children screened at private providers. The City of New Orleans Lead Poisoning Prevention Program has also played an important role in addressing lead poisoning. Orleans Parish has taken part in lead poisoning prevention initiatives since the early 1970s and continues to do so with support from the Office of Public Health.

Program Activities

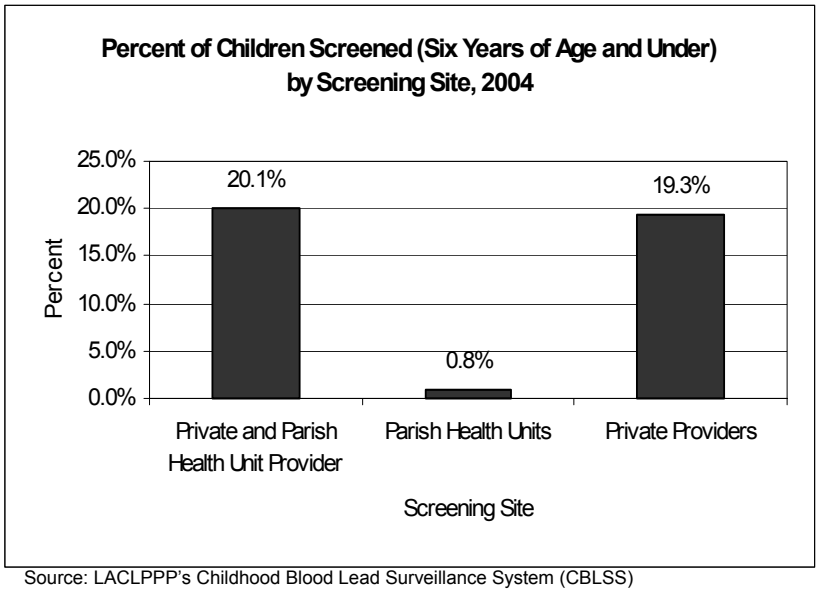
LACLPPP has collaborated with its advisory committee to compose a strategic plan to eliminate childhood lead poisoning by the year 2010. The essential components of the plan are: surveillance, primary prevention (including education/outreach and environmental/housing), and initiatives for reaching high risk populations.

LACLPPP works with local and statewide organizations to curb childhood lead poisoning by increasing screening in high-risk populations and areas, improving knowledge of lead poisoning, and facilitating comprehensive medical and environmental case management for lead-poisoned children. The program also has a statewide case management system designed to ensure that children with elevated blood lead levels receive adequate care. The driving force behind LACLPPP's activities is its surveillance system, which enables the program to target resources to high-risk areas and populations.

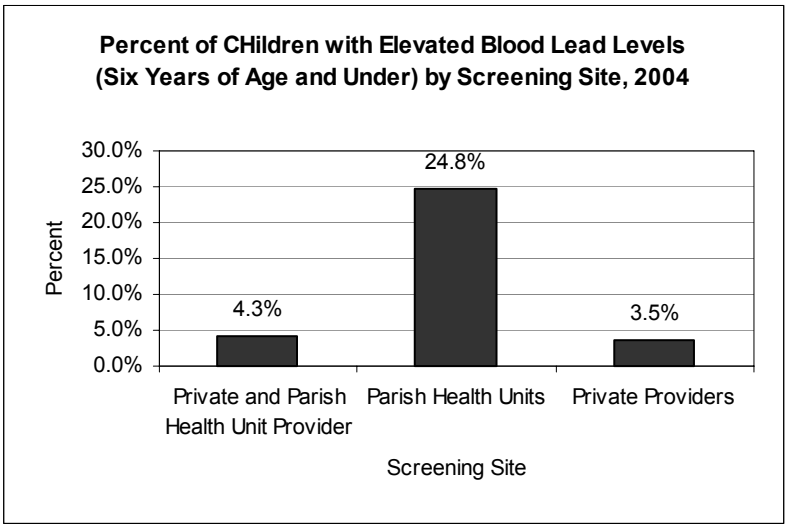
Over the last year, efforts were focused on maintaining and enhancing the childhood blood lead surveillance system by maintaining public and private laboratory data, developing statewide screening recommendations, and strengthening case management and primary prevention by placing a greater emphasis on environmental activities.

Screening and Prevalence

Lead poisoning is a preventable disease that affects 4.4% of children in the United States between six months and six years of age. Data from 2005 show that 57,310 children in Louisiana (16%) were screened at parish health units and by private providers. Of the children screened, 3% had blood lead levels that were 10 µg/dl or greater. A majority of children aged six months to six years of age have not been reached through screening.

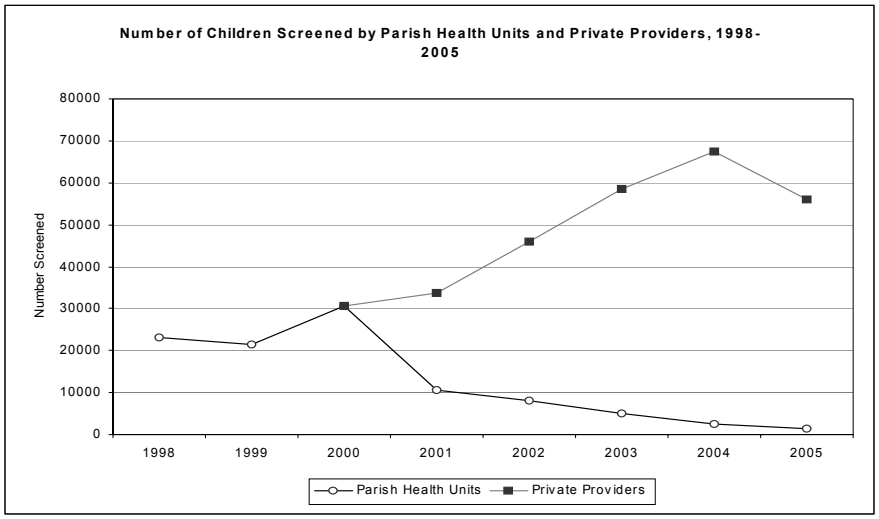


Source: LACLPPP's Childhood Blood Lead Surveillance System (CBLSS)
Denominator data from Census 2000pop. For children <=6, US Census Bureau



Source: LACLPPP's Childhood Blood Lead Surveillance System (CBLSSS)
NB: Percentage is based on number of Children Screened,
not on population of children <=6

In previous years, most children were screened at the parish health units; however, with the shift to DHH's Community Care Initiative, more children are now being screened by private providers. The increase in the number of children being screened by private providers underscores the importance of working with private providers and ensuring that they are aware of program recommendations and guidelines. In the figure shown below, private provider data are not available for 1996 through 1999 as the Louisiana Childhood Lead Poisoning Prevention Program Rule (LAC 48:V.7001-7007), requiring private providers and laboratories to report to LACLPPP, had not yet been implemented.



Source: LACLPPP's Childhood Blood Lead Surveillance System (CBLSS)

Screening is an important aspect of lead poisoning prevention and elimination as it is only through screening that lead-poisoned children are identified. Once identified, the program can ensure that lead poisoned children receive the necessary services. Thus, over the next year, LACLPPP will focus on increasing screening rates by ensuring that private providers and parish health units are aware of and comply with the screening recommendations and the mandated screening legislation. Furthermore, the program will assume a three-pronged approach to expand the scope of screening and improve the percentage of at-risk children screened. The program will work with the state Medicaid program to ensure screening and follow-up of this at-risk population, assure screening of children receiving services through WIC at the parish health units, and work with private providers who serve affected children to assure appropriate case management and follow-up.

Future Plans

In addition to increasing screening rates, LACLPPP intends to spend the next year focusing on primary prevention and strengthening its environmental activities by:

- Ensuring the screening plan is implemented on a statewide level;
- Implementing mandated screening in areas specified by legislation;
- Conducting primary prevention activities for families at high risk for lead poisoning, particularly those who live in housing built prior to 1978;
- Working with program partners to promote protective measures and to collaborate on increasing abatement and remediation activities in the state; and
- Implementing the childhood lead poisoning strategic plan to meet the *Healthy People 2010* objective of eliminating childhood lead poisoning by 2010.

G. SAFE KIDS COALITION

The DHH, Office of Public Health, EMS/Injury Research and Prevention Program includes Louisiana SAFE KIDS. This non-profit coalition is dedicated to the reduction of unintentional injuries in children from birth to age 14 years.

At the state level, Louisiana SAFE KIDS promotes media coverage of preventable childhood injuries, sponsors injury prevention events, and provides ongoing messages that unintentional injuries are the leading cause of death for children under age 14. Louisiana SAFE KIDS also works actively to promote policies and programs to prevent childhood injury. Eight community chapters and three community coalitions sponsor injury prevention education activities in their respective areas.

Examples of these injury prevention education activities include: hands-on child safety seat clinics where trained, certified specialists check for proper child safety seat installation and educate parents how to use

car seats correctly; promotion of the use of bicycle helmets through grant programs supporting community projects and reminder tags that are hung on bicycle handlebars; and bicycle rodeos. For information on the broad list of prevention materials available or information on how to start a chapter, SAFE KIDS Louisiana may be contacted at (504) 219-4540.

H. ADOLESCENT SCHOOL HEALTH INITIATIVE

Pursuant to a legislative request, the DHH OFFICE OF PUBLIC HEALTH (OPH) conducted a study in 1990 that concluded that the causes of adolescent deaths and illnesses could be reduced or prevented through greater adolescent health education and improved teen access to primary/preventive health care and professional counseling. Therefore, in 1991, the Louisiana State Legislature created the Adolescent School Health Initiative to facilitate the development of comprehensive health centers in public middle and senior high schools.

The School-Based Health Center Program, officially known as the Adolescent School Health Initiative, is directed by the DHH-OPH ADOLESCENT SCHOOL HEALTH PROGRAM. School Based Health Centers (SBHCs) are an integral part of the state's Coordinated School Health Program, which also encompasses education, school environment, nutrition, physical fitness, and parent and community involvement.

Sources of funding for the SBHCs include the State General Fund (Tobacco Settlement monies), Maternal and Child Health Block Grant, local in-kind contributions, and Medicaid reimbursement.

SBHCs are established by a sponsoring agency (the grantee), which is responsible for management of the health center. Hospitals, medical schools, health departments, youth-serving agencies, community organizations, or school systems may be sponsoring agencies. Each SBHC's staff includes a licensed physician, a nurse practitioner, a registered nurse, a mental health counselor, a clinic administrator, and support staff, who work in collaboration with the counselors, social workers, psychologists, and speech, physical, and occupational therapists on school campuses. Services provided include preventive health care, medical screenings, sports and employment physical examinations, treatment for common simple illnesses, referral and follow-up for serious illnesses, and emergencies. Other services include mental health counseling, immunizations, and preventive services for high-risk conditions such as pregnancy, sexually transmitted diseases, drug and alcohol abuse, violence, and injuries.

In the academic year 2004-2005, 54-OPH funded SBHCs were operational in 23 parishes, serving 87 public schools and providing access to nearly 50,000 students. Many sites have expanded services to primary and elementary feeder schools. In the 2004-2005 school year, 28,455 students received services, comprising a total of 134,339 individual visits to the centers. This number does not include students who participated in group counseling sessions with mental health professionals.

I. LOUISIANA'S SERVICE SYSTEM FOR PERSONS WITH DEVELOPMENTAL DISABILITIES

The Office for Citizens with Developmental Disabilities (OCDD) within the Department of Health and Hospitals serves as the Single Point of Entry (SPOE) into the Developmental Disabilities (DD) Services System. OCDD conducts an assessment of persons who request services to determine the person's eligibility for system entry. Eligibility is based on the definition of developmental disability contained in LA R.S. 28:451.1-455.2. The DD Services System includes public and private residential services and other supports and services to persons with developmental disabilities; it is administered through ten community services regional offices and human services authorities/districts and seven developmental centers. These regional offices and authorities/districts and centers are located statewide in or near major cities and provide a range of supports and services that enable the person to achieve his/her maximum potential based on identified personal outcomes and goals. The community services regional offices and human services authorities/districts serve as the points of entry for individuals to receive services from both the regional offices and the developmental centers.

The seven developmental centers provide a variety of residential supports and services, including care and treatment in the residential facility, community-based services such as community homes, extended family living services, Supported Independent Living Program, and day vocational services. In concert with the community services regional offices and human services authorities/districts, the developmental centers provide planning and follow-up services for those individuals who have chosen to move from the facilities to live in the community.

OCDD community regional offices and human services authorities/districts offer a broad range of services including individual and family supports, such as personal care assistance, cash subsidy, respite, crisis intervention, and supported living services. OCDD regional offices and human services authorities/districts also offer vocational services for adults. Services are provided by private provider agencies through contractual agreements or through individualized agreements with individuals and families who obtain their own service providers. The services are described below.

- The Individual and Family Support Program provides resources to people with developmental disabilities to allow them to live in their own homes or with their families in their own community. Regional offices and human services authorities/districts administer the program through state general fund monies to provide support that is not available from any other source. Individual and Family Support services include, but are not limited to: respite care, personal assistance services, specialized clothing (e.g., adult briefs), dental and medical services not covered by other sources,

equipments and supplies, communication services, crisis intervention, specialized nutrition, and family education. Requests for Family Support funding are reviewed each year or when a person's needs change.

- The Cash Subsidy Program provides a monthly stipend to families of eligible children with severe disabilities, until the age of 18. Funds are intended to help families meet the extraordinary cost associated with maintaining their child in the home. Stipends are awarded on a first come, first serve basis to eligible children with exceptionalities identified through the Department of Education's Pupil Appraisal Evaluation.

- Home and Community-Based Waiver services are offered through the New Opportunities Waiver (NOW) and the Children's Choice Waiver. These waivers offer a variety of services and supports to allow individuals to reside in community settings other than ICFs/DD. A third waiver, the Supports Waiver, is designed for people with developmental disabilities, age 18 and over, who are currently receiving or waiting for state general funded vocational and habilitation services from OCDD.

- The Resource Centers are initiatives implemented in state fiscal year 2003 that provide leadership, enhance communication and collaboration, and increase the availability and capacity of support and services to people with developmental disabilities. Services provided include training opportunities, training curriculum development, provision of resource materials, resource guides, peer reviews, and program reviews. There are five Resource Centers in the state, each offering specialized information and expertise: **Resource Center on Aging with Developmental Disabilities** – Columbia, **Resource Center on Community Inclusion** – Lake Charles, **Resource Center on Dental & Medical Supports** – Belle Chasse/Thibodaux, **Resource Center on Nutritional, Physical & Nursing Supports** – Pineville, and **Resource Center on Psychiatric & Behavioral Supports** – Hammond.

There are nine Community Support Teams located in various regions throughout the state; they are managed through local developmental centers and accessed through OCDD Regional Offices and human services authorities/districts. Community Support Teams provide support and services to people with developmental disabilities who need intensive treatment intervention, thus allowing them to remain in their community living setting. The support and services include: initial and ongoing assessment, psychiatric services, family support and education, support coordination, and other services critical to an individual's ability to live successfully in the community. Community Support Teams, which consist of psychologists, social workers, nurses, and psychiatrists, provide support and services on an as-needed basis, 24 hours a day, seven days a week. Additionally, Community Support Team services are provided in the

community rather than in an office-based practice and combine skills development with clinical management.

J. NUTRITION SERVICES PROGRAM

The Nutrition Services Program is the Office of Public Health are comprised of several programs, including the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); the Commodity Supplemental Food Program (CSFP); the 5-A-Day Program; operation of the Centers for Disease Control and Prevention's (CDC's) Pediatric Enhanced Nutrition Surveillance System (PEDNSS); nutrition consultative services currently provided for the Genetics Program, and the Louisiana Obesity Council. The overriding goal of Nutrition Services is to promote health through nutrition education and, when necessary, through medical nutrition therapy.

The **Special Supplemental Nutrition Program for Women, Infants, and Children (WIC)** is the largest program operated by OPH Nutrition Services. The Program serves pregnant, breastfeeding and postpartum women, infants, and children up to the age of five years who meet eligibility criteria, including an income of less than 185% of the poverty level. WIC is available through a statewide system of 104 clinics located in parish health units and contract local agencies. During state fiscal year 2006, the state served an average of approximately 127,007 women, infants, and children, which represented a 12% decrease over the state fiscal year 2005 which is directly related to the hurricane Katrina and Rita disasters.

The WIC Program in Louisiana is 100% federally funded by two grants from the United States Department of Agriculture (USDA): a Food grant and a Nutrition Services and Administration grant. The Program spent a total of $96.5 million during federal fiscal year 2005 (which ended on September 30, 2005). Of that total $73.1 million were allocated directly to the purchase of specific supplemental foods rich in vitamins A and C, iron, calcium, and protein. Foods are provided through the issuance of food instruments, which are redeemed at approximately 700 approved WIC vendors across the state, thus impacting the state's economy. The number of approved vendors has decreased from 830 the previous year due to the catastrophic effects of last year's hurricanes.

In addition to the provision of supplemental foods, the WIC Program provides services including assessment of nutrition risk; development of a nutrition plan of care; and nutrition counseling based on nutrition risk, educational activities, reassessment, and continued nutrition guidance. Prenatal nutrition counseling is extremely important to ensure healthy pregnancy outcomes. Breastfeeding is promoted to prenatal women as a means of providing optimal nutrition and health for their babies.

The **Commodity Supplemental Food Program (CSFP)** is also 100% federally funded by a grant from the USDA. This program provides monthly food boxes primarily to senior citizens, but also serves pregnant women, breastfeeding and postpartum women, infants, and children until six years of age. Participation in the program is at approximately 56,000 individuals per month, of whom 93% are senior citizens. CSFP experienced a 34% decrease in participation due to the catastrophic hurricanes. The infrastructure was greatly diminished due to flooding at the major warehouses in New Orleans and the loss of delivery trucks due to flood and confiscation by the National Guard for rescue efforts post storm. The CSFP grant for federal fiscal year 2005 was $4,672,088. Foods provided for the program are purchased by the USDA and distributed to the participating states around the country. In Louisiana, the CSFP program is administered through a subcontract with the Catholic Archdiocese of New Orleans, which operates around the state with expansion into the northwest parishes in the near future.

The DHH-OPH Nutrition Services Program has been designated as the licensee for the national **5-A-Day Program**. While no funding exists for this program, Louisiana does benefit from national public partnerships. The state is able to access free materials on the benefits of consuming at least five servings of fruits and vegetables per day, which are then distributed to the public through the system of parish health units around the state. In addition to the general benefits of good health that fruit and vegetable consumption provide, consuming five servings of fruits and vegetables per day has been associated with a decrease in cancer occurrence in 13 anatomical sites.

The **Pediatric Enhanced Nutrition Surveillance System (PEDNSS)** is a collaborative effort with the CDC whereby anthropometric and laboratory data obtained on participants in the WIC program are analyzed in order to identify the participants at highest nutrition risk in the state. These data enable nutritionists in the public health system to provide intervention techniques to improve the health status of the children in Louisiana.

Consultative services are provided statewide to Louisiana's population participating in the Maternal and Child Health Program, the Genetics Program, the Children's Special Health Services Program, and the Family Planning Program. These services are provided both at the state level (directly to program managers) and at the local level (by public health nutritionists in the communities around the state). Consultation relative to these programs usually involves medical nutrition therapy providing intervention in cases of underweight, overweight, oral motor dysfunction, and metabolic disorders such as PKU and galactosemia. Nutrition intervention is essential in managing these conditions. In April 2006, Nutrition Services hired a nutritionist to revitalize and coordinate the efforts of the Louisiana Obesity Council.

Programs Targeting Infectious Diseases

K. Tuberculosis (TB) Prevention and Outreach

Through the work of Disease Intervention Specialists (DIS), the DHH-OPH TB Control Section monitors the treatment of reported cases of TB statewide. The DIS staff accomplishes this monitoring through Directly Observed Therapy (DOT), which is a service provided to ensure compliance with and completion of TB treatment for all Louisiana patients in either public or private health care settings. The DIS staff also investigates each case of TB to assure timely identification and evaluation of contacts to TB. Of those patients whose TB cases have been designated "closed," 93% completed therapy in 2000, and 95% completed therapy in 1999, as compared with the 96% completing therapy among the "closed" cases in 1998. The high therapy completion was due to both the intense DOT efforts of DIS staff and to the utilization of incentives and enablers.

L. Sexually Transmitted Diseases (STDs) and HIV/AIDS Prevention Programs

DHH/OPH aims to prevent the spread of STDs and HIV/AIDS through a variety of methods, including: prevention education; HIV counseling, testing, and referral; and partner notification. Other methods include STD treatment and control (including syphilis partner notification) and encouraging patients with other STDs to have their partners seek medical treatment as STD contacts. Additional activities implemented statewide by DHH/OPH involve peer programs, street and community outreach in selected Zip Code areas, and condom distribution via businesses in communities with high rates of STDs and HIV/AIDS.

STDs

STD control is a labor-intensive task which relies on the rapid location of a person's sexual partners in the community to halt further spread of the disease. The OPH STD CONTROL PROGRAM conducts the following four basic activities in order to prevent the spread of disease:

- Prevention activities which provide education and information to patients and the general public about STDs and the use of condoms;
- Clinical services that include the testing, diagnosis, and treatment of patients seen in public health clinics;
- Epidemiology in conjunction with surveillance, location, and referral of persons suspected of having an STD for examination and early treatment; and
- Targeted screening, which is a mechanism to discover infections in certain populations and determine disease prevalence.

To reach people who have the highest risk of infection, the STD Control Program works with a number of other health-related programs, including Maternal and Child Health (MCH), Family Planning, correctional institutions, substance abuse centers, and other facilities where STDs may be prevalent. Through collaboration with these programs and efforts of STD field personnel, 250,000 STD screening tests are administered annually.

HIV/AIDS

The HIV/AIDS Prevention component of the program is driven by the CDC's required community planning process. This process operated under the structure of 10 local and regional advisory groups and one statewide planning group that ultimately had the responsibility for developing and producing a comprehensive HIV/STD statewide prevention plan. DHH/OPH co-chaired all of these bodies and supported, facilitated, and coordinated this statewide activity. These regional and local groups met monthly, while the statewide group met twice during the year. A three-year HIV/STD Prevention Comprehensive Statewide Plan was developed and submitted with the OPH HIV/AIDS PROGRAM (HAP) Cooperative Agreement to the CDC. This plan identified and prioritized target populations, intervention strategies, and geographic locations throughout the state where HIV/STD prevention activities should be conducted with individuals at high risk for these diseases.

During 2003, OPH/HAP provided support, contract monitoring, technical assistance, capacity building, and training to 28 funded community-based organizations. These organizations conducted the following interventions: prevention resource distribution, street outreach, venue based outreach, small group peer programs, popular opinion leader programs, and prevention counseling and testing. Additionally, statewide public health, STD, substance abuse, and mental health clinics participate in partner counseling and referral services, as well as HIV prevention counseling and testing interventions.

The following accomplishments were reported in 2003: A total of 55,144 prevention counseling sessions were conducted by 178 organizations; 579 new HIV infections were detected through the prevention counseling; 373 individuals were trained in prevention counseling and outreach; 429,892 street outreach contacts were conducted; 715 educational sessions, which trained 86 peer leaders and 1,985 peer participants, were conducted; 3,122 telephone calls were received by the Statewide Hotline; and 187,489 brochures were distributed to the residents of Louisiana.

The Perinatal HIV Prevention Program, now in its fifth year, was funded by a grant from CDC. This grant has now become part of the annual base award for the HIV/AIDS Prevention Program. The focus of the perinatal program is to maximally prevent mother-to-child transmission of HIV through promotion of the nationally recommended testing and treatment protocols and by strengthening linkages to care.

As part of these efforts, the HIV/AIDS Program has distributed education materials statewide, and is continuing to reach out to clinicians and medical centers statewide to promote the U.S. Public Health Service recommendations for screening and treatment of HIV for pregnant women and their newborns. In collaboration with the Family Advocacy Care and Educational Services Program, the HIV/AIDS Program has distributed folders with patient and clinician education materials to over 2,500 obstetricians/ gynecologists and family practice physicians and pediatricians, residency programs, medical centers, parish health units, clinics, and social service agencies throughout Louisiana. In addition, over 50,000 pocket cards have been distributed to females at high risk during street outreach. These materials are available and can be ordered through the HIV/AIDS Program Clearinghouse Resource Center.

Programs Targeting Chronic Diseases

M. Heart Disease and Stroke Prevention Program

Louisiana has the 9th highest mortality rate for cardiovascular disease in the United States. In 2002, the death rate from cardiovascular disease in the state was 12% higher than that for the rest of the nation, Likewise, the state ranks 12th in the nation for stroke mortality. Louisiana is located in an area of the country known as the Stroke Belt, where the highest rates of stroke mortality in the nation are found. Louisiana is represented in the Delta States Stroke Consortium (DSSC), which also includes Mississippi, Alabama, Tennessee, and Arkansas. Through the consortium, the state will implement a pilot project designed specifically to address the burden of stroke in this region.

The legislatively mandated Louisiana Stroke Task Force submitted recommendations to the Legislature on how to reduce the burden of stoke in the state. The recommendations include:

- reducing stroke risk through healthy lifestyle practices
- recognizing stroke warning signs
- adopting and disseminating stroke protocols and guidelines

This year, the task force promoted the recognition of Stroke Warning Signs by raising billboards across the state in areas where stroke mortality is the highest. Along with the Bureau of Emergency Medical Services, the Heart Disease and Stroke Prevention (HDSP) program distributed fact sheets on Stroke and High Blood Pressure to nine major industrial sites, Counsels on Aging, and schools housing Automatic External Defibrillators (AED) throughout the state. The HDSP program also partnered with the American Stroke Association to distribute Stroke Patient Education Toolkits and Heart Truth for Women Toolkits to 100 Community Care clinics around the state.

In 2005/06, the HDSP Program will lead the HDSP Coalition in completing assessments in the Community and School settings. These assessments, combined with the Worksite and Health Care Assessments conducted last year, provide a “state of the state” picture of programs, policies and

environments in Louisiana. The HDSP program and key partners in the coalition will implement strategies set forth in the State Plan for Cardiovascular Health based on gaps identified by the Environmental Assessments.

The HDSP program continues to support the Behavioral Risk Factor Surveillance Survey conducted by **University of Louisiana at Monroe**. Plans for this year include 9 regional reports using BRFSS signs and symptoms and CVD optional modules identifying demographic, geographic, and other disparities using the expanded 2004 BRFSS and disseminate 2005 State of the Heart Report.

Activities planned for 2004 include: collaboration with the American Heart Association to conduct a statewide training conference on the adherence to nationally recognized guidelines for treatment of heart disease and stroke; and collaboration with community health centers for appropriate treatment and follow up for patients with identified risk factors for heart disease and stroke and reoccurrence of heart attack and stroke.

N. DIABETES CONTROL PROGRAM

The Louisiana DIABETES PREVENTION AND CONTROL PROGRAM (DPCP) began receiving funding from CDC on October 1, 1996. The overall goal of the program is to reduce the burden of diabetes in Louisiana using the following methods: *monitoring* the prevalence and incidence of diabetes and available care and education opportunities; *informing* the population on how to use existing resources as efficiently and effectively as possible; and *strengthening* weak points in the diabetes care system. Through these methods, DPCP hopes to reduce morbidity and mortality related to diabetes in the state. It is hoped that future efforts will focus on primary prevention of type-2 diabetes through obesity prevention for high-risk groups.

Activities supported by the Louisiana DPCP include the following:

- **Coordinate diabetes efforts with other prevention activities.** Because of the overlap in intervention strategies and risk factors for diabetes, cardiovascular health, and tobacco use, the Health Promotion and Chronic Disease Control Section of OPH, which administers the Louisiana DPCP, will integrate reducing the burden of diabetes with existing programs. This program includes collaborating to develop and implement standards and quality assurance for preventive services in clinical settings and community-based interventions that target risk and preventive healthcare-seeking behaviors, as well as community-based and statewide marketing of health messages aimed at the 10 leading causes of death.
- **Create a comprehensive surveillance and evaluation system** using existing vital statistics, surveillance data, client encounter-based systems, and data from the Behavioral Risk Factor Surveillance System, a diabetes module of which has been in place since 1997. A partnership has

been established with the Louisiana State University Health Sciences Center. Collaborations have also been developed or strengthened with the Louisiana Diabetes Association, Medicaid, and the Louisiana Healthcare Review, as well as with managed care organizations, insurers, and employers.

- **National Health Disparities Collaborative.** This effort is being addressed through a contract with the Louisiana Primary Care Association and partnering with seven community health centers. The goal is to reduce the burden of diabetes in disparate populations by increasing the capacity to provide diabetes patient education and improve the data management system that tracks the health care of the homeless patients on the diabetes registry.
- **A statewide Diabetes Initiatives Council.** The Council will adopt diabetes standards of care guidelines, develop a state plan for Louisiana, establish a "Diabetes Center of Excellence", and make recommendations to the Secretary of the Department of Health and Hospitals. The Council also serves as a catalyst for collaboration among public, private, and community-based organizations regarding diabetes issues.

O. TOBACCO CONTROL PROGRAM

The OPH TOBACCO CONTROL PROGRAM (TCP) is committed to promoting partnerships and using research-based strategies for tobacco prevention, control, and awareness in order to empower citizens to make healthy lifestyle choices and strive to create a tobacco-free Louisiana.

Program Impact Statement

The Louisiana TCP has been working diligently to decrease the burden of tobacco use on the residents of the state through evidence-based strategies and activities. The program's community outreach efforts to prevent tobacco use and decrease current smoking through cessation services have benefited a diverse group of Louisiana residents. Furthermore, the program's success can be measured by the fact that, in spite of the millions of dollars that are spent each year by the tobacco industry to lure people into the smoking addiction, the number of adult Louisiana smokers has remained constant over the past 10 years.

Goals

The TCP's goals are to: 1) prevent non-smokers from starting; 2) help current smokers to quit; 3) prevent exposure to second-hand smoke; and 4) eliminate health disparities among special populations to reduce the burden of tobacco-related diseases.

Tobacco Facts

- Tobacco use is the single most preventable cause of death and disability in American society, causing more deaths every year than AIDS, alcohol, car crashes, murders, suicides, and illegal drugs combined.[2]
- Approximately 100,000 youth in Louisiana are projected to die prematurely due to smoking.[2]
- An increasing number of adolescents in Louisiana become addicted to tobacco products at an early age and go on to become chronic users each day.[3]
- One in four adults in Louisiana (752,000) is a current smoker.[4]
- One in four Louisiana children has tried cigarettes by the 6th grade.[3]
- Tobacco causes one in five deaths in Louisiana.[5]
- The economic cost to the state associated with tobacco use is approximately $1.46 billion a year.[5]
- Children exposed to environmental tobacco smoke (ETS), or second-hand smoke, are at an increased risk for sudden infant death syndrome, acute respiratory tract infections, asthma induction and exacerbation, and middle ear infections.[6]
- Approximately 744,000 Louisiana children under the age of 18 years were exposed to ETS inside their homes.[4]
- One in five mothers of newborns reported smoking cigarettes during the first 3 to 6 months after delivery.[7]

The Program

Implemented in 1993, OPH/TCP focuses on: increasing community awareness of the harmful effects of ETS; assisting communities in policy development which makes tobacco use less socially acceptable; empowering youth and adults to recognize tobacco industry advertising tactics used to promote smoking; and developing strategies to counter these messages.

The program plan and components are based on the *Best Practices For Comprehensive Tobacco Control Programs* recommended by Office on Smoking and Health of CDC. These specific components are:

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[2] Centers for Disease Control and Prevention. Projected smoking-related deaths among youth – United States, 1996. Morbidity and Mortality Weekly Report 1996;45(44):971-4

[3] Tobacco Control Program, Office of Public Health, Louisiana Department of Health and Hospitals. Louisiana Youth Tobacco Survey (LYTS) – 2000.

[4] Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Behavioral Risk Factor Surveillance System (BRFSS), 2000.

[5] Chronic Disease Epidemiology Unit, Office of Public Health, Louisiana Department of Health and Hospitals. Smoking Attributable Mortality, Morbidity and Economic Costs (SAMMEC) Report – Louisiana 1999

[6] EPA. Respiratory health effects of passive smoking: Lung cancer and other disorders. EPA/600/6-90/006F; December 1992.

[7] Louisiana Office of Public Health. Louisiana Pregnancy Risk Assessment System (LAPRAMS), 2000.

Community Interventions for Tobacco Control

Community mobilization and empowerment make up a significant component of the OPH/TCP initiatives. The program provides grants to community-oriented organizations to coordinate community planning and capacity building for tobacco prevention and control.

Tobacco Control Program Policy Priorities

OPH/TCP promotes policy development and change by encouraging an increase in tobacco excise taxes (which is directly related to a decrease in consumption by youth) and promoting clean indoor air in public places, worksites, schools, and all other places where children learn and play.

Strategic Use of Media

The Louisiana TCP is executing two marketing and public relations outreach campaigns. The Educational and Promotional Multimedia Smoking Cessation Campaign is aimed at those who want to quit smoking. It will also promote the use of the toll-free 1-800-LUNG-USA smoking cessation helpline. The Educational and Promotional Multimedia Second Hand Smoke Campaign informs the public of the risks associated with tobacco use and promotes changes in behavior to reduce exposure to second-hand smoke through radio and print ads and the cutting-edge Louisiana-specific website www.BreatheEasyBayou.com. The website provides information for various audiences including pregnant women, restaurant/bar workers, and businesses owners, among others. The website also encourages web visitors to "Tell Their Story" about ETS by posting their stories directly to the site, which the program utilizes in media outreach activities. The ultimate goal of the campaign is to decrease the number of tobacco smokers and to reduce the number of people exposed to ETS. The second hand smoke media campaign also aspires to eliminate and prevent first time smoking among the youth population and to encourage worksites and major public facilities to establish and implement smoke-free policies. Louisiana residents will be exposed to television and radio commercials, billboards, and other print materials that will convey both the cessation and second-hand smoke messages.

Cessation Services

TCP receives funding from CDC and the State of Louisiana. In 2002, the Legislature awarded OPH $500,000 for tobacco cessation efforts. OPH-TCP has used the funding to implement the 1-800-LUNG-USA helpline and establish Freedom From Smoking (FFS) clinics both in person and online, at www.ffsonline.org, throughout the state. The FFS clinics target Medicaid patients, the uninsured, and state workers. OPH-TCP sponsors the cessation helpline as a free service to all Louisiana residents. Both the cessation helpline and the FFS clinics are provided through a partnership with the American Lung Association of Louisiana.

OPH-TCP also provides a Perinatal Cessation Program. Through this program, medical professionals in the state are trained to counsel pregnant and post partum women on quitting smoking and the negative

health effects of smoking while pregnant and/or while in the presence of their children. This program also provides outreach to the pregnant and post partum women by working with workplaces, churches and community organizations that involve women of childbearing age. These services are provided through partnerships with the American Cancer Society and the American Lung Association of Louisiana. This program is evaluated by the Louisiana State University Health Science Center School of Nursing.

Interfaith Program

The purpose of this program is to develop a statewide interfaith organization, identify and train congregational health advocates, identify and train regional health ministers, and to serve as a forum for pastors and lay leaders in Louisiana's faith communities statewide. Through the Interfaith Program, Congregational Health Advocates are trained to provide tobacco prevention education in churches statewide. The Congregational Health Advocates serve as a conduit to help churches to go smoke-free both collectively as a congregation through smoke-free church policies and as individual members. The purpose is to involve faith-based organizations (FBOs) such as churches as an integral part of the community in the area of advocating for smoke-free policies, environments, homes, and families. The program is headed by two FBOs/community-based organizations: the LeBrane Legacy Foundation and Holy Temple International, Inc. Over 100 congregational health advocates have been trained. Relationships have been established with the Church of God in Christ, the National Baptist Convention, Southern Baptist Convention, non-denominational churches, Apostolic churches, low socioeconomic-status populations through the Catholic Archdiocese of New Orleans, the Baha'i faith, and Muslim masjids (mosques). Capacity building is achieved through presentations, training, and congregational meetings. The program promotes quitting by helping pastors set up health ministries. Collaborating programs include the Coalition for A Tobacco-Free Louisiana, Communities of Color, American Heart Association, American Lung Association, Rapides Foundation, McFarland Center, and the Office of the Social Apostolate of the Archdiocese. Religious leaders and laity have shown great interest in the tobacco control efforts and are particularly interested in smoking-cessation strategies. Currently, the program is producing a faith-based resource guide on health-related information with the goal of building healthier churches throughout Louisiana.

Diversity Program

The purpose of this program is to identify and eliminate disparities among specific population groups. Currently, the diversity program works to serve four disparate groups: 18-24 year olds, blacks, Vietnamese, and Hispanics. OPH-TCP is currently developing projects that address each of these groups directly.

To address the disparity among 18-24-year-olds, OPH-TCP is currently implementing the Bacchus Gamma "Step by Step Program" which is CDC-approved and recommended. Step by Step is a detailed

guide to developing student advocacy groups on college campuses to address tobacco control. This project involves developing campus advocacy groups on 13 of the state's major colleges and universities. The program will be expanded to include more universities in the coming years due to an exceptional interest among the campuses and the specific requests received from university presidents.

In order to address the plight of tobacco-related illness in the black community, TCP is currently mobilizing this community statewide around the topic of tobacco prevention, cessation and control by making links and contacts with community leaders that will result in 9 regional advocacy groups that will serve as the Louisiana African American Tobacco Control Network. The first year of this initiative is culminating in an unprecedented African American Summit on Tobacco and Health in Louisiana.

The Vietnamese community is a unique community that is growing and in need of specific messaging and programming. In 2002, OPH-TCP conducted a needs assessment in the Vietnamese community throughout the Greater New Orleans area. The information is now being used to provide effective programming such as education and awareness in the Vietnamese community. Currently, the program is working to identify translators and community leaders to become partners in tobacco control activities specifically geared toward these citizens.

The Hispanic community is the fastest growing minority community in the nation, which also requires specific messaging and programming as a form of outreach. Currently, OPH-TCP is working toward offering perinatal cessation brochures and other materials in Spanish to effectively include these citizens and serve them. In July 2003, OPH-TCP contracted with an organization in New Orleans to conduct a needs assessment of the Hispanic community in the Greater New Orleans Area. This assessment will be used to provide specific programming geared directly toward eliminating tobacco related health disparities in the Hispanic community statewide.

OPH-TCP is also currently working with the Governor's Council on Physical Fitness and Sports to eliminate disparities in the American Indian community statewide by conducting programs in the Cherokee/Chahta/Creek tribe in Slidell.

CDC has requested that each state address all of the aforementioned groups. There are a number of other groups that will be reached in the near future including the Gay Lesbian Bisexual Transgender group and institutionalized smokers.

Youth Tobacco Prevention and Youth Advocacy

OPH-TCP also funds a Youth Tobacco Prevention Program which focuses mostly on sports as an alternative to tobacco use and involves collaboration between the Governor's Council on Physical Fitness

and Sports and the New Orleans Saints Organization. This program encourages activism and leadership among elementary, middle, and high-school students.

Through TCP's Youth Advocacy Program, youth ranging from middle-school age to college age are trained to advocate for policy and environmental change. The current focus is on increasing the state excise tax on tobacco products, advocating clean indoor air, and increasing the number of smoke-free environments statewide. OPH-TCP also educates the youth in media literacy, which, enables them to understand the tactics used by the tobacco industry to target them for tobacco use (media literacy is the ability to "read" television and mass media). It also provides the tools necessary to access, analyze, and evaluate the persuasion methods used in commercial media. By examining who pays for an advertisement, how the advertisement is made, and the messages in an advertisement, youth learn to identify the marketing methods used to communicate primary and secondary messages. Media-literacy training identifies the commercial influences on tobacco use. These young people conduct their own activities at the State Capitol and host programs during national observances such as KICK BUTTS DAY and WORLD NO TOBACCO DAY.

Tobacco Surveillance and Evaluation

Current Surveillance Efforts

OPH/TCP collects data on tobacco-use patterns through the Behavioral Risk Factor Surveillance System (BRFSS) and the Youth Tobacco Survey (YTS). The information obtained from BRFSS assists in: identifying the need for interventions; monitoring the effectiveness of existing interventions and prevention programs; developing health policy and legislation; and measuring progress toward attaining state and national health objectives. The YTS gathers information about tobacco use patterns among middle and high-school students and provides valuable information for program planning, implementation, and evaluation.

Current Evaluation Efforts

The Louisiana TCP has contracted with the University of North Carolina (UNC) at Chapel Hill to perform a comprehensive evaluation of the program. This evaluation will include the measurement of program outcomes and the impact the Louisiana TCP is having statewide. UNC-Chapel Hill has a verifiable track record in the field of tobacco control evaluation and will equip the Louisiana TCP staff with the expertise to maintain evaluation efforts once their contract has ended.

Riester-Robb, one of the country's leading public relations firms, is the media contractor for the Louisiana TCP. Through a request for proposals (RFP) process, Riester-Robb was awarded the contract with the Louisiana TCP to develop and implement a statewide secondhand smoke education campaign and tobacco cessation effort. The secondhand smoke campaign is currently being evaluated and the

campaign's awareness, message recall, attitudinal changes, perceptional changes, and, most importantly, behavior changes are being monitored on an ongoing basis. All data generated are compared to the originally established baseline data. This methodology will allow the Louisiana TCP to fully document campaign progress.

The Louisiana State University Health Sciences Center (LSUHSC) School of Nursing is currently evaluating the Perinatal Smoking Cessation Program, with Dr. Demetrius Porche as the principal investigator. The final results of this evaluation will provide recommendations for further program development and health policy that impacts tobacco usage among pregnant women in Louisiana.

Accomplishments of the TCP

- The Louisiana Department of Education and OPH/TCP have teamed together to begin the formulation of a comprehensive tobacco-free school policy for the entire state. Preliminary meetings have taken place and a written policy is being formulated. The goal is to present the policy to the Louisiana Board of Elementary and Secondary Education by the fall of 2004.
- OPH/TCP, in conjunction with the Coalition for a Tobacco Free Louisiana (CTFLA), hosted a Communities of Color Meeting in which participants were educated about the problems of tobacco use.
- OPH/TCP and CTFLA jointly conducted Advocacy Training.
- OPH/TCP and CTFLA completed two memoranda of understanding (MOUs) for the Legislative Session in 2004 and 2005. These MOUs clearly state that CTFLA will take the lead role in advocating and educating for TCP's goals of restoring local control in 2004 and increasing the state excise tax on tobacco products in 2005.
- Conducted a radio and print advertisement campaign on ETS, added a website component to the program's ETS media campaign (www.BreatheEasyBayou.com), and conducted media with public relations events around the State of Louisiana.
- TCP's five-year strategic plan was completed in April 2003. The program is on target with the plans and recommendations.
- TCP has collaborated with the newly organized Louisiana Comprehensive Cancer Control Plan, which will develop and execute a statewide comprehensive cancer control plan with a specific tobacco use work group, by submitting the program's strategic plan to use a model for the tobacco use section.
- With partial support from TCP, the BRFSS expanded its sample size from 5,000 to 9,000 for the 2004 survey year. In addition to the core Tobacco questions, 3 optional modules (Other Tobacco Products, Smoking Cessation, Secondhand Smoke Policy), and 3 state added questions were included. For the first time, Louisiana is now positioned to collect critical data on tobacco indicators and evaluation measurements for each of the state's 9 OPH Regions. This enhanced geographical capability will

allow for Louisiana to identify disparities related to geography. Furthermore, this vastly larger sample size will also allow for detailed analysis of indicators by race, sex, and age.

- TCP successfully partnered with the Heart Disease and Stroke Program on two statewide data collection ventures: Workplace Wellness Survey and Healthcare Site Survey.
- Together with the Heart Disease and Stroke Program and the Tulane University Prevention Research Center (PRC), TCP has embarked on a collaborative project to assess the status of worksite health promotion policies in business and industry across Louisiana. The PRC is in the process of administering a telephone survey to obtain workplace wellness information on businesses across the state.

Partners include:

- **American Lung Association of Louisiana—"**To Quit Smoking for Good" Call 1-800-LUNG-USA.
- **Louisiana Public Health Institute (LPHI)—**LPHI is also the site of the Coalition for a Tobacco-Free Louisiana and the Campaign for Tobacco Free-Living. OPH/TCP is a participating member of this statewide coalition of public and private agencies, institutions, and individuals dedicated to the cause of tobacco prevention and control in the state.
- **University of New Orleans Conference Services -** serves as a logistics contractor for all trainings, conferences and meetings.
- **New Orleans Saints—Youth Tobacco Prevention Physical Activity Program -** incorporates tobacco control policies and clean indoor air messages in the Healthy Living portion of the Junior Training Camp and the Sunday Morning Football Program.
- **American Cancer Society—"Make Yours A Fresh Start Family" -** Provides training to public and private medical providers in the area of counseling pregnant and post-partum smokers.
- **LeBrane Legacy Foundation / Congregational Health Advocates in Tobacco (C.H.A.N.T.) and Holy Temple International, Inc. -** This grassroots coalition seeks to eliminate exposure to second hand smoke and advocates local involvement, particularly by faith-based organizations, in community tobacco policy.
- **Governor's Council on Physical Fitness and Sports -** The Council identifies elementary and middle-school students who participated in the statewide, 30-parish fitness assessment study and who are at risk of becoming habitual smokers. These students will be informed about the dangers of tobacco and tobacco-related products along with other tobacco control and prevention initiatives. This program reaches 90,000 school-age children statewide.
- **Mothers Against Drugs of Louisiana, Inc.** - Conducts tobacco control policy presentations covering topics such as the passage of local smoke-free air ordinances and other tobacco related topics in order to promote policy change locally throughout Caddo, Bossier, Red River, and De Soto parishes.
- **Gibsland Youth Community Resource Center -** Promotes clean indoor air policies throughout Claiborne, Webster, Lincoln, Bienville, Jackson, and Union parishes by conducting tobacco control

policy presentations to parish and municipal governments, school boards, business/trade/civic organizations, and worksites/public places to develop formal smoking policies that prohibit smoking indoors.

- **Southwest Louisiana Area Health Education Center (SWLAHEC) -** Serves a 13-parish area of southwestern Louisiana. SWLAHEC has played a significant role in the establishment of a tobacco-control coalition in its service area and advocating tobacco control policies for the state.
- **No Smoking Environment Coalition (NoSE)-**Promotes the passage of local smoke-free ordinances and educates decision-makers and community leaders/members on the dangers of second-hand smoke through presentations and community forums.
- **Empowering Communities of America-** Provides tobacco-control prevention and education to nine parishes of northern Louisiana. This organization is taking the lead in their area in bringing together local businesses, school systems, and city governments in taking a stand against tobacco use.

P. ASTHMA PROGRAM

Asthma is a chronic lung disease characterized by acute episodes or attacks of breathing problems such as coughing, wheezing, chest tightness, and shortness of breath. These symptoms are caused by airway swelling, blocked airways, and increased responsiveness of the airways to a variety of stimuli or "triggers." The triggers that cause an asthma episode vary with individuals; the most common include:

- allergens such as pollen, animal dander, dust mites, and molds;
- irritants such as cold air, strong odors, weather changes, and cigarette smoke;
- upper respiratory infections such as a cold or flu; and
- physical exercise, especially in cold weather.

The Community Health Promotion and Chronic Disease Section has recently established a statewide Asthma Program. This program's objectives are to:

- Develop relationships with other organizations and stakeholders within the community and throughout the state to create an Asthma Coalition.
- Prepare grant applications for submitting to the U.S. Environmental Protection Agency (EPA), CDC, and other federal agencies to secure funding.
- Create a State Asthma Plan to include:
    - Collection of new (and review of already-collected) asthma data.
    - Identification of persons with the condition, providing education on the importance of environmental modifications and correctly adhering to management regimens, and providing quality medical care to those in need.

Through these objectives, the Asthma Program will achieve the ultimate goals of increasing knowledge and awareness about asthma, decreasing asthma mortality and morbidity, reducing the burden of cost of asthma, creating behavior modification regarding asthma and its triggers, and reducing the number of hospitalizations and emergency room visits statewide due to asthma.

Important Asthma Facts

- An estimated 200,000 adults in Louisiana currently suffer from asthma.
- One in ten Louisiana households with children has, at least, one child with asthma.
- Asthma disproportionately affects the poor, minorities, and women.
- Asthma costs Louisiana approximately $184 million every year.

Programs Targeting Substance Abuse

Q. Alcohol, Drug, Tobacco, and Prevention Addiction Services

The Impact of Substance Abuse: Office for Addictive Disorders (OAD) Services

Substance abuse has been called the nation's number one health problem.[8] Research indicates that it is associated with poor health, disruptive social relations, decreased work productivity, violence, crime, and child abuse. A report on chronic diseases and causes of death explains that chronic diseases are often complicated by lifestyle and environment.[9] The actual leading causes of death in the United States are tobacco use, poor diet, physical inactivity, and alcohol use.[10] Since 1989, more individuals have been incarcerated for drug offenses than for all violent crimes, and drug and alcohol abusers commit most violent crimes. Alcohol and drug abuse is implicated in three-quarters of all spouse abuse, rapes, child molestation, suicides, and homicides.[11] On a daily basis throughout the United States, hospital emergency rooms treat victims of gunshot wounds and other violence caused by alcohol abuse and drug addiction. Exchanging sex for drugs, practicing unsafe sex, and sharing dirty needles are high-risk behaviors that substance abusers often engage in, and which contribute to the spread of HIV/AIDS and sexually transmitted diseases (STDs).

The Center for Substance Abuse Research (CESAR) highlights significant findings in the field of addictive disorders and gives scientific validation to the information presented above in a weekly report distributed by fax. The death rate for drug-induced causes has increased every year since 1990, reaching 5.6 deaths per 100,000 population in 1997. While drug-induced deaths for both males and

[8] Using Social Indicators to Estimate Substance Abuse Treatment Needs in Louisiana. July 1998.
[9] Chronic Diseases and Their Risk Factors: The Nation's Leading Causes of Death 1999. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.
[10] McGinnis & Forge, 1993
[11] The National Center on Addiction and Substance Abuse, Columbia University. 1996

females are rising, the death rate for males is 2.4 times greater than for females, and rising more steeply. Among males, this figure was 8.4 per 100,000 in 1997, up from 4.9 in 1990. Among females, the drug-induced death rate was 3.6 in 1997, up from 2.8 in 1990. The category "drug-induced causes" includes death from dependent and non-dependent use of both legal and illegal drugs, as well as poisoning from medically prescribed and other drugs.[12] Between 50% and 77% of male adult arrestees tested positive for at least one illicit drug in 1999, according to data from 34 cities participating in a National Arrestee Drug Abuse Monitoring (ADAM) program. Marijuana was the drug most frequently detected in 24 sites, followed by cocaine in the remaining 10 sites. Treatment of cocaine-dependent persons in long-term residential and outpatient drug-free programs generated reductions in crime that more than offset the cost of the treatment, according to data from the national Drug Abuse Treatment Outcomes Study (DATOS). The average cost of crime among these cocaine-addicted clients decreased 78% from the year before to the year after long-term residential treatment, resulting in a $21,360 average benefit per client. This is nearly twice the average treatment cost per episode of $11,016. Outpatient drug-free clinics experienced slightly less savings. The average cost of crime decreased 28% from the year before to the year after treatment, resulting in a $2,217 average benefit per client—1.5 times the cost of treatment. It was noted that these figures may understate the economic benefits of treatment because other areas commonly improved by treatment, such as employment and health, were not included in the study.[13]

A 2003 study by Loren Scott and Associates, Inc. estimated that, for each dollar the state puts into an alcohol-and drug-abuse treatment program, society enjoys a reduction in future crime and medical-care cost savings, between $3.69 to $5.19. Because Louisiana has one of the highest HIV infection rates in the United States as well as the highest incarceration rate, it is reasonable to assume that the medical care and crime cost savings from alcohol-and drug-abuse treatment programs will be greater than the national average figures cited above. Finally, it should be noted that the estimated cost savings would be greater if the effects of alcohol and drug abuse treatment programs on education, public assistance, and lost productivity were included in the analysis.[14]

Louisiana's substance-abuse healthcare picture resembles that of the nation. Tobacco use was cited as a leading actual cause of death (i.e., played a significant role in cancer, heart disease, stroke, vascular and respiratory diseases) in 1994 in Louisiana.[15] One of every five deaths was attributable to tobacco use. The LOUISIANA OFFICE OF COMMUNITY SERVICES, which provides child welfare services, estimates that, currently, up to 75% of the families receiving Child Protective Services interventions have some substance abuse involvement. Less than one-fifth (18%) of child passengers who died while being

[12] CESAR, July 17, 2000, vol.9, Issue 28

[13] CSAT by Fax, July 19, 2000, Vol. 5, Issue 10

[14] Issue Brief on Addictive Disorders, September 2003

[15] Chronic Disease Control Program, 1998

transported by a drunken driver were restrained at the time of the fatal crash, according to an analysis of data from the National Highway Traffic Safety Administration.[16] In all age groups, child passenger restraint use decreased as the blood alcohol concentration of the child's driver increased. Older children were least likely to have been restrained.

A cumulative report from the DEPARTMENT OF SOCIAL SERVICES (DSS) indicates that, as of state fiscal year (SFY) 2003, 5,748 assessments have been completed under the Family Independence Temporary Assistance Program (FITAP) Drug Testing Program. OAD referral tracking records from SFY 2003 show 514 recipients (9%) have been referred by DSS, with 220 (43%) admitted to treatment. The DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS reports that approximately 75% of incarcerated adults have substance abuse problems. Smokers who begin smoking at a younger age are more likely than those who begin smoking at a later age to report lifetime drug use and dependency. According to the 1999 National Household Survey on Drug Abuse, the mean age of first cigarette use is currently 15.4 years.[17] Because of the high prevalence and significant social, health, and economic impact/cost of substance abuse, both the state and the federal government give high priority to prevention and treatment efforts. OAD, the sole state authority for substance abuse, operates through a regionalized Community Service District (CSD)/Regions substructure. There are ten administrative regions (or CSDs) of approximately 450,000 to 500,000 inhabitants each, two of which are currently independent districts. Effective July 1, 2004, two additional independent districts, Region 1 and Region 9, will be operationalized.

Programs within OAD are categorized as either Prevention or Treatment. Prevention programs address the individual, interpersonal, social, and environmental influences that cause an individual to abuse alcohol and other drugs. Prevention program activities must include, at least, three of the following six strategies: Information Dissemination; Education; Alternatives; Problem Identification and Referral; Community-Based Process; and Environmental Processes/Social Policy/Advocacy. Prevention services have the additional responsibility of the Synar Initiative, a community development and educational program designed to comply with the federal and state laws regarding tobacco sales to individuals under the age of 18 years. The December 1996 baseline found 75% of retailers to be non-compliant. OAD implemented programs to educate tobacco vendors regarding tobacco sales to minors. Enforcement efforts are conducted via compliance checks by the OFFICE FOR ALCOHOL AND TOBACCO CONTROL through a contractual agreement with OAD. The federal mandate was to reduce the illegal sales of tobacco to minors from 75% to 20% over a five-year period. Louisiana met the federal goal in 18 months. The most current non-compliance rate available stands at 5.6%, which is among the best in the nation.

[16] CESAR, August 21, 2000 vol. 9 issue 33
[17] CESAR September 25, 2000 vol. 9 issue 38

OAD continues to operate a statewide Tobacco Cessation Program for its clients in both outpatient and inpatient substance-abuse facilities. The program is based on the "Your Next Step" Tobacco Cessation Program developed by the Minnesota-based Hazelden organization, which incorporates the 12-step model for treating chemical dependency. Nicotine patches are provided as a component of this program. In May 2002, 24 OAD facilities offered tobacco-cessation services, and 450 clients were screened during the month. Seven facilities accounted for 56.4% of all screenings. Among tobacco users screened, 18.2% wanted to participate in the program. Sixteen clients (3.6%) were admitted to the program. The majority of clients were male (74.4%) and 82.9% of the clients used tobacco products. During the past year, 62.5% of the clients smoked, at least, one pack of cigarettes a day. With regard to discharge, 75% of the clients completed more than half of the modules. During the program, 100% did not smoke. During follow-up, 100% of the clients reported that they had not used as much tobacco in the previous month as they did before participation in the program.

Prevention specialists coordinate prevention services in each of the Regions and implement community-based primary-prevention strategies. Research indicates that alcohol, tobacco, and other drug (ATOD) use, delinquency, school achievement, and other important outcomes in adolescence are associated with specific characteristics (i.e., risk or protective factors) in the students' communities, schools, and family environments. Evidence indicates that exposure of adolescents to a greater number of risk factors, irrespective of what the specific risk factors are, is associated with more substance use and delinquency, while exposure to more protective factors is associated with lower prevalence of these behaviors.

The analysis of risk and protective factors is the most powerful paradigm available for understanding the origin of both positive and negative adolescent behavioral outcomes and how the most successful adolescent prevention programs can be designed.[18] Under the sponsorship of the CENTER OF SUBSTANCE ABUSE PREVENTION (CSAP), DHH/OAD contracted with DEVELOPMENTAL RESEARCH AND PROGRAMS, INC., of Seattle, Washington, to conduct a survey of sixth, eighth, tenth, and twelfth-grade students, using the Communities that Care ® (CTC) Youth Survey. The CTC survey was developed to provide scientifically sound information to communities on the prevalence of risk and protective factors among youth. The survey data were collected in October 1998, March 2001, and October 2002 in Louisiana public and private schools. A risk and protective factor profile was developed for the students.

Results showed Louisiana students to be above the national average for all but two of the protective factors. There was only one protective factor, Opportunities for Positive Involvement in the Community, for which Louisiana students scored significantly lower than both the National Comparison average and the CTC matched comparison. The next lowest protective factor was School Rewards for Prosocial

[18] *Communities that Care® Youth Survey*. May 1999.

Involvement. The most elevated risk factor was in the school domain, Academic Failure, which measures students' self-reports of their academic performance. Other risk factors that were significantly higher than the national average were Friends, Delinquent Behavior and Impulsiveness, and Poor Family Discipline. Results of the survey are posted on OAD's web page. It is important to note, the survey points out, that both risk and protective factors must be addressed for a program to be successful. OAD conducted a follow-up Louisiana Youth Survey in collaboration with the Southwest Center for Application of Prevention Technologies, University of Oklahoma. The survey began in the school system in March 2001 and was completed the following month. Analysis of these data is complete and will be used to determine the areas most in need, as well as the type and intensity of programs to be implemented. It will also enable the state to transition into a model conducive to research-based programming. Beginning with the implementation of the State Incentive Grant (SIG), OAD has funded 18 research-based projects around the state addressing Risk and Protective Factors.

OAD HAS been designated by the Office of the Governor to administer and implement the Center for Substance Prevention's SIG. The grant award is in the amount of $8.4 million for a 3-to-5 year period. SIG is a cornerstone of the National Youth Substance Abuse Prevention Incentive (NYSAPI), which was established to assist state governors with enhanced capabilities to coordinate, leverage, and implement effective prevention strategies as well as a statewide prevention plan for its citizens.

OAD provides a continuum of treatment services: detoxification, inpatient, halfway houses, residential, and outpatient. These treatment services provide assessment, diagnosis, and treatment of alcohol abuse, alcoholism, drug abuse, and drug addiction. In addition, OAD provides services in three programs: Drug Courts (services are provided upon referral by the Courts to any OAD 24-hour care facility), Compulsive Gambling (Inpatient and Outpatient), and Driving While Intoxicated (DWI) treatment. Federal funding mandates require that OAD provide specialized services to pregnant women, women with dependent children, intravenous drug users, and those infected with HIV.

OAD continues to participate in a collaborative project between OPH and THE OFFICE OF MENTAL HEALTH (OMH) to provide services to the school-based health centers in the state. An interdepartmental agreement for School Based Health Centers (SBHCs) was approved by the Assistant Secretaries of OAD, OMH, and OPH. This agreement will afford each Office an opportunity to provide prevention and early intervention services to children and adolescents served by SBHCs.

Programs Targeting Intentional and Unintentional Injury

R. Prevention of Sexual Violence

The EMS/Injury Research and Prevention Program provides statewide data, educational resources, funding, technical support, and leadership in public health methods to groups working for the prevention of sexual violence. This category includes child sexual abuse, date rape, and violence against women. To facilitate violence prevention initiatives within communities, staff and contractors organize training events and presentations, provide access to key agencies, offer inter-agency mentoring, and promote the creation of local groups.

Prevention of sexual violence through support of local and statewide volunteer agencies is an ongoing project. In addition to direct services for victims, the agencies also work to achieve coordination within the medical and legal systems to minimize victim trauma. The agencies challenge communities to examine attitudes and actions which implicitly support violence against women, and to replace that implicit support with explicit support of non-violence. The EMS/Injury Research and Prevention Program provides information on outreach to media, faith-based communities, athletic organizations, businesses, universities, and other groups which can use their authority to change community norms concerning violence toward women and children.

S. Unintentional Injury Prevention - Community Injury Prevention

Unintentional injuries are the leading cause of death for Louisiana residents 1 to 44 years of age, and the fourth leading cause of all deaths. The EMS/Injury Research and Prevention Program supports nine Regional Coordinators and a State Injury Prevention Coordinator who facilitates and provide education and resources for community programs to address injuries and/or deaths from unintentional injuries among children. Examples of preventive areas include: Use of All Terrain Vehicles (ATVs); Choking & Suffocation; Drowning; Falls; Use of Firearms; Fire & Burns; Poisoning; Use of Motor Vehicles; and Sleep-related Infant Deaths.

The Community Injury Prevention Program reviews the existing injury prevention curriculum and tailors information to fit the specific needs of agencies that serve school-aged children in the state. The curriculum addresses the importance of wearing seat belts and bicycle helmets, pedestrian and traffic safety, home safety, drowning prevention, fall prevention, and playground safety. In addition the curriculum includes fact sheets regarding data specific to injuries, prevention tips, and laws in Louisiana.

Several local, state, and federal agencies have missions related to injury prevention. Examples are the U.S. Coast Guard, law enforcement, the state Department of Wildlife and Fisheries, North and South Louisiana Area Health Education Center (AHEC), Christus St. Francis Cabrini Hospital, Family Voices, Maternal and Child Health Coalition, and Options for Independence. The Program joins with these groups to maximize messages and provide public health perspectives to safety programs.

For more information about the Community Injury Prevention Program, the EMS/Injury Research and Prevention Program may be contacted at (504) 219 4540.

Programs Targeting Pre-hospital Emergency Medical Services

T. Emergency Medical Services (EMS) Program

Assuring that pre-hospital healthcare professionals receive appropriate training, examination, and certification is the responsibility of the OPH Emergency Medical Services Program.

Certified Emergency Medical Technicians and Paramedic personnel may be found in a variety of public safety and first response settings which vary from large multi-parish ambulance services to town volunteer fire departments. These personnel are the first line of critical medical assistance for many individuals. They respond to incidents of drowning, heart attacks, industrial injuries, automobile crashes, and childbirth, among other incidents. Their pre-hospital actions often mean the difference between additional disability or death.

The approximate 20,000 EMS students, personnel, and instructors in Louisiana are dependent on testing and national certification handled by and through the Program. In any one year, approximately 3,000 to 5,000 of these individuals are processed by the Program for initial certification or for bi-annual recertification, as required by national standards. For real-time clinical testing, the Program supervises an additional temporary corps of about 400 trained contract personnel as examiners and victims. While written test scoring and registration are handled by the national organization, this Program offers credentials for practice to those eligible. The Program is the repository of all certification data, and frequently must respond to pre-employment queries. EMS instructors must also be trained and certified through the section.

The OPH/EMS Program within the Center for Community Preparedness provides leadership in domestic disaster preparedness in the pre-hospital setting. Working for seamless utilization of personnel, resources, and communications, the section collaborates closely with entities such as the DHH Office of

Emergency Preparedness; the Louisiana State Police; the Office of the State Fire Marshal; the Commission on Highway Safety; pediatric, trauma, and emergency room physicians and nursing organizations; and the military. The Program also participates in traffic safety planning; State Trauma Plan initiation; management of a unified EMS data reporting system; and training citizens, industrial employees, and others as First Responders.

The Section staffs the EMS Certification Commission, which reviews charges of practice irregularities by individuals. There are additional projects such as the extensive **A**utomatic **E**xternal **D**efibrillators (**AED**) training and distribution project with an emphasis on rural sites. AEDs can be used by trained bystanders to assist in cardiac emergencies prior to the arrival of trained personnel. Another supported project allows high school seniors to complete their Basic **E**mergency **M**edical **T**echnician (**EMT**) Training prior to graduation. This has the benefit of keeping more children in school, and of graduating children with highly marketable and desirable skills. Special training in recognition of stroke signs and symptoms for early treatment is also provided by the EMS Program.

Emergency Medical Services for Children: EMS-C

To serve children better, the EMS Program directs additional training toward childhood emergencies, including children with special needs. As a leader of the Governor's Council on EMS and Children, the Project has published and distributed recommendations for child-sized or child-specific ambulance and emergency room equipment and standards for daycare first-aid and cardiopulmonary resuscitation (CPR). The Project has trained emergency personnel in communicating with and understanding the needs of the child patient and his/her family, and in managing equipment used by children with special needs.

Safety training in fire and burn prevention and use of 911 has been provided to thousands of children in Head Start programs and grammar schools through EMS-C. This programming includes education and family safety information for parents and daycare personnel.

Programs Targeting Mental Health

U. Suicide Assessment

The DHH Office of Mental Health (OMH) provides a comprehensive crisis intervention program throughout the state for all citizens who may experience thoughts of suicide, as well as other signs and symptoms of a mental-health crisis. This system includes crisis telephone lines with toll-free numbers, a Single Point of Entry system for those who need face-to-face evaluation, hospital diversionary programs (such as respite), or acute hospitalization.

Mental Health professionals conduct a suicide assessment of any client who presents to the system with emotional or behavioral problems, or with symptoms of severe mental illness. Additionally, all paraprofessionals who work with mentally ill clients are trained in the mental health assessment of potential suicide. These assessments include current ideations of self-harm, plans for self-harm, and whether the individual has the means to harm him/herself. Immediate steps are taken to protect that individual when suicide potential is indicated by the mental health assessment. Additionally, the assessment includes past history of suicidal ideation, an assessment of the severity of previous attempts, and the emotional and environmental factors surrounding previous suicidal issues for the consumer.

V. OFFICE OF MENTAL HEALTH (OMH) PROGRAMS

Acute Unit

The acute-care psychiatric inpatient units provide psychiatric, psychosocial, and medical services in compliance with all licensing and accreditation standards in order to meet the individualized patient needs of adult and adolescent patients in the State of Louisiana who require a level of care which must be rendered in an inpatient setting. These units address the need for inpatient treatment in a less restrictive, shorter term, and more cost effective manner than in the state's longer term care psychiatric facilities.

Specialized Inpatient Services

OMH operates four state psychiatric facilities which provide mental health evaluation, treatment, and rehabilitation services to adults with severe and persistent mental disorders and to child/adolescent clients with serious emotional/behavioral disorders.

Clinic-based Services

OMH currently has an annual caseload of over 52,400 individuals with serious and persistent mental illness. This caseload includes children and youth with serious emotional disturbances receiving outpatient mental health services through the operation of licensed Community Mental Health Centers (CMHCs) and their satellite outreach clinics located throughout the six OMH geographic regions and the four service district regions. The CMHC facilities provide an array of services: screening and assessment; emergency crisis care; individual evaluation and treatment; medication administration and management; clinical casework services; specialized services for children and adolescents, the criminal justice system, and the elderly; and pharmacy services. Inability to pay does not have an impact on the receipt of services.

Crisis Management Services

Crisis services are provided on a 24-hour basis. These services are designed to provide a quick and appropriate response to individuals who are experiencing acute distress. Crisis services include

telephone counseling and referrals, face-to-face screening and assessment, community housing for stabilization, and crisis respite.

Day Programs and Psychosocial Rehabilitation Programs

Psychosocial programs and day-treatment programs provide opportunities for teaching new rehabilitative skills related to community living and work activities; build networks of peer support; teach self-help community activities; and provide a place where individuals can learn how to relate to persons and communicate their needs and desires successfully. In addition, day programs provide secure, structured environments where individuals experiencing disruption in routine behaviors brought on by their illness can receive treatment and support. Day programs also provide structured activities which allow children and adolescents with severe emotional disturbances to continue along their educational path.

Support Services

Supported living services, either through specialized residential programs or through case management and other services which support persons living in their own homes, are available throughout Louisiana. Individuals with serious psychiatric disabilities are provided with services necessary to address their housing, employment, and mental-health rehabilitative needs.

Programs Targeting Environmental Health

W. Community Water Fluoridation

Currently, 54.9% of the United States population served by public water systems is serviced by optimally fluoridated water systems. Renewed effort has been undertaken to reach the Centers for Disease Control and Prevention's Healthy People 2000 goal of optimally fluoridating 75% of the population's water supply. Community water fluoridation efforts have been re-established with recent legislation, ensuring a stable Office of Public Health (OPH) Fluoridation Program. The program will oversee monitoring and evaluation of current systems, provide training, and assist in promotional activities in collaboration with the Oral Health Program, the Center for Environmental Health Services of OPH, and the newly established Fluoridation Advisory Board. This board will function to secure additional resources needed to implement fluoridation systems created as a result of promotional activities. The Parish of Plaquemines and the City of Amite, Louisiana have recently passed ordinances to implement community water fluoridation with the potential to reach an additional 31,000 state residents.

X. Environmental Health Advisories

The OPH Section of Environmental Epidemiology and Toxicology (SEET) issues fish consumption advisories in consultation with state environmental agencies when chemicals or heavy metals in sport fish reach levels that could potentially harm the public.

Mercury in Fish

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5749

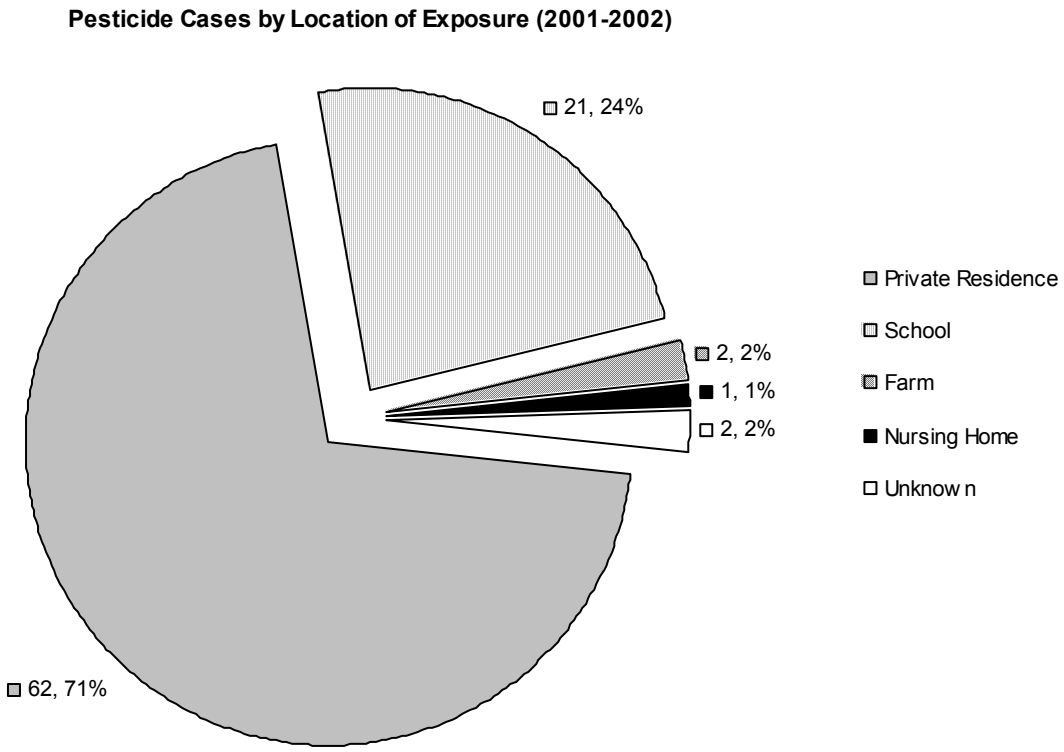
SEET works with the Louisiana Department of Environmental Quality (LDEQ) and the Louisiana Department of Wildlife and Fisheries (LDWF) to assess the extent of mercury contamination in fish. Methylmercury, a compound present in fish tissue, can cause birth defects and neurological problems when present at high levels. LDEQ samples fish from water bodies that are selected based on water quality, usage, and SEET recommendations. SEET then conducts a public health risk assessment, and, if warranted, the State Health Officer issues a fish consumption advisory for specific species of fish. Of nearly 500 water bodies tested to date, 41 health advisories for fish containing mercury have been issued. These advisories cover at least 66 freshwater bodies in or traversing 43 parishes, and include an advisory on king mackerel, cobia, greater amberjack, and blackfin tuna for parishes along the Gulf of Mexico.

Y. Environmental Health Education

Health Effects Related to Pesticide Exposure

http://www.dhh.louisiana.gov/offices/page.asp?ID=205&Detail=6686

In 2001-2002, 21% of the total number of reported pesticide exposures occurred at school. To better educate residents about pesticide use in Louisiana schools, a multi-agency workgroup developed a pamphlet for statewide distribution. The pamphlet, “What You Should Know about Pesticide Use in Louisiana Schools”, was jointly developed by SEET, the Louisiana Department of Agriculture and Forestry (LDAF), and the Louisiana Environmental Action Network (LEAN). The pamphlet discusses the Louisiana Pesticide Law, state requirements, Integrated Pest Management (IPM), and examples of IPM strategies. Distribution of the pamphlet will occur through Parish School Systems, the LDAF Pesticide and Environmental Programs and the Louisiana School Nurses Association as well as health units, state libraries, the Louisiana Cooperative Extension Service, colleges and universities, and organizations and agencies working in the area of environmental health.



In 2001, another pamphlet, "What You Need to Know About Pesticides and Your Health in Louisiana", was jointly developed by SEET, the Louisiana Department of Agriculture and Forestry (LDAF), and the Louisiana Environmental Action Network (LEAN). The U.S. Environmental Protection Agency funded printing and distribution costs. The pamphlet discusses health effects related to commonly used pesticides, how pesticide exposure occurs, what a person should do if exposed to a pesticide, laws regulating the use and application of pesticides, and how to file a Health-Related Pesticide Incident Report with LDAF. Ongoing distribution of the pamphlet occurs through parish health units, state libraries, the Louisiana Cooperative Extension Service, colleges and universities, and organizations and agencies working in the area of environmental health.

Mercury in Fish

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5749

The Louisiana Departments of Health and Hospitals (LDHH), Environmental Quality (LDEQ), Wildlife and Fisheries (LDWF), and Agriculture and Forestry entered into an interagency agreement in 1997 to determine jointly which water bodies in Louisiana needed health advisories based on levels of environmental contamination, particularly from mercury. That same year, the Louisiana Legislature provided funding to assess mercury levels in recreationally caught fish and to offer free blood-screening

services in parishes where high levels of mercury had been identified. In 2003, SEET returned to one of these areas to offer blood mercury screening to commercial fishers and their families and others who eat fish from local water bodies.

SEET, working jointly with representatives of LDEQ, LDWF, the Sierra Club, and the Louisiana Audubon Council, produced two informational brochures, one for the general public and the other directed specifically toward pregnant or breastfeeding women and mothers of small children. The publications were widely distributed throughout Louisiana by obstetrician/gynecologists' and pediatricians' offices as well as parish health units. The environmental organizations continue to work closely with the Legislature and the state departments to inform the public about the potentially harmful effects of mercury and other contaminants on people's health.

Health Professional Education Sub-Program

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5752

SEET conducts Health Professional Education as part of its educational activities. Training is targeted toward physicians and other health professionals located near Superfund and proposed Superfund sites. Information provided focuses on site contaminants, health effects from exposure, and clinical descriptions of the diagnosis and management of cases of chemical exposure. SEET's Health Education Program also offers environmental health education to the public and to the medical profession concerning health effects of contaminants from hazardous waste sites and other sources. It develops, publishes, and distributes environmental health education materials; prepares and presents environmental health information to schools, physicians and communities; and coordinates with other state educational programs regarding current environmental health projects and issues. Since 1996, SEET has disseminated ATSDR case studies to over 4,000 Louisiana physicians in 20 parishes.

Private Well Brochure

http://www.dhh.louisiana.gov/offices/publications.asp?ID=205&Detail=1198

In 2006, the brochure titled "Private Water Well Testing in Louisiana" was reprinted. In this printing, OPH produced 10,000 copies. This brochure provides the owner/user of the private well with answers to the following questions: how to protect your well water supply, when to test the water, how to test the water, and what contaminants should be tested for. It also provides instructions for sanitarian services, registering your well, various contact numbers, and related Internet links.

Indoor Air Quality Education

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5750

SEET provides consultations for indoor air quality (IAQ) complaints and inquiries. Telephone consultations generally consist of a discussion of the complaint/inquiry followed by an appropriate referral,

if any is indicated. Complainants may also be directed to the OPH/SEET "Indoor Air Quality and Mold Information" web page for IAQ information; if callers lack Internet access, information will be mailed to them. Complaints and requests for information originate from the following sources, among others: private residences (homeowners, renters, landlords); state-owned buildings in Louisiana; schools (teachers, parents, principals, school boards); universities (students, parents); businesses and government agencies (employees, managers, building managers, health and safety professionals); health care facilities, nursing homes and other residential care facilities (physicians, nurses); the media; attorneys; and legislators.

During the months following Hurricanes Katrina and Rita, SEET conducted approximately 1,000 IAQ phone consultations for the residents of Louisiana. The majority of callers sought guidance on proper clean up and safety measures for returning to the area. Information was distributed across the state and the country. SEET developed several fact sheets and informational bulletins such as, "Coming Home: Steps to Stay Safe as You Return to Your Home", "Mold: What You Need to Know About Your Health and Your Property" and the "Hurricane Public Information Packet".

Z. Environmental Health Emergency Response Programs

Environmental Public Health Emergency Preparedness & Response (EEPR)

Accidental releases, explosions, and other chemical releases occur each year in Louisiana. SEET evaluates the public-health threat of selected events and provides information and recommendations to affected communities, hospitals, and physicians treating exposed individuals. SEET maintains a surveillance system of emergency chemical releases in the state by screening event notifications from the Louisiana State Police, Louisiana Department of Environmental Quality (LDEQ) and the National Response Center of the U.S. Coast Guard. During a hazardous-materials release, which affects or threatens the public's health, incident briefs, chemical information, and treatment guidelines are provided to hospital emergency departments in the impacted area. Appropriate OPH regional staff members are notified when chemical events requiring a response occur in their region. SEET generates maps of incident locations pinpointing critical facilities and susceptible populations that may potentially be affected. In 2005, SEET screened over 14,000 event notifications and responded to thirteen emergency chemical events.

Chemical Terrorism (CT)

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6678

In 2002, SEET established a Chemical Augmentation Team (CAT), which is a specialized, interdisciplinary response unit that can be rapidly mobilized and deployed at the regional or state level to assess and evaluate the potential for adverse health outcomes to the public during large-scale catastrophic events involving chemical and radiological weapons of mass destruction (WMDs) or

accidental releases of hazardous substances. The CAT provides emergency response expertise to the Public Health Incident Response Teams (IRTs), the OPH Assistant Secretary, and the State Health Officer in the areas of toxicology, epidemiology, human health risk assessment, exposure assessment, environmental health, Geographical Information Systems (GIS) mapping of public health data, information systems management, health surveillance, and medical monitoring. The CT program also tracks all Poison Control Center data for terrorist activities. The team helps prevent or minimize harmful public health consequences both during and after a chemical event by providing technical support to the IRT and others as assigned; planning and conducting environmental sampling for public health purposes; reviewing sampling results and assessing exposure; providing input into event management, response and follow-up; and providing community health education and risk communication.

Poison Control Center Notifications Sub-Program

SEET receives daily notifications of Poison Control Center cases that involve exposure to chemicals and maintains a database with the details of each exposure. Those incidents that occurred on the job or in a public place are referred for follow-up. This is a sub-program of both the CT Program and the Pesticide Surveillance (PS) Program.

Geographical Information System (GIS) Support Services

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6710

The GIS Support Services maintains public health related locational databases used in the generation of maps and for special SEET projects. Maps generated by the program can be used by public health assessors and by emergency responders when dealing with accidental chemical releases and/or terrorism as well as by agency personnel during local and statewide drills. In 2005, SEET developed an Internet Map Server (IMS) site that serves as a repository for mapable data. The user-friendly site, currently available to OPH staff, allows users to create customized maps for use in many public health applications.

Hazardous Substances Emergency Events Surveillance Project

http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=5748

In the fall of 2000, funds were awarded to the Section of Environmental Epidemiology and Toxicology (SEET) by the Agency for Toxic Substances and Disease Registry (ATSDR) to participate in the Hazardous Substances Emergency Events Surveillance (HSEES) system. Currently, fourteen other states also participate in this project. SEET collects information on acute hazardous substance events and enters it into a comprehensive database, which includes releases to the air, water, and land, and threatened releases that lead to public health actions. Data are also collected about associated public health consequences including evacuations, injuries, and deaths. The database includes data collected from the National Response Center, Louisiana Department of Environmental Quality, the Louisiana State

Police and other sources. SEET collects public health information which focuses on the impact of releases on the population, e.g., injuries, medical care, evacuations, and in-place sheltering. In 2004, SEET screened over 9,000 events; of those, a total of 1,496 were entered initially to the HSEES database system, and 564 (37.7%) events met the criteria for inclusion in the Louisiana HSEES database. Over 9,200 events were screened in 2005, with a total of 1,468 entered into the HSEES database; 867 (59.1%) events met the criteria for inclusion in the Louisiana HSEES database.

The purpose of HSEES is to collect data that can be used to reduce the injuries and fatalities to employees, first responders, and the public resulting from acute hazardous substances releases. Using these data, SEET targets its efforts to prevent further adverse public health consequences from acute hazardous releases in Louisiana. By describing injuries and deaths which result from the releases of hazardous substances, strategies are developed to reduce such consequences.

V. LOUISIANA STATE HEALTH CARE SYSTEM

A. Analysis of Health Care in Louisiana

In the United Health Foundation's *State Health Rankings 2005*[1], Louisiana ranked 49th—as the second least healthy state in the nation. According to this report, Louisiana is 49th for the combined measures of risk factors and 49th for the combined measure of outcomes, possibly indicating that the relative health of the population will remain at current levels in the future. The state's greatest deficiencies were in the areas of: Premature Death, ranking 49th (10,546 years, lost per 100,000 population); Infant Mortality, ranking 49th (9.6 deaths per 1,000 live births); Cancer Deaths, ranking 48th (223.5 deaths per 100,000 population); Infectious Disease, ranking 46th (32.3 cases per 100,000 population); and Prevalence of Obesity, ranking 46th (26.9 % of population). Racial disparity with regard to health access and outcomes was also listed as one of the state's problems. Examples of this include the differences between infant mortality of race groups, at 6.9 deaths per 1,000 live births for non-Hispanic whites to a high of 13.7 deaths for non-Hispanic blacks.

Despite the negative findings, there were also some positive points. Louisiana ranked 8th in the Adequacy of Prenatal Care measure, with 81.8 % of all pregnant women in the state receiving adequate prenatal care, as defined by the Kessner Index. Additionally, the percentage of persons under age 18 in poverty decreased from 25.2 % to 20.6 %, the immunization coverage for children aged 19 to 35 months increased 5.0 % to 74.9 % and the prevalence of smoking decreased from 26.5 % to 23.5 %.

Shortages affecting the accessibility and availability of primary-care physicians (family practice, general practice, internal medicine, pediatrics, and obstetrics/gynecology) pose a significant problem in the delivery of healthcare in Louisiana. As of August 2006, the National Center for Health Workforce Analysis (NCHWA) within the Bureau of Health Professions of the Health Resources and Services Administration (HRSA/BHPR) recognized 114 primary care shortage areas in 63 parishes within the state: 47 whole parish and 12 partial parish geographic areas, 7 whole parish and 4 partial parish population groups, and 44 healthcare facilities.

In addition to the shortages of primary-care physicians, other healthcare occupations identified by the NCHWA as posing a general supply problem in the state are physician assistants, nurse practitioners, certified nurse midwives, registered nurses, dentists, dental hygienists, dental assistants, psychologists, and social workers.

Louisiana has attempted to address the problems associated with health professional shortages over the years in many ways. State schools of medicine, nursing schools, and schools of allied health professions

[1] United Health Foundation State Health Rankings 2005 © United Health Foundation

have been mandated to cooperate, in collaboration with the Louisiana Area Health Education Centers (AHECs), to improve and expand programs for health-professional shortage areas. Currently, hundreds of thousands of dollars in state funds have been allocated to secure federal monies for professional development initiatives, including loan repayment programs for medical professionals to practice in shortage areas in exchange for payment of professional education loans and medical placement services to assist medical professionals in finding a practice site.

- The Louisiana State Loan Repayment Program is designed to encourage primary-care physicians to serve in health-professional shortage areas. This program is funded with federal monies that match the state investment in recruitment and retention of healthcare providers to practice in health professional shortage areas.
- Med Job Louisiana is a non-profit recruitment and retention program designed to assist rural and underserved communities located in health-professional shortage areas in attracting qualified health professionals to improve residents' access to primary-care services. The project is a collaboration between the Louisiana Department of Health and Hospitals' Bureau of Primary Care and Rural Health, the Louisiana AHECs, the Louisiana Rural Health Access Program, and local communities.
- The National Health Service Corps is a federally funded scholar and loan repayment program managed by HRSA/BHPR that is designed to bring quality primary-healthcare professionals to communities in need, as well as support communities in their efforts to build better systems of care.

Louisiana must continue to meet the healthcare needs of its residents by working to reduce the health professional shortages in the state. Ensuring appropriate and adequate primary-care services for Louisiana can only take place when there is a concerted effort among the residents of the state to secure state financing to support these services.

B. Louisiana Health Care Statistics

Percent of Population Enrolled in Medicaid in 2004 [2]	
Alabama	17.7%
Arkansas	22.3%
Louisiana	21.0%
Mississippi	22.2%
Texas	12.3%
United States	14.9%
Percent of Population Not Covered by Health Insurance in 2004 [2]	
Alabama	13.5%
Arkansas	16.7%
Louisiana	18.8%
Mississippi	17.2%
Texas	25.1%
United States	15.5%
Change in Percent of Population Uninsured: 2000 to 2004 [2]	
Alabama	(4.9)
Arkansas	9.2
Louisiana	(4.1)
Mississippi	9.6
Texas	13.1
United States	7.6
Rate of Physicians in Primary Care per 100,000 Population in 2004 [2]	
Alabama	85
Arkansas	82
Louisiana	96
Mississippi	71
Texas	78
United States	99
Rate of Beds in Community Hospitals In 2004 per 100,000 Population [2]	
Alabama	339
Arkansas	348
Louisiana	382
Mississippi	453
Texas	259
United States	275
Average Stay (in Days) in Community Hospitals in 2004 [2]	
Alabama	5.1
Arkansas	5.4
Louisiana	5.5
Mississippi	6.5
Texas	5.2
United States	5.6
Number of Health Maintenance Organizations (HMOs), Louisiana, 2005 [2]	8
Percent of Population Enrolled in HMOs in 2005 (National Percent = 23.8%) [2]	9.7%
Number of Nurses, Louisiana, February, 2005 [3]	41,211
Number of Physician Assistants, Louisiana, 2006 [4]	365

[2] Morgan, K.O. and Morgan, S. (Eds.).2006. *Health Care State Rankings 2006: Health Care in the 50 United States* (14th Ed.)

[3] Louisiana State Board of Nursing

[4] Louisiana State Board of Medical Examiners May 2006

C. Louisiana Health Care Access

Number of Hospitals and Beds Louisiana, 2006		
Type of Hospital	**Hospitals**	**Licensed Beds**
Acute	108	18,020
Children's	2	246
Critical Access	27	694
Long Term	46	2,104
Psychiatric	33	2,334
Rehabilitation	26	737

Source: Health Standards Section, DHH

Health Facilities Louisiana, 2005	
Type of Facility	**Number**
Alcohol/Drug Abuse Facilities	166
Community Health Centers	45
State Developmental Centers	9
Hospitals	225
Mental Health Clinics	35
Rural Health Clinics	76
Parish Health Units	77

Source: Health Standards Section, DHH

Licensed Nursing Home Statistics Louisiana, 2006	
Number of Nursing Homes	303
Number of Beds	
Licensed Beds	38,246
*Medicaid **	35,629
*Average Annual Occupancy (Medicaid)**	77.5%

*From October, 2001 thru September, 2002
Source: Health Standards Section, DHH

Lack of Access to Primary Care* Louisiana, Neighboring States, and United States, 2005		
State	**Percent**	**Rank****
Alabama	24.6	3
Arkansas	10.0	31
Louisiana	21.6	7
Mississippi	30.1	1
Texas	12.7	22
United States	11.5	-

* Lack of Access to Primary Care measures the percent of population areas where the population is underserved by primary care practitioners residing in designated Health Manpower Shortage Areas.
** Rank reflects worst (lowest) to best (highest).
Source: Morgan, K.O. and Morgan, S (Eds.). 2006. *Health Care State Rankings 2006*

D. MEDICAID

Medicaid, or Title XIX of the Social Security Act, became law in 1965 as a jointly funded cooperative venture between the federal and state governments. Its purpose was to assist states in the provision of adequate medical care to eligible individuals and families with low incomes and resources. Within broad, federally provided national guidelines, Louisiana has autonomy in establishing its own eligibility standards; determining the type, amount, duration, and scope of services; setting the rate of payment for services; and administering its own program.

As the largest provider of medical and health-related services to America's poorest people, Medicaid includes funding for these basic healthcare programs: inpatient and outpatient hospital services; laboratory and X-ray services; skilled nursing and home health services; physician's services; family planning; and periodic health checkups, diagnoses, and treatments for children.

LOUISIANA MEDICAID PROGRAM
SFY 2002/03 (July 1, 2002 to June 30, 2003)
2002-2003

	Unduplicated Recipients			
Race/Ethnicity	**Male**	**Female**	**Unknown**	**Grand Total**
White	142,007	199,234	17	341,258
Black or African American	225,185	314,254	27	539,466
American Indian or Alaskan Native	827	1,149	-	1,976
Asian	1,594	2,121	1	3,716
Hispanic or Latino (no other race info)	2,417	3,409	-	5,826
Native Hawaiian or Other Pacific Islander	70	92	-	162
Hispanic or Latino and one or more other races	141	166	1	308
More than one race indicated (and not Hispanic or Latino)	121	139	3	263
Unknown	22,111	33,466	3,134	58,711
Grand Total	394,473	554,030	3,183	951,686

LOUISIANA MEDICAID PROGRAM
SFY 2002-2003 (July 1 2002 to June 30 2003)

	Payments *			
Race/Ethnicity	**Male**	**Female**	**Unknown**	**Grand Total**
White	$650,018,662	$967,032,761	$40,800	$1,617,092,222
Black or African American	$637,527,361	$922,590,038	$43,580	$1,560,160,979
American Indian or Alaskan Native	$1,831,031	$2,984,115	$638	$4,815,785
Asian	$3,657,927	$4,622,327	$1,925	$8,282,179
Hispanic or Latino (no other race info)	$5,319,629	$7,607,537	$0	$12,927,166
Native Hawaiian or Other Pacific Islander	$228,069	$189,065	-	$417,134
Hispanic or Latino and one or more other races	$159,578	$369,374	$847	$529,799
More than one race indicated (and not Hispanic or Latino)	$226,984	$189,756	$1,682	$418,422
Unknown	$108,818,454	$178,249,956	-$22,636,760	$264,431,650
Grand Total	$1,407,787,693	$2,083,834,931	-$22,547,289	$3,469,075,335

* Figures have been rounded to the nearest dollar.
Source: DHH / Division of Health Economics (Medicaid)

Louisiana Medicaid Program, SFY 2002-2003 (July 2002-June 2003)		
Age Group (Years)	**Total Number of Recipients**	**Total Payments**
Under 1	57,679	$237,026,459
1- 5	188,106	$256,827,756
6 - 14	269,143	$321,390,076
15 - 20	124,803	$263,173,731
21 - 44	146,967	$825,322,158
45 - 64	74,917	$755,525,161
65 - 74	35,570	$241,425,052
75 - 84	32,217	$300,014,515
85+	22,284	$268,370,427
Total	951,686	$3,469,075,335

Source: Division of Health Economics (Medicaid), for SFY (July 2002-June, 2003)

The following tables compare Louisiana's Medicaid statistics to those of its neighboring states and the United States.

Medicaid Statistics Louisiana, Neighboring States, and United States, Fiscal Year 2003			
State	**Medicaid Enrollment**	**Medicaid Expenditures ***	**Medicaid Expenditures per Enrollee ***
Alabama	760,527	$3,093,271,000	$4,204
Arkansas	557,074	$2,237,818,000	$4,247
Louisiana	861,846	$4,885,972,000	$5,859
Mississippi	720,304	$2,877,014,000	$4,421
Texas	2,559,248	$13,523,486,000	$5,605
United States	42,740,719	$246,283,943,000	$5,985

* Figures correspond to year 2002; figures for year 2003 not yet available

Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005: (13th Ed.): Morgan Quitno Press, Lawrence, KS.

Medicaid Statistics Louisiana, Neighboring States, and United States, Fiscal Year 1998-2002		
	Percent change in Medicaid expenditures	**Percent change in expenditures per Medicaid enrollee**
Alabama	33.1%	- 7.5%
Arkansas	59.1%	5.6%
Louisiana	53.9%	7.3%
Mississippi	73.8%	5.8%
Texas	38.3%	5.8%
United States	45.8%	10.2%

Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005 (13th Ed.): Morgan Quitno Press, Lawrence, KS.

E. MEDICARE

Medicare provides health insurance to people who are at least 65 years old, the disabled, and those with permanent kidney failure. People who receive Social Security or Railroad Retirement benefits are automatically enrolled when they become eligible for Medicare. Others must apply at their local Social Security offices.

Medicare has two parts: Hospital Insurance (Part A) and Medical Insurance (Part B). Medicare Part A helps pay for inpatient hospital services, skilled nursing facility services, home health services, and hospice care. Medicare Part B helps pay for physician services, outpatient hospital services, medical equipment and supplies, and other health services and supplies. Many Medicare beneficiaries choose to enroll in managed care plans like health maintenance organizations. These beneficiaries are eligible for both Part A and Part B benefits in most managed care plans. A total of 620,196 Louisiana residents were enrolled in the Medicare program in 2003[2].

Medicare Statistics
Louisiana, Neighboring States, and United States, Fiscal Year 2003

State	Medicare enrollment 2003	Percent of population enrolled 2003	Percent of Medicare enrollees in Managed Care Programs 2005
Alabama	719,246	16.0%	8%
Arkansas	452,676	16.6%	0%
Louisiana	620,196	13.8%	11%
Mississippi	436,677	15.1%	0%
Texas	2,390,053	10.8%	8%
United States	41,086,981	13.8%	14%

Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005 (13th Ed.): Morgan Quitno Press, Lawrence, KS.

Medicare Statistics
Louisiana, Neighboring States, and United States, Fiscal Year 2001

State	Medicare benefits payments	Medicare benefit payments per capita	Medicare payments per enrollee
Alabama	$4,270,957,000	$956	$6,144
Arkansas	$2,420,406,000	$898	$5,478
Louisiana	$4,902,926,000	$1,097	$8,099
Mississippi	$2,140,391,000	$748	$5,055
Texas	$16,336,061,000	$764	$7,104
United States	$236,492,552,000	$823	$6,003

Source: Morgan, K.O. and Morgan, S (Editors) 2005. Health Care State Rankings 2005 (13th Ed.): Morgan Quitno Press, Lawrence, KS.

[2] Source: Morgan, K.O. and Morgan, S (Editors.) 2004. Health Care State Rankings 2004: Health Care in the 50 United States. (12th Ed.) Lawrence, KS: Morgan Quitno Press.

F. PROVIDER SITES

The following pages describe the various healthcare facilities available to the public throughout the State of Louisiana. These facilities include the state charity hospital system, small rural and community hospitals, parish health units, rural health clinics, Federally Qualified Health Centers (FQHCs), developmental centers, mental health clinics, mental health and rehabilitation hospitals, and substance abuse prevention clinics. Other programs such as school-based health centers, community care, and health maintenance organizations (HMOs) also are discussed.

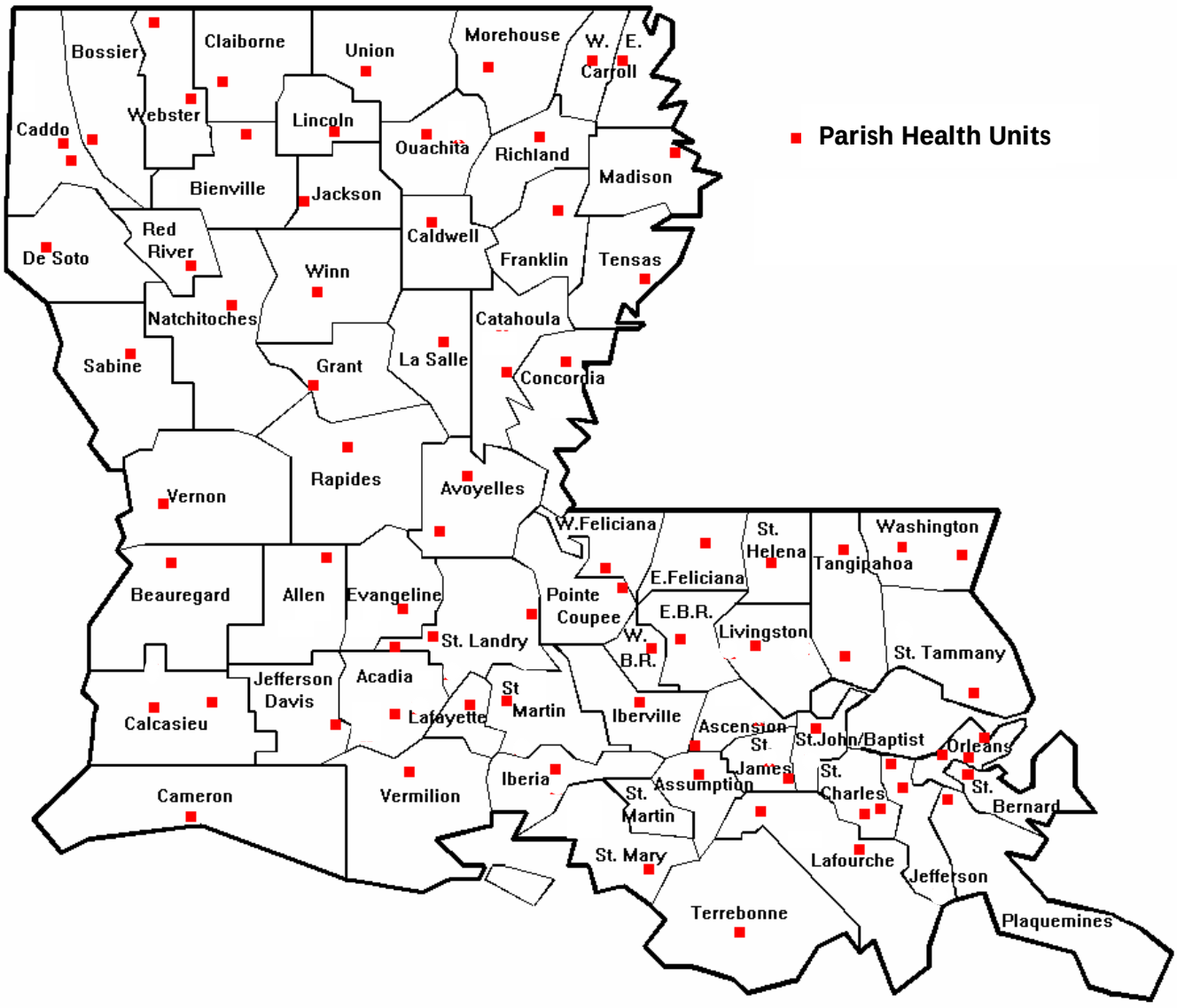
State Charity Hospitals

The Louisiana Charity Hospital System is currently being operated by the LOUISIANA STATE UNIVERSITY HEALTH SCIENCES CENTER (LSUHSC). The first Charity Hospital in New Orleans was built in 1736. The system was expanded across the state during the administration of Governor Huey Long. Two new medical centers were added in 1978 and 1993, and two were rebuilt in the late 1970s.

Most of the charity hospitals are teaching hospitals used to train medical school, graduate, and postgraduate students from LSUHSC's Schools of Medicine and Nursing, as well as other professional educational institutions.

Parish Health Units

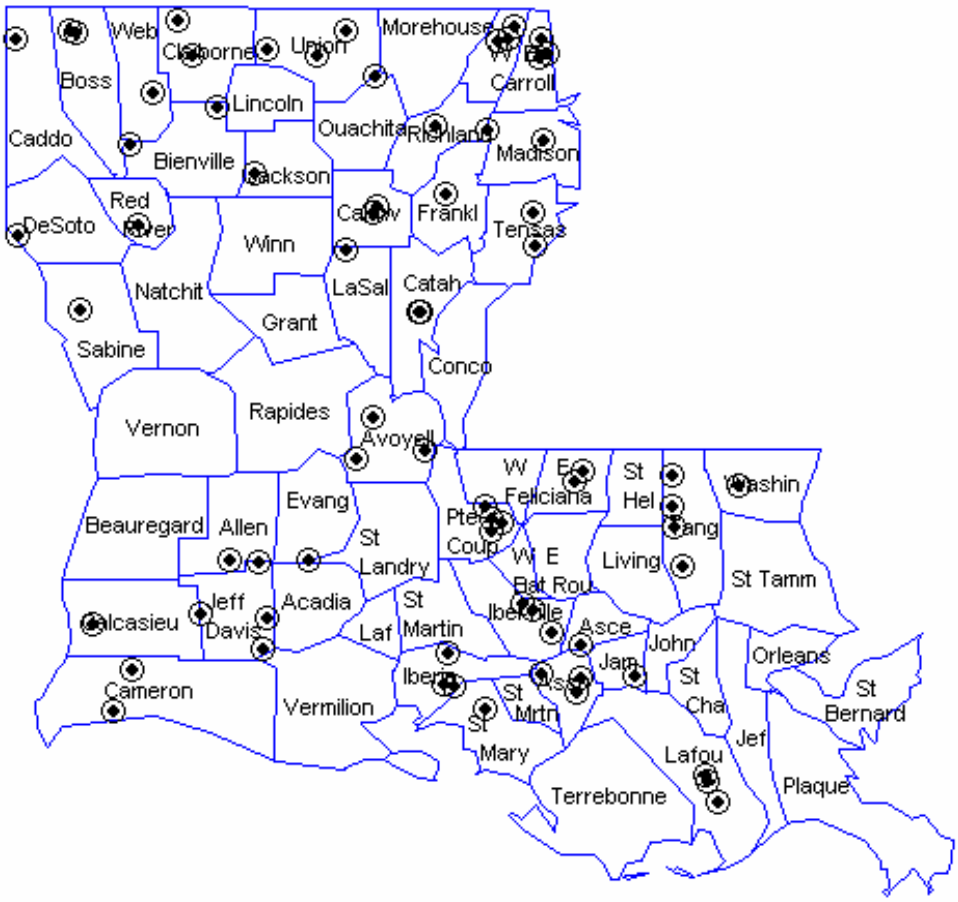
Louisiana has 77 parish health units (PHUs). DHH-OPH currently operates parish health units (see map below) that provide services in the following areas: immunization, family planning, prenatal care, newborn screening for genetic disorders, well-baby care, nutrition therapy, individual nutrition education and counseling, genetic evaluation and counseling, early intervention services for individuals infected with HIV, health education, testing and monitoring of infectious diseases (e.g., tuberculosis, sexually transmitted diseases/HIV/AIDS), environmental health services, and vital records services.



Source: Louisiana Department of Health and Hospitals, Office of Public Health, Center for Community Health

Rural Health Clinics

Louisiana has 76 Rural Health Clinics (RHCS). These facilities are located in non-urbanized areas, as defined by the 2000 Census, and in Health Professional Shortage Areas (HPSAs) or Medically Underserved Areas (MUAs). The facility must be staffed by, at least, one physician and, at least, one mid-level practitioner, such as a physician assistant, a nurse practitioner, or a certified nurse midwife at least 50% of the time the clinic is open. RHCs provide routine diagnostic services, maintain medical supplies, dispense drugs, and have arrangements with local hospitals and other providers for services not available at the clinic.



DHH/Health Standards, December 2005

Small Rural Hospitals

Louisiana has 49 Small Rural Hospitals. A Small Rural Hospital is defined as a hospital, other than a long-term care hospital, rehabilitation hospital, or free-standing psychiatric hospital, but including distinct-part psychiatric units, meeting the following criteria:

a. had no more than 60 hospital beds as of July 1, 1994, and is located in a parish with a population of less than 50,000 or in a municipality with a population of less than 20,000; or
b. meets the qualifications of a sole community hospital under 42 CFR §412.92(a); or
c. had no more than 60 hospital beds as of July 1, 1999 and is located in a parish with a population of less than 17,000 as measured by the 1990 census; or
d. had no more than 60 hospital beds as of July 1, 1997 and is a publicly-owned and operated hospital that is located in either a parish with a population of less than 50,000 or a municipality with a population of less than 20,000; or
e. had no more than 60 hospital beds as of June 30, 2000 and is located in a municipality with a population, as measured by the 1990 census, of less than 20,000; or
f. had no more than 60 beds as of July 1, 1997 and is located in a parish with a population, as measured by the 1990 and 2000 census, of less than 50,000; or
g. was a hospital facility licensed by the department that had no more than 60 hospital beds as of July 1, 1994, which hospital facility:
   i) has been in continuous operation since July 1, 1994;
   ii) is currently operating under a license issued by the department; and
   iii) is located in a parish with a population, as measured by the 1990 census, of less than 50,000; or
h. has no more than 60 hospital beds or has notified the department as of March 7, 2002 of its intent to reduce its number of hospital beds to no more than 60, and is located in a municipality with a population of less than 13,000 and in a parish with a population of less than 32,000 as measured by the 2000 census; or
i. has no more than 60 hospital beds or has notified DHH as of December 31, 2003, of its intent to reduce its number of hospital beds to no more than 60; and
   i) is located, as measured by the 2000 census, in a municipality with a population of less than 7,000;
   ii) is located, as measured by the 2000 census, in a parish with a population of less than 53,000; and
   iii) is located within 10 miles of a United States military base; or
j. has no more than 60 hospital beds as of September 26, 2002; and
   i) is located, as measured by the 2000 census, in a municipality with a population of less than 10,000; and

ii) is located, as measured by the 2000 census, in a parish with a population of less than 33,000; or

k. has no more than 60 hospital beds as of January 1, 2003; and

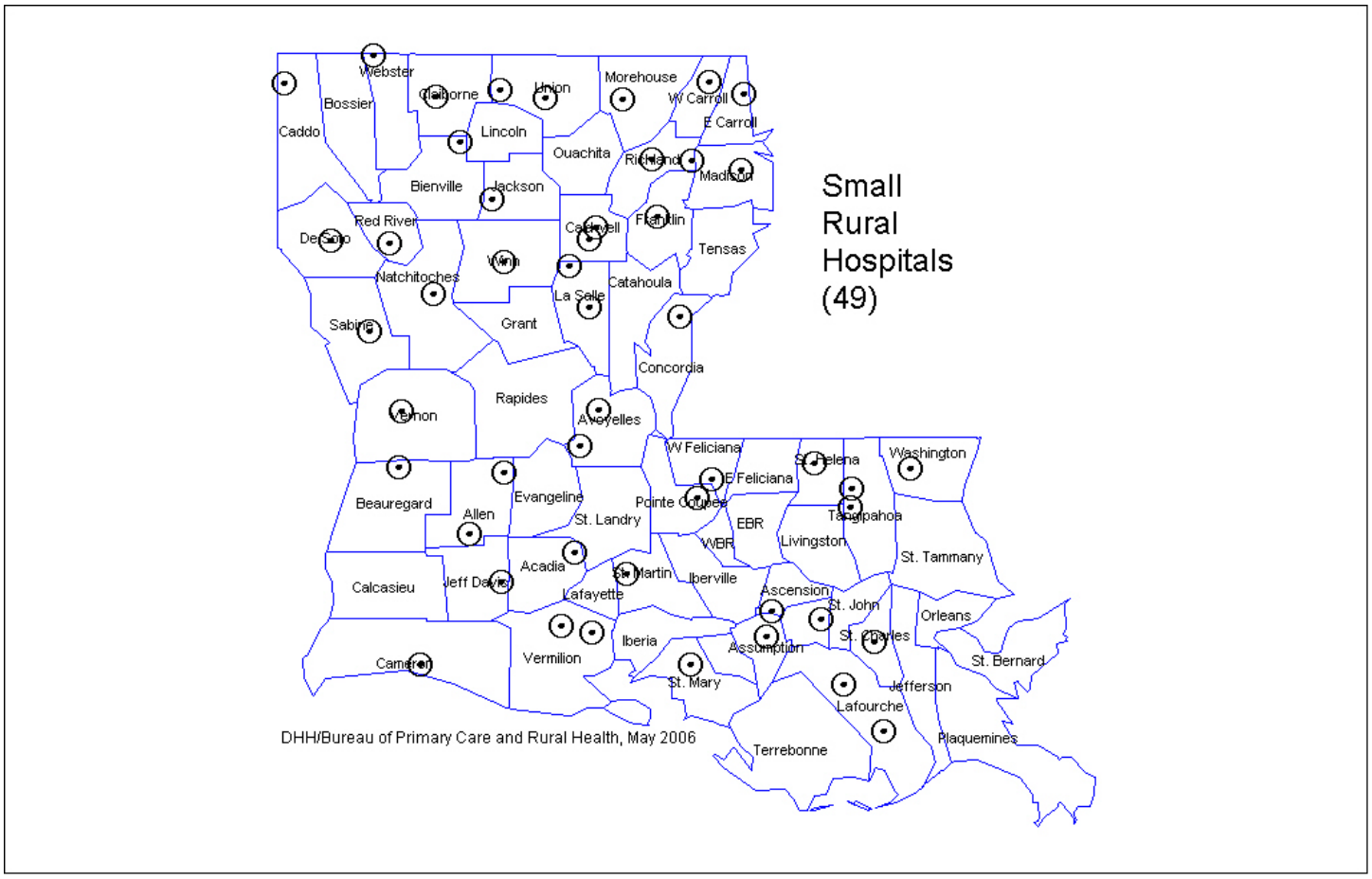
i) is located, as measured by the 2000 census, in a municipality with a population of less than 11,000; and

ii) is located, as measured by the 2000 census, in a parish with a population of less than 90,000; or

l. has no more than 40 hospital beds as of January 1, 2005, and

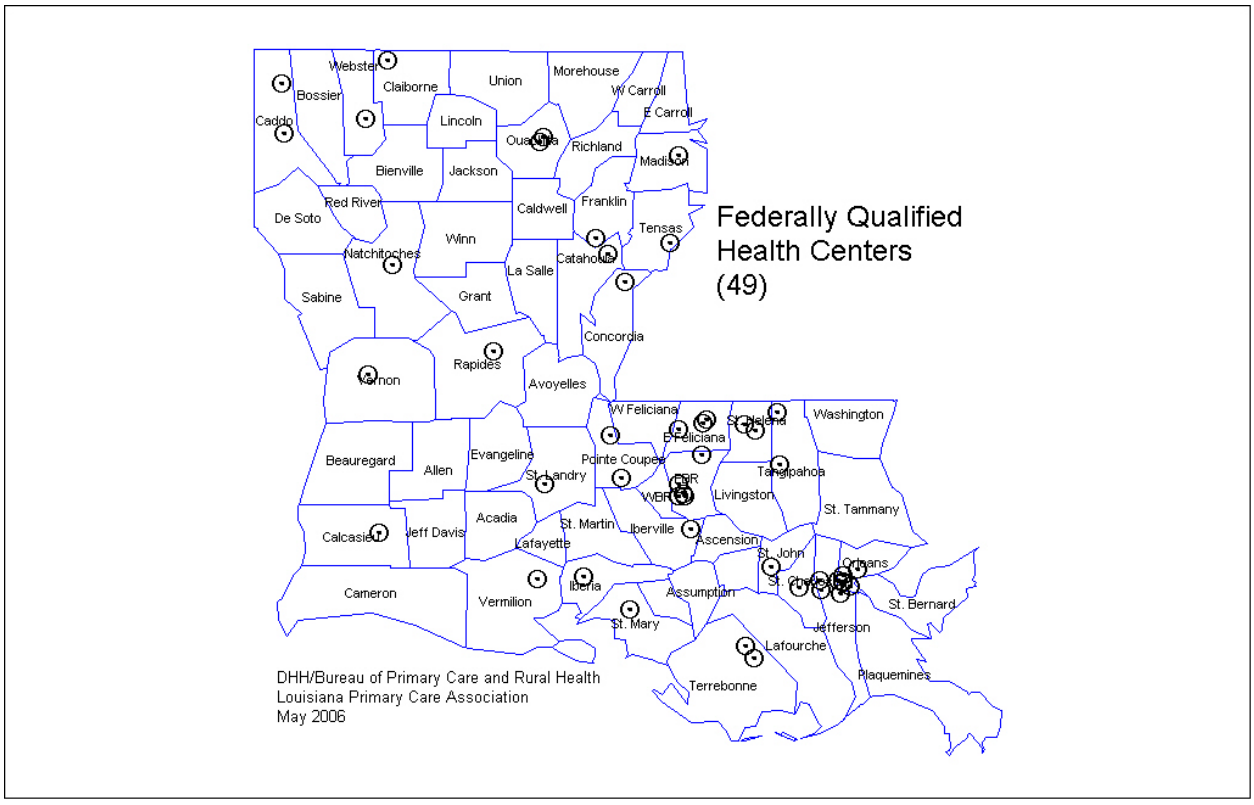
i) is located in a municipality with a population of less than 3,100; and

ii) is located in a parish with a population of less than 15,800 as measured by the 2000 census.



Federally Qualified Health Centers (FQHCs)

Louisiana has 20 grantees for community health centers delivering services to 49 sites supported through a federal grant program funded under Section 330 of the United States Public Health Service Act. FQHCs (also known as Community Health Centers) are health clinics that provide primary and preventive healthcare services in medically underserved areas throughout the United States and its territories. FQHC staff may include primary care physicians (pediatricians, general practitioners, family practitioners, obstetricians, gynecologists, and general internists), advanced nurse practitioners, physician assistants, dentists, social workers, counselors, psychologists, other mental-health and substance abuse professionals, and support staff. Services most commonly provided include primary and preventive healthcare, outreach, dental care, mental health services, laboratory tests, pharmacy services, health education, transportation, translation, and prenatal services.



CommunityCARE

CommunityCARE is a Medicaid primary care case management (PCCM) managed care program that operated in specific parishes in Louisiana under the authority of a 1915(b)(1) waiver from 1992 through April 2001. In May 2001, DHH embarked on a statewide expansion of the program and in December 2003 CommunityCARE was fully implemented statewide. Effective April 1, 2006, the Centers for Medicare and Medicaid Services (CMS) approved Louisiana's request to operate the CommunityCARE program as a State Plan Amendment program instead of a waiver program. CommunityCARE is designed to assure Medicaid recipients a "medical home".

The program links most Medicaid recipients with a physician, clinic, FQHC, or RHC that serves as the primary care provider (PCP). The PCP is responsible for coordinating and providing preventative acute care and health education and maintaining a comprehensive integrated health chart. Referrals and authorizations for medically indicated specialty care, outpatient hospital services, and other ancillary health services are an integral component of the PCP responsibilities.

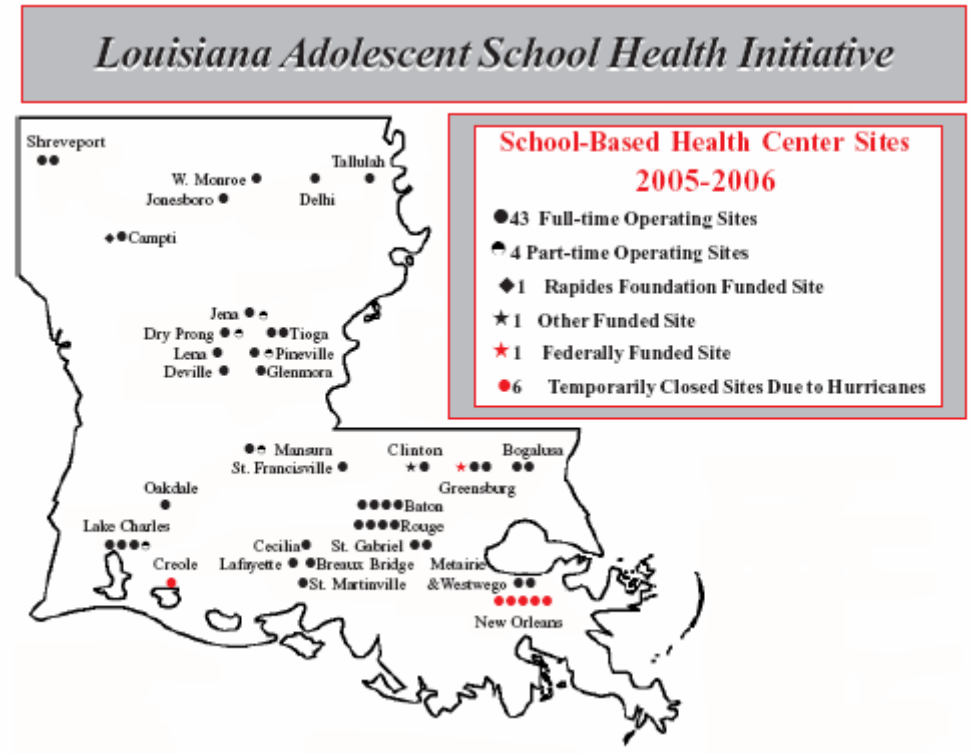
As of August 2006, CommunityCARE has a total of 771 enrolled providers employing a total of 1,465 physicians statewide. PCPs are paid a per member/per month management fee of $3.00 plus fee for service. In addition, the PCP fee for service reimbursement, for certain evaluation and management codes, is paid at an enhanced rate when the service is provided to a CommunityCARE enrollee.

As a result of recommendations by advisory groups of physicians and hospitals, numerous changes have been made in the program to reduce unnecessary paperwork, streamline processes, and ease the administrative burden on PCPs and other providers while maintaining the quality of care. The CommunityCARE quality unit, a staff of registered nurses, conducts ongoing quality improvement projects based on the Health Plan Employer Data and Information Set (HEDIS), the national data collection and reporting instrument that CMS recommends for Medicaid managed care, supplemented by other widely utilized quality measures.

School-Based Health Centers

In response to the Adolescent School Health Initiative Act passed by the Louisiana State Legislature in 1991, DHH-OPH funds and provides technical assistance to localities for the establishment and operation of full service health centers in elementary, middle, and secondary schools (see map below). Currently, there are 47 state-funded sites, one foundation funded site, one federally funded site, and one funded by other sources. Five health centers in New Orleans and one in Cameron Parish were closed due to Hurricanes Katrina and Rita. It is hoped that these will again be up and running by the end of fiscal year 2007. These school-based health centers are sponsored and operated at the local level by a health or education agency under contract with OPH. The state reimburses to each of these centers a portion of their costs.

The centers primarily serve low-income adolescents in rural and medically underserved urban areas. They offer primary and preventive physical and mental healthcare, including health education, and counseling services. They are staffed by physicians, nurse practitioners, registered nurses, and master-level mental-health counselors and have been immensely popular with the high-risk adolescent population.



Developmental Centers

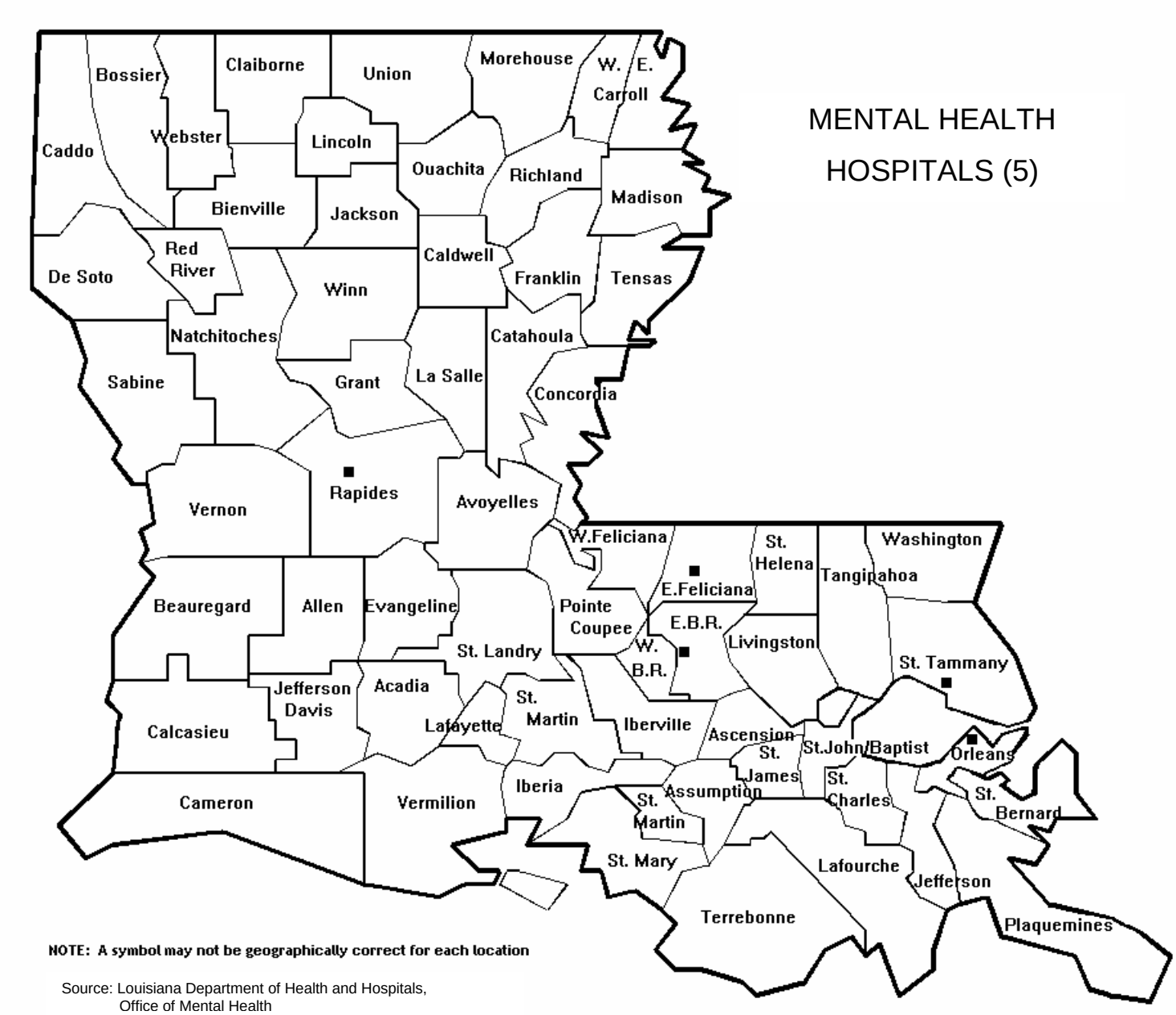
There are seven state-operated developmental centers licensed as Intermediate Care Facilities for persons with Mental Retardation (ICFs/MR) which provide active treatment services and a range of residential services including 24-hour care in large and small settings such as institutions and community or group homes. In addition, these centers provide a variety of services such as extended family living, supported living in one's own home, supported employment, and day habilitation. They include the Hammond, Metropolitan (at Belle Chasse), Northwest (at Bossier City), Peltier-Lawless (at Thibodaux), Pinecrest (at Pineville), Ruston, and Southwest (at Iota) Developmental Centers.

State Developmental Centers (7)

Note: A symbol may not be geographically correct for each location
Source: Office for Citizens with Developmental Disorders

Mental Health Clinics

THE DHH Office of Mental Health (OMH), either directly or through partnerships with private and university resources, provides an array of community-based and hospital-based services, the range of which is consistent with national models for public mental-health care for individuals with serious mental illnesses. Statewide, there are currently 43 community mental-health centers, 33 outreach sites, seven acute treatment units, four intermediate/long-term care hospitals, and one forensic hospital (see map below). Major service components include crisis response programs, assertive community treatment, family or consumer respite care, traditional clinic-based services, community forensic interventions, hospital-based inpatient intensive and intermediate units, case management, and rehabilitative services.

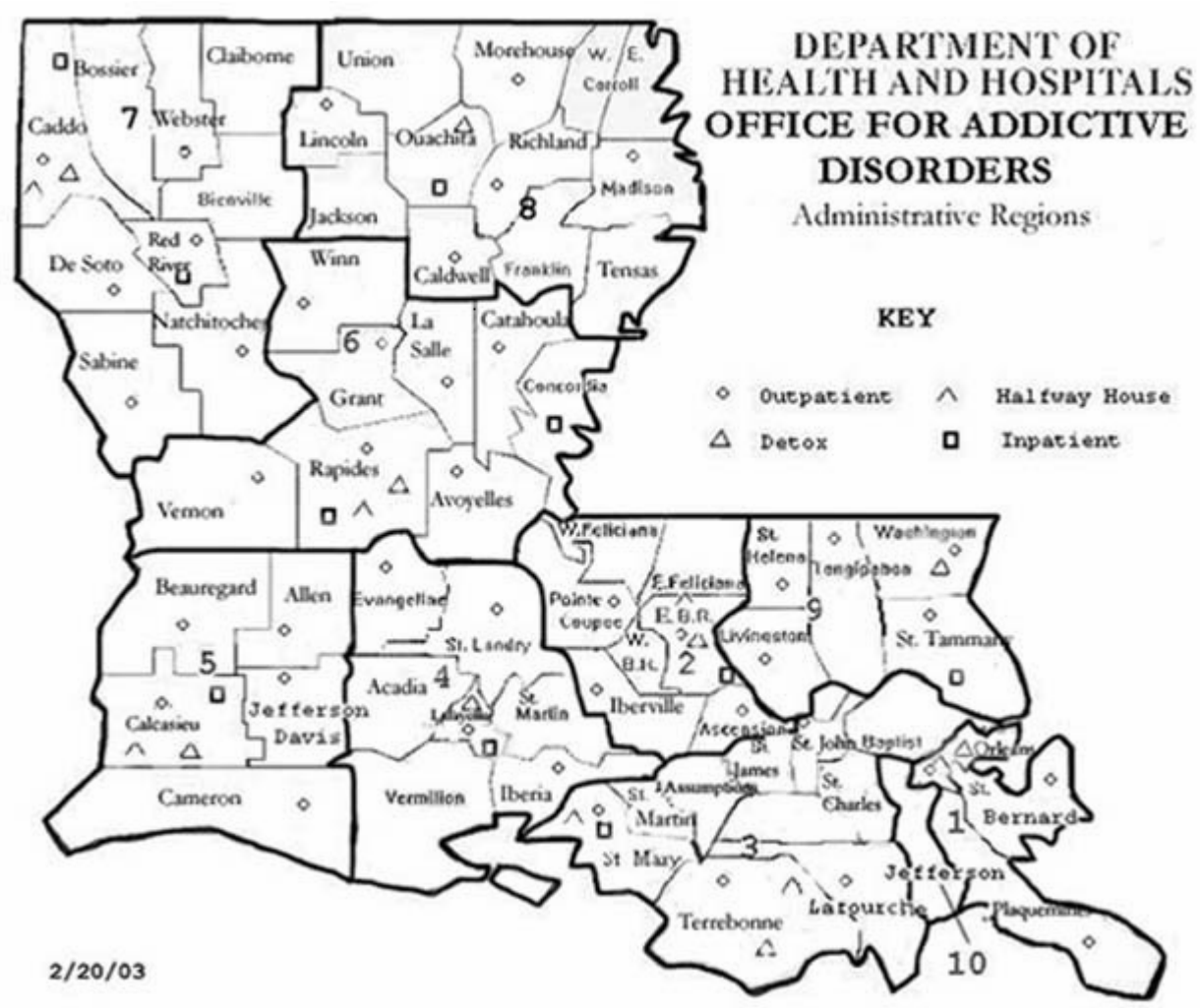


NOTE: A symbol may not be geographically correct for each location

Source: Louisiana Department of Health and Hospitals,
Office of Mental Health

Substance Abuse Prevention Clinics

The DHH Office for Addictive Disorders (OAD) offers a continuum of care for prevention, diagnosis, treatment, rehabilitation, and follow-up care for alcohol and drug abuse through contracts and state-operated facilities. This system is composed of nine treatment delivery regions, with DHH-OAD Region 2 as an independent district. OAD has 12 inpatient clinics (10 adult and two adolescent), 11 detoxification clinics, 16 halfway houses, and three residential facilities. The Prevention Delivery System offers 48 prevention programs.



Source: Louisiana Department of Health and Hospitals, Office for Addictive Disorders

Existing Health Maintenance Organizations

Louisiana currently has 8 licensed health maintenance organizations (HMOs) operating in the state. Under state insurance law, an HMO is defined as any plan delivering basic health benefits for a prepaid fee. Most of the state's HMOs are composed of independent physicians practicing alone or in small medical groups. As of the year 2005, approximately 435,870 Louisiana residents (9.7% of the population) were enrolled in HMOs.[6] In addition to HMOs, the LOUISIANA MANAGED HEALTH CARE ASSOCIATION lists as members preferred provider organizations (PPOs) and several physician hospital networks (PHOs) operating in the state.

G. INVENTORY OF PRIMARY CARE/ MENTAL HEALTH PROVIDERS

Number of Selected Health Professionals by Parish
Louisiana, 2003

Location	*Primary Care Physicians (PCPs)*							*Mental Health Provider*	
Parish	*Family Practice*	*General Practice*	*Infectious Disease*	*Internal Medicine*	*Obstetrics & Gynecology*	*Pediatrics*	*Total PCP*	*Psychiatrists*	*Social Workers*
Acadia	15	3		5	3	5	31	1	8
Allen	5	1		1		3	10		4
Ascension	9	7		11		4	31	1	22
Assumption	4	1					5		2
Avoyelles	9	5		3			17		10
Beauregard	7			3	3	2	15		6
Bienville							0		3
Bossier	17	2		29	10	9	67	2	31
Caddo	68	7	2	217	54	77	423	40	164
Calcasieu	56	8		57	27	23	171	14	92
Caldwell	4			2		1	7		2
Cameron	1			2			3		0
Catahoula	3	1					4		1
Claiborne	5			1		1	7		3
Concordia	4	1		1	2		8		5
DeSoto	1	3		1	2	1	8	1	4
East Baton Rouge	102	35	1	204	78	101	520	42	577
East Carroll	2			1			3		0
East Feliciana	6	5		1	1		13	2	14
Evangeline	7	5		10	4	2	28		1
Franklin	3			1			4		3
Grant	3				1		4		4
Iberia	17	10		13	8	12	60	2	18
Iberville	7	2		6	2	3	20		14
Jackson	1			3		1	5		3
Jefferson	60	29	4	317	90	125	621	61	376

[6] Morgan, K.O. and Morgan, S. (Eds.).2006. *Health Care State Rankings 2006: Health Care in the 50 United States* (14th Ed.) Lawrence, KS: Morgan Quitno Press.

Number of Selected Health Professionals by Parish
Louisiana, 2003

Location	Primary Care Physicians (PCPs)							Mental Health Provider	
Parish	Family Practice	General Practice	Infectious Disease	Internal Medicine	Obstetrics & Gynecology	Pediatrics	Total PCP	Psychiatrists	Social Workers
Jefferson Davis	3	5		7	2	2	19	1	7
Lafayette	48	15		103	42	42	250	20	181
Lafourche	21	6		21	11	8	67	2	23
LaSalle	2	2		3			7		1
Lincoln	6	2		13	3	3	27	1	15
Livingston	7	1		2		1	11		25
Madison		2		1		1	4		2
Morehouse	7	3		5	3	2	20		3
Natchitoches	5	4		7	3	8	27	2	15
Orleans	64	27	3	428	109	201	829	158	798
Ouachita	44	12		74	19	32	181	17	96
Plaquemines	3	2		2			7	2	4
Pointe Coupee	9	3		1	1		14		8
Rapides	36	5		66	19	27	153	20	111
Red River	2	1		1			4		3
Richland	7	1		2	2		12		5
Sabine	2	2		5		1	10		3
St. Bernard	1	1		16	1	3	22	1	15
St. Charles	4	1		4		5	14	2	14
St. Helena	2	1					3		1
St. James	5	1		3	1	2	12	1	6
St. John	7	1		7	4	2	21		12
St. Landry	25	8		18	11	13	75	2	26
St. Martin	5	1		1			7		4
St. Mary	12	2		7	6	3	30		7
St. Tammany	38	9	1	122	38	51	258	34	214
Tangipahoa	19	6		26	8	11	70	3	59
Tensas		2					2		0
Terrebonne	10	7		31	17	16	81	6	39
Union	2	2		4			8		11
Vermilion	4	3		5	1	4	17	2	14
Vernon	3	2		7	2	3	17	1	5
Washington	7	6		9	2	1	25	1	11
Webster	12	4		5	4	2	27		9
West Baton Rouge	5						5		4
West Carroll	1	1		2		1	5		2
West Feliciana	3			2		1	6		11
Winn	2	2		2		1	7		2
Total	849	278	11	1901	594	817	4439	442	3133

Source: Louisiana Board of Medical Examiners, January 2003
Louisiana Board of Certified Social Work Examiners, 2000

H. HEALTH PROFESSIONAL SHORTAGE AREAS (HPSAS)

Health Professional Shortage Area (HPSA) designations identify geographic areas, population groups, or facilities where a lack of primary-care providers poses serious barriers to adequate healthcare. The equitable geographic distribution of healthcare resources has long been recognized as a problem in the United States, particularly Louisiana. Adequate access to healthcare services for all residents is an important objective of current state and federal policy. Availability of an adequate supply and distribution of health professionals is essential to the ability to access basic healthcare services, regardless of ability to pay. The redistribution of the supply of health professionals, particularly primary-care providers, through the designation of HPSAs, is one method used to attain this goal.

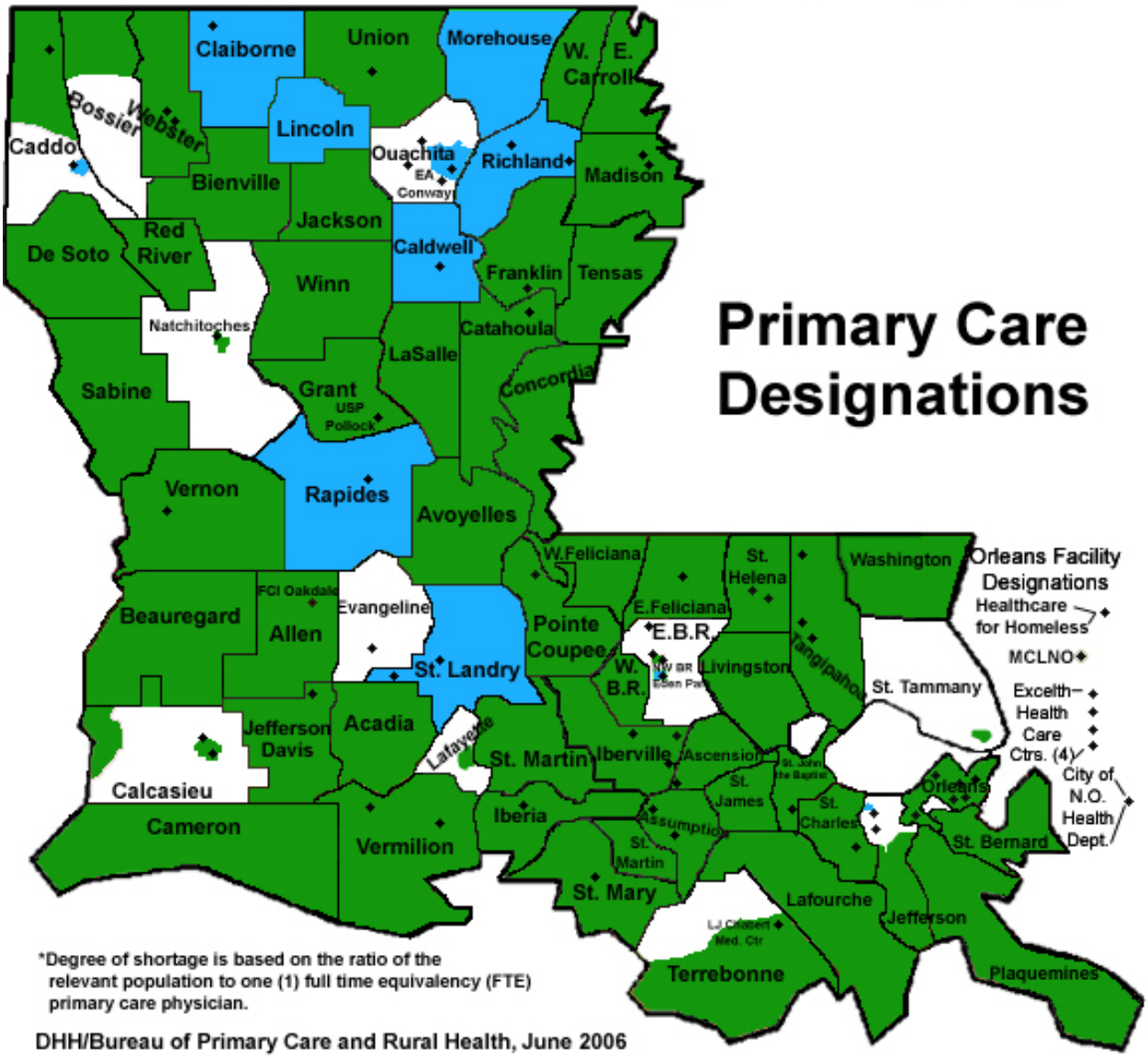
HPSA designations are used to create incentives to improve the distribution and the number of primary care providers in the most critical shortage areas. The designation methodology was developed to determine exactly where shortages exist in order to define those areas eligible for participation in the incentive programs.

Designation requests and reviews are the responsibility of the DHH BUREAU OF PRIMARY CARE AND RURAL HEALTH. After analysis and review, the designation requests and recommendations are forwarded to the Shortage Designation Branch in Health Resources and Services Administration/Bureau of Health Professions/National Center for Health Workforce Analysis (HRSA/ BHPR/ NCHWA), which is a part of the U.S. Department of Health and Human Services. The entire designation process can take up to six to eight months for completion.

There are approximately 34 federal programs utilizing HPSA designations. The following are examples:

- National Health Service Corps
- Medicare Incentive Payments
- J-1 Visa Waiver Program
- Rural Health Programs

Health Professional Shortage Area (HPSA) Map

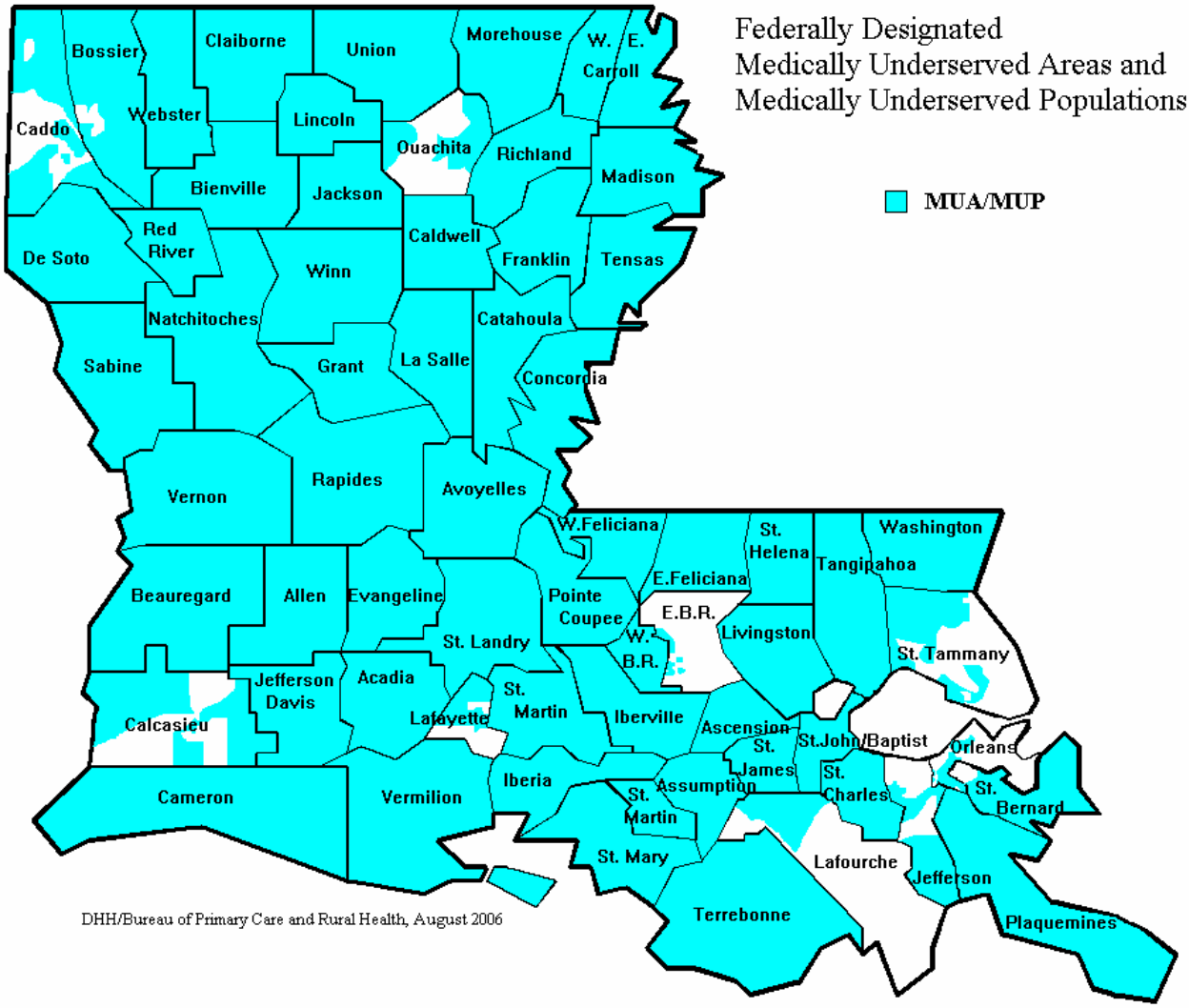


*Degree of shortage is based on the ratio of the relevant population to one (1) full time equivalency (FTE) primary care physician.

DHH/Bureau of Primary Care and Rural Health, June 2006

HPSA DESIGNATIONS LEGEND:

- Geographic Designation
- Population Group Designation
- Facility Designation



Medically Underserved Area and Population designations entitle a provider to many of the same benefits as does Health Professional Shortage Areas (HPSA).

Medically Underserved Areas (MUA) may be a whole parish or a group of contiguous parishes, a group of parish or civil divisions or a group of urban census tracts in which residents have a shortage of personal health services.

Medically Underserved Populations (MUPs) may include groups of persons who face economic, cultural or linguistic barriers to health care.

VI. RECOMMENDATIONS FOR IMPROVING HEALTH STATUS

A. MATERNAL, INFANT, AND CHILD HEALTH

Maternal Mortality

- Conduct an ongoing, formal Pregnancy Associated Mortality Review (PAMR) process under the direction of the State Perinatal Commission, to evaluate deaths and identify opportunities for their prevention.

Infant Mortality

- Implement the recommendations to reduce low birthweight rates (see Low Birthweight section below), since this is a leading cause of infant mortality.
- Expand a systematic review of all fetal and infant deaths (Fetal Infant Mortality Review) to gather information for the development of preventive programs.
- Carry out public and professional education on risk factors for Sudden Infant Death Syndrome (SIDS).
- Encourage the cessation of smoking and avoidance of second-hand smoke during and after pregnancy.
- Extend home-visiting and case-management services to mothers who are at high risk for an adverse outcome and evaluate program effectiveness.
- Formalize a community-based approach through development of Regional MCH Forums designed to increase awareness, promote collaboration, and implement effective intervention strategies to address infant mortality at the local level.
- Monitor the status of pregnancy risk factors with the LOUISIANA PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (LaPRAMS) and employ this information for policy development and implementation of appropriate, effective interventions.
- Enhance communication, collaboration, and coordination with public and private agencies that impact infant mortality and MCH outcomes (i.e., Louisiana STD, HIV, Family Planning, Tobacco Control Programs; Office of Addictive Disorders; Office of Mental Health; Louisiana Public Health Institute; Louisiana MCH Coalition; Louisiana Chapter of the American College of Obstetricians and Gynecologists).
- Increase direct communication with public providers, private providers, and birthing hospitals on state/regional outcome data, current intervention programs, and opportunities to enhance more effective interventions.
- Re-assess available services and needs following Hurricane Katrina, as most of the provision of services to high risk women was eliminated.

Low Birthweight

- Ensure access to prenatal care for all pregnant women, especially minorities, those with low incomes, teenagers, and those living in medically underserved areas.
- Improve access to and utilization of prenatal care by identifying and removing barriers, eliminating factors contributing to racial disparity, and promoting the use of non-traditional obstetrical practitioners in Louisiana (e.g., nurse midwives, nurse practitioners).
- Expand a system of prenatal screening for multiple risk factors (e.g., substance use/abuse, domestic violence, and depression) associated with poor pregnancy outcomes, so that identified women can be referred early for appropriate management.
- Promote healthy oral hygiene during pregnancy, particularly coverage of treatment of periodontal disease currently included as Medicaid-covered services.
- Promote appropriate weight gain during pregnancy, as Louisiana data reveal increased risk of low birthweight in women with too little weight gain.
- Promote preconceptional and interconceptional care with increased availability of Family Planning services, identification of maternal risk factors, and referral for treatment as appropriate.
- Reduce substance abuse (including use of drugs, alcohol, and tobacco) among pregnant women through public education.
- Increase screening, counseling, and treatment services for substance-abusing pregnant women in conjunction with the Office for Addictive Disorders.
- Target women with prior very low birth weight (VLBW) infants with education/prevention messages as part of an overall interconception care service.
- Increase WOMEN, INFANTS, AND CHILDREN (WIC) PROGRAM services for pregnant women.
- Improve surveillance systems to gather information on risk factors in low birthweight pregnancies.
- Increase support for Partners for Healthy Babies, which promotes healthy prenatal behaviors and early prenatal care through media messages and a toll-free hotline that links pregnant women with healthcare providers.
- Initiate a Continuing Medical Education based educational program for healthcare providers, focusing on factors influencing low birth weight births and their prevention.
- Analyze data collected in the LAPRAMS database to assess preventable risk factors associated with low birthweight and to help identify effective and ineffective elements of existing efforts.

Child Health

- Provide access to preventive health services (e.g., health screening, immunizations, parental education) to infants and children in low-income families or to others who do not have access to such services due to geographic or financial barriers, or a lack of providers.
- Support outreach efforts through the Covering Kids and Families Initiative for the Louisiana Children's Health Insurance Program (LaCHIP) in order to increase access to health services.

- Expand health-system development efforts to all areas of the state to insure that all children have access to comprehensive health (primary and specialty), mental health, social, and education services.
- Develop and implement statewide and community-based initiatives for the prevention of unintentional injuries, which are the leading cause of death in children over the age of one year.
- Support local Child Death Review Panels for the review of all unexpected deaths in children under 15 years of age in order to develop interventions for the prevention of such deaths.
- Conduct public awareness media campaigns on issues related to improving the health and safety of infants and children such as Safe Sleep Environments, Safe Havens, and prevention of injuries due to motor vehicles, drowning, fire, and suffocation.
- Establish comprehensive systems of services for young children and their families through which their needs are addressed.
-

Child Abuse and Neglect

- Increase public awareness of child abuse prevention and positive parenting and promote parenting education.
- Expand home visiting services to families at high risk for child abuse and neglect, utilizing the Nurse Family Partnership Visiting Model.
- Educate healthcare providers in the assessment of the parent-child relationship for early detection of families who are at risk for child abuse and neglect.
- Implement, in several regions of the state, a new program for at-risk pregnant women and women with babies using a health/infant mental health intervention focus to strengthen overall child outcomes, including reducing the risk of abuse and neglect.
-

Child Care

- Promote health and safety in out-of-home childcare by utilizing childcare health consultants.
- Provide expertise and leadership in the development and enhancement of childcare standards.
- Sustain the coalition of state and local health professionals, government and community agencies, child care providers, and concerned citizens to address health and safety childcare issues.
- Utilize a multi-disciplinary community approach to improve quality of childcare facilities.
- Utilize childcare health consultants to assist childcare centers to integrate children with special health care needs into their facilities.
-

Teenage Birth Rates

- Facilitate the community's capacity to address teenage pregnancy through provision of information and resources.

- Provide educational enrichment and economic opportunities to strengthen the family and the community.
- Involve both the public and the private sectors in developing community-centered, sustainable, collaborative, innovative and adolescent-focused programs.
- Encourage age-appropriate sex and family life education at home by parents.
- Provide age-appropriate family life education in schools, focusing on abstinence and the delay of sexual activity.
- Ensure access to information on safe sex practices and contraceptives.
- Provide culturally appropriate, intensive, long-term programs that recognize family and community values.
- Provide resources to adult mentors, peers, and community members with similar backgrounds and experiences to facilitate a variety of approaches.
- Mobilize multi-disciplinary teams involving teachers, health professionals, social workers, and community leaders.
- Develop multi-message programs addressing school drop-out; real life options; job exploration, training, and placement; and individual and family counseling when necessary.
- Provide comprehensive adolescent health clinics that are community-based, school-based, and/or school-linked.
- Ensure youth involvement and leadership in program design, implementation, and evaluation.
- Infuse adolescent voices into planning and policy-making efforts.
- Assist local communities in 1) identifying needs and potential resources; 2) prioritizing problems; 3) developing solutions; and 4) evaluating impact.
- Provide technical assistance, and give presentations on adolescent health to community based organizations, institutions, and other agencies.
- Coordinate community-based awareness summits, conferences, and church activities.
- Spearhead statewide teen pregnancy prevention observances annually.

B. INFECTIOUS DISEASES

Surveillance and Epidemiologic Response

- Conduct surveillance activities to identify disease trends and risk factors for acquiring infections.
- Coordinate or implement preventive measures required after reporting communicable diseases.
- Investigate outbreaks and recommend or implement preventive measures.
- Develop appropriate statewide guidelines for the prevention, surveillance, and management of communicable diseases of public health importance.
- Assist healthcare facilities in planning and implementing infection control programs.

- Provide education and information to the public and health professionals regarding infections of public health importance.

Bioterrorism

- Provide for early detection of exposure to bioterrorism agents and early identification of diseases due to bioterrorism agents.
- Prepare for early and efficient response to bioterrorism events.
- Plan preventive measures to minimize adverse consequences of bioterrorism events.
- Disseminate information on identification of and response to bioterrorism events to health professionals.
-

Other Infectious Disease Objectives

- Conduct surveillance of antibiotic resistance through passive reporting of invasive diseases through active laboratory surveillance of select agents and compilation of hospital antibiograms in a statewide summary.
- Implement a broad-based program directed at the health professionals and the public to promote appropriate antibiotic use for outpatient upper respiratory infections.
- Implement an educational program for judicious use of antibiotics in health-care facilities.
- Coordinate and foster in sexually transmitted disease clinics and HIV/AIDS program sites screening and educational activities to prevent hepatitis C.
- Provide education and information to the public concerning hepatitis C.
- Continue active surveillance for influenza cases each year in order to inform health-care providers and the public about the proper time to be immunized each fall.

Tuberculosis

- Continue the practice of directly observed therapy (DOT) to ensure completion of therapy
- Expand surveillance for TB through liaisons with hospital infection control practitioners and private medical groups in high-incidence areas
- Enhance the capacity to provide field-based outreach and ensure thorough case and contact follow-up
- Ensure that the in-patient treatment facility at Villa Feliciana remains a treatment option for drug-resistant, recalcitrant, or other TB patients who require close supervision of therapy
- Assure prompt medical assessment of foreign-born persons entering the state with evidence of TB

Sexually Transmitted Diseases (STDs) and HIV/AIDS

- Promote abstinence among persons who are not sexually active.
- Encourage condom use among persons who may have high-risk sexual behavior and increase distribution of and accessibility to condoms.

- Provide STD and HIV testing and counseling, group educational sessions, and outreach to persons at high risk for STDs and HIV/AIDS.
- Increase access to clinical services for people with STDs to ensure rapid treatment and thereby reduce spread of STDs and vulnerability to HIV.
- Increase awareness of asymptomatic STD infection, especially gonorrhea and chlamydia in the young adult population, and the need to screen both men and women for those infections.
- Enhance partner notification activities for syphilis, all other STDs, and HIV/AIDS.
- Enhance statewide efforts to promote syphilis elimination.
- Continue support for public awareness and professional education regarding HIV/AIDS in pregnant women, the effective use of anti-retroviral drugs in preventing perinatal transmission, and education for all people regarding the public health threat of STDs and HIV/AIDS.

C. ORAL HEALTH

- Continue to strengthen the fluoridation program infrastructure within OPH.
- Continue to promote expansion of community water systems that adjust water fluoridation levels to optimal range for the reduction of dental cavities.
- Ensure continuous monitoring of all public water systems that fluoridate and provide technical assistance to all public water systems operators.
- Provide education to the public, policymakers, and dentists regarding the status of optimal water fluoridation in Louisiana.
- Increase access to pit and fissure dental sealants among school children in Louisiana.
- Provide education to the public, policymakers, and dentists regarding current pit and fissure sealant utilization rates among populations at risk for dental caries.
- Work with the DHH Bureau of Health Services Financing to increase Medicaid dental coverage for at-risk special-needs populations.
- Provide education to the public, policy makers, dentists, and obstetricians regarding the relationship between periodontal disease in pregnant women and premature births.
- Continue to work with Medicaid/LaMOMS outreach programs to inform pregnant women about the dental program available to them.
- Provide tobacco cessation training to future dental healthcare professionals.

D. CHRONIC DISEASES

Tobacco

Evidence Based Strategies that Work

- Increase the excise tax on tobacco products. This would directly correlate with a decrease in tobacco consumption by youth and provide funds for increased tobacco control efforts to be accomplished and thus help in long-term improvement of health for Louisiana's residents.
- Conduct an effective mass-media campaign as an intervention which is useful in reducing the consumption of tobacco products and increasing cessation among current tobacco users.
- Incorporate a policy requiring a comprehensive provider-education program and insuring a provider-reminder system for smoking cessation by health-insurance providers which include cessation services. This would allow for increased smoking cessation efforts by those individuals who use tobacco.
- Eliminate exposure to secondhand smoke by working at the local level to enact local smoke-free air ordinances which encompass smoke-free workplaces, public places, schools, and restaurants, among other facilities.

Diabetes

- Advocate maintenance of optimal weight levels and physical activity.
- Increase intake of fruits, vegetables, and grains while reducing fat in the diet.
- Promote working continuously with a physician to control blood sugar levels and monitor hemoglobin A1c through regular testing.
- Encourage adoption of healthy lifestyles.
- Advocate maintenance of normal blood pressure and cholesterol levels.
- Encourage annual retinal exams.
- Promote daily inspection of feet.
- Urge patients to have their feet checked annually.
- Encourage annual influenza shots.
- Encourage pneumococcal shots.
- Promote daily self-administered blood-glucose checks.

Heart Disease/Stroke

- Advocate for programs that promote community awareness of signs and symptoms of stroke and the need to call 911.
- Advocate for reimbursement of rehabilitation and follow up care for heart disease and stroke victims.
- Advocate for systems change that encourages adherence to national guidelines for appropriate stroke treatment.

- Advocate for systems change that encourages adherence to national guidelines for appropriate treatment and follow up of heart disease.
- Advocate for policy development that ensures increased adherence to national guidelines for the prevention and control of high blood pressure and high cholesterol through screening and follow-up.
- Advocate for programs that assist worksites in providing and promoting detection and follow-up services for employees for control of blood pressure and cholesterol.
- Advocate for programs that inform the public that high blood pressure and high cholesterol is a major modifiable risk factor for heart disease and stroke.
- Advocate for programs that inform the public that having blood pressure and cholesterol checks is an important first step in reducing the risk of heart disease and stroke.

Asthma

- Support existing programs and foster statewide implementation of regional pilot projects.
- Promote annual influenza and pneumonia immunizations.
- Promote disease management activities, especially for people with moderate to severe persistent asthma.
- Advocate for the development of primary guidelines to ensure that all primary care providers and/or clinic staff are equipped to counsel people with asthma and their care givers in asthma-management and episode prevention.
- Advocate for screening of all Louisiana children for asthma.
- Eliminate exposure to secondhand smoke.
- Advocate for asthma education for all people with asthma as well as their teachers, parents, and caregivers.
- Adjust the literacy level of asthma publications in Louisiana.

E. Alcohol, Drug, and Other Addictions

Prevention

- Implement research-based/evidence-based prevention programs statewide.
- Maintain the sale of tobacco products to minors at a 10% or lower non-compliance rate through the Synar Program.
- Continue the Center for Substance Abuse Prevention's State Incentive Grant activities empowering the Governor with enhanced capability to coordinate, enforce, and integrate effective prevention strategies into the state's Prevention Plan for its residents.
- Develop and implement a compulsive gambling prevention curriculum in the school system and for elderly citizens statewide.
- Continue to offer Tobacco Cessation Services for all Office for Addictive Disorders(OAD) clients.

- Partner with the Office of Alcohol and Tobacco Control of the Louisiana Department of Revenue regarding the access of alcohol to minors.

Treatment and Prevention

- Promote and support healthy lifestyles for individuals, families, and communities by maintaining a comprehensive and accessible system of prevention/treatment services as part of a fully integrated healthcare system which is effective, dynamic, flexible, and continually improving.
- Put a "new face" on addiction, substance use, abuse, dependence and their consequences to eliminate stigma and recognize that they are preventable and treatable health care issues that affect all aspects of society.
- Identify and eliminate barriers in all systems and increase access to services so that individuals, families, and communities may receive appropriate services when and where they are needed.
- Make decisions using all available data and information to support the provision of effective and efficient services.
- Institute best practices that will improve the quality and effectiveness of our services and workforce.
- Commit OAD resources to develop the workforce and programs to assure they are capable and ready to provide the best quality of services.
- Respond to identified needs through innovative polices, programs, and practices.
- Provide a comprehensive array of prevention and treatment services to meet the needs of problem and compulsive gamblers and expand Intensive Outpatient capacity in four areas of the state.
- Continue the development of recovery homes and therapeutic community models as part of the community-based treatment continuum.
- Implement recommendations from the Governor's Health Care Summit.
- Explore a Medicaid waiver or pre-authorization as a means of providing substance-abuse treatment services to the Medicaid-eligible population.
- Collaborate with the Office of Mental Health in building an infrastructure to support assessing and treating co-occurring disorders, both in outpatient and inpatient settings.
- Outreach with Faith-Based and Community-Based Organization to assist in expanding capacity for clinical and recovery support services.
- Adopt a screening instrument for substance abuse, mental health and domestic violence issues as part of the screening of pregnant women served in public and private settings statewide.
- Provide treatment accessibility and priority admission to women with dependent children in need of long-term residential treatment.

F. Unintentional Injuries

- Continue pursuing an aggressive “don’t drink and drive” and promoting the use of seat restraints in motor vehicles.
- Support policies and promote social norms about safer firearm storage.
- Further encourage parents to invest time in accompanying their newly licensed drivers and uphold a “no-passenger” rule for the first year of licensure.
- Promote and practice alcohol and drug-free driving, use of seatbelts, and child seat restraints.
- Continue promoting the use of helmets consistently when biking.
- Teach children to avoid matches and cigarette lighters, and keep these materials in a child-secure place.
- Encourage the public to learn to swim to make sure everyone in the family can swim.
- Stress the use of personal flotation devices around bodies of water.

G. Intentional Injuries

- Practice and support social norms that repudiate violence against women.
- Support policy and resources to protect and rehabilitate children who witness or experience violence.

Child Death

- Support polices recommended by Child Death Review Panels.
- Follow all safety rules for all-terrain-vehicle (ATV) use.
- Work to promote resources for and to identify and prevent child abuse.
- Promote policies to provide services for adolescents and adults abused as children.
- Continue promoting of a safe sleep environment for infants.
- Further support the practice of home fire drills.
- Continue an aggressive campaign against leaving children alone in cars.

H. Mental Health

- Assure the provision of a system of mental health services based on best practices, which are responsive to the assessed and self-identified needs of consumers, families, and the communities in which they live.
- Provide the greatest impact on the quality of life for individuals within the state mental health system.
- Provide quality services that are cost-effective.
- Provide person-centered care to meet the individual’s and family’s needs.
- Provide a continuum of services in collaboration with multiple stakeholders.

- Decrease the stigma associated with mental illness by increasing public education efforts.
- Enhance consumer and family participation in the planning, delivery, and monitoring of services and settings, especially concerning suicide issues.
- Focus on prevention and early intervention efforts to minimize the impact of mental illness.
- Treat each person served by the mental health system in a holistic manner with services tailored to meet their individual needs.
- Educate and train all physicians to recognize the signs and symptoms of persons with mental illness and/or at risk for suicide, so that appropriate referrals can be made and/or intervention measures taken.

Contact Information

Louisiana Department of Health & Hospitals	http://www.dhh.state.la.us
Office of Public Health	http://www.dhh.louisiana.gov/offices/?ID=79
Office for Addictive Disorders	http://www.dhh.state.la.us/offices/?ID=23
Office for Citizens with Developmental Disabilities	http://www.dhh.state.la.us/offices/?ID=77
Office for Community Services	http://www.dss.state.la.us/departments/ocs/Index.html
Office of Mental Health	http://www.dhh.state.la.us/offices/?ID=62
Children's Special Health Services	http://www.dhh.louisiana.gov/offices/?ID=256
Chronic Disease Control	http://www.dhh.louisiana.gov/offices/?ID=243
Environmental Epidemiology & Toxicology	http://www.dhh.louisiana.gov/offices/suboff.asp?ID=242
Family Planning	http://www.dhh.louisiana.gov/offices/?ID=262
Administration & Technical Support	http://www.dhh.louisiana.gov/offices/?ID=195
HIV/AIDS	http://www.dhh.louisiana.gov/offices/?ID=264
Immunizations	http://www.dhh.louisiana.gov/offices/?ID=265
Infectious Epidemiology	http://www.dhh.louisiana.gov/offices/?ID=249
Injury Research & Prevention	http://www.dhh.louisiana.gov/offices/?ID=221
Maternal & Child Health	http://www.dhh.louisiana.gov/offices/?ID=267
Oral Health	http://www.dhh.louisiana.gov/offices/page.asp?id=267&detail=6347
Sexually Transmitted Diseases	http://www.dhh.louisiana.gov/offices/?ID=272
State Center for Health Statistics	http://www.dhh.louisiana.gov/offices/?ID=275
Tuberculosis	http://www.dhh.louisiana.gov/offices/?ID=273
Vital Records Registry	http://www.dhh.louisiana.gov/offices/page.asp?ID=252&Detail=6489
Women, Infants, & Children (WIC) Nutrition Program	http://www.dhh.louisiana.gov/offices/?ID=269

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