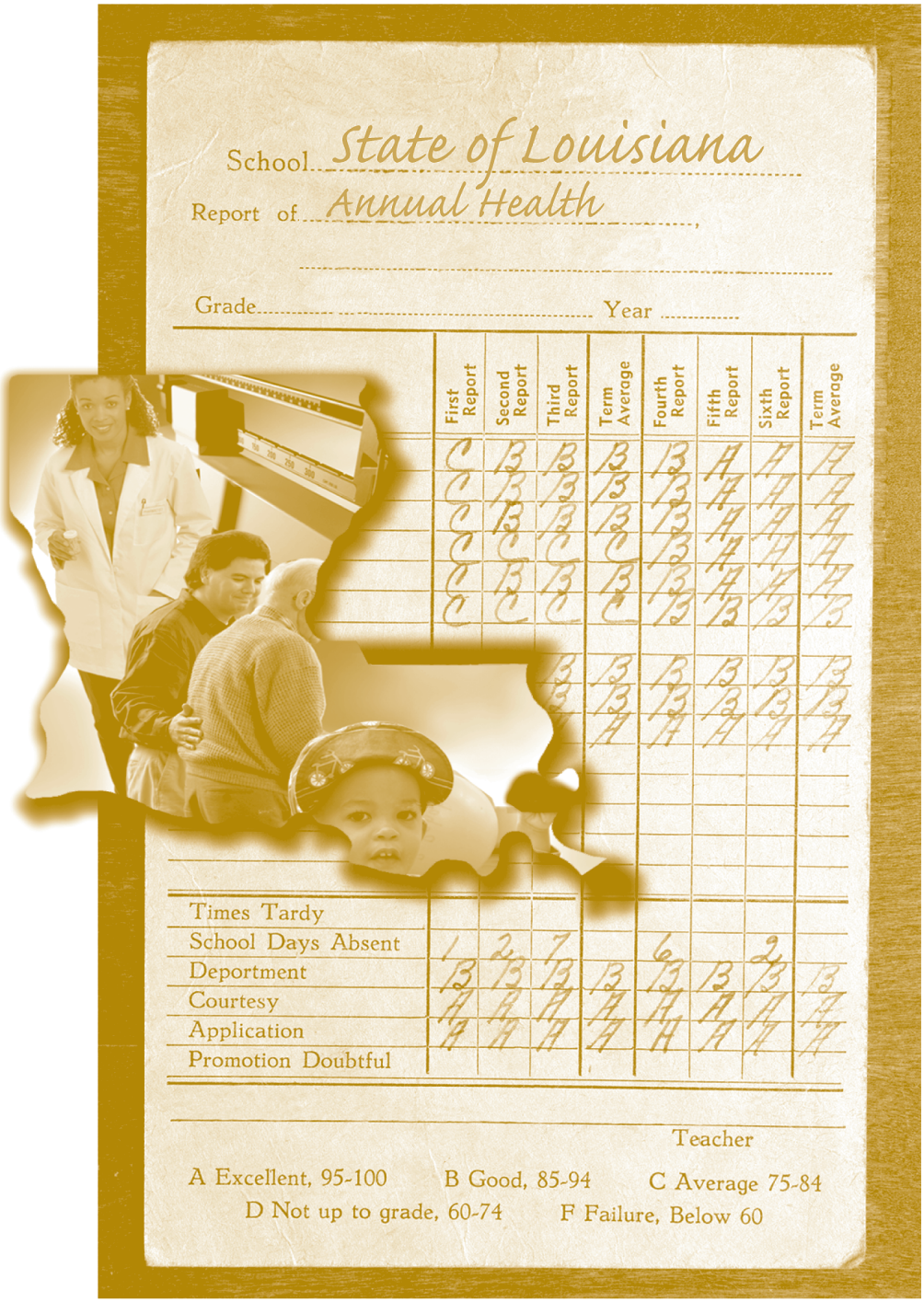
2007 Louisiana Health Report Card



Submitted to the Governor and Louisiana Legislature 2008

As required by R.S. 40:1300.71

Bobby Jindal
Governor

Alan Levine
Secretary
Department of Health and Hospitals

2007 LOUISIANA HEALTH REPORT CARD

As mandated by R.S. 40:1300.71

Bobby Jindal
Governor

Alan Levine
Secretary, Department of Health and Hospitals

Submitted to the Governor and the Louisiana Legislature
March, 2008

Louisiana Department of Health and Hospitals
Office of Public Health

Alan Levine, BS, MHS, MBA
Secretary
Department of Health and Hospitals

Sybil M. Richard, RPh, MHA, Esq.
Deputy Secretary

M. Rony Francois, MD, MSPH, PhD
Assistant Secretary

Darlene W. Smith, BA
Center Director and State Registrar
Center for Records and Statistics

Editors

Robert Starszak, MS, MPH
Manager, State Center for Health Statistics

Rafael A. Jarpa, MS
Public Health Epidemiologist Supervisor

Production Staff: State Center for Health Statistics

Suresh N. Belame, MD, MPH
Public Health Epidemiologist

Shamim Akhter, MD, MPH
Public Health Epidemiologist

With the assistance of:

Shenkang Yu, MS
Public Health Epidemiologist

Cover Design
Auxiliary Enterprises
Louisiana State University, Health Sciences Center

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.

A Publication of the
Department of Health and Hospitals
Office of Public Health
State Center for Health Statistics
1450 L & A Road
Metairie, LA 70001
(504)219-4515
Website: www.oph.dhh.state.la.us

Bobby Jindal
GOVERNOR

STATE OF LOUISIANA
DEPARTMENT OF HEALTH AND HOSPITALS

LOUISIANA
Department of HEALTH and HOSPITALS
Alan Levine
SECRETARY

May 1, 2008

Dear Governor Jindal, Legislators, and Fellow Louisianans:

The Department of Health and Hospitals, Office of Public Health (DHH/OPH), is pleased to present this 2007 *Louisiana Health Report Card*, as required by state law, along with this *Health At-A-Glance, 2005* poster. These publications are 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. Chart, 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 *2007 Louisiana Health Report Card* and the *Health At-A-Glance, 2005* poster are 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 these reports continue to prompt discussion and meet informational needs as we all work together to improve health status in Louisiana.

Sincerely,

Alan Levine
Secretary

AL:blg
Attachments

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 tenth 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.

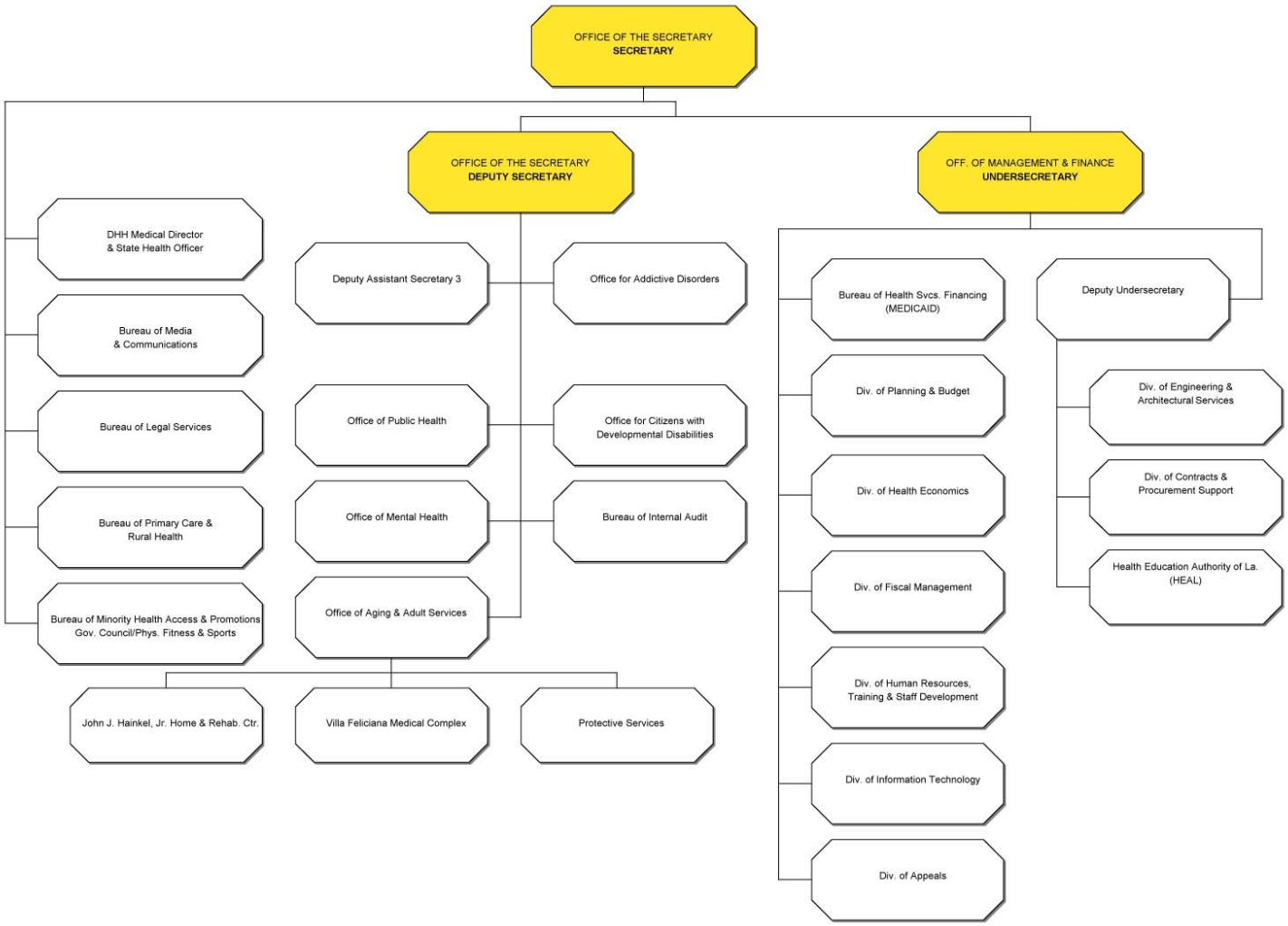
The last three sections address current health care initiatives, the state’s health care delivery system, and future measures for health status improvement. These sections are: “Preventive Health Outreach and Service Programs,” “Louisiana State Health Care System,” and “Recommendations for Improving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

May 2007




7
8
6
2
9
5
4
1
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 2005 by the U.S. Census Bureau and National Center for Health Statistics (NCHS). According to these estimates, Louisiana's resident population was 4,523,628 as of July 1, 2005. The state's subgroup estimate counts for 2005 are given in the following table:

Louisiana Population, 2005 *

Gender	Race	Age Group (Years) <5	5-19	20-44	45-64	65-84	85 & +	All*
Male	White	91,426	283,121	513,606	381,382	154,565	13,954	1,438,054
	Black	69,754	198,510	254,094	143,586	42,828	4,436	713,208
	Other	3,372	10,972	20,594	10,514	2,777	230	48,459
Female	White	87,391	267,656	501,764	389,360	200,398	33,001	1,479,570
	Black	67,203	193,011	286,487	173,937	65,533	10,301	796,472
	Other	3,298	10,216	19,515	11,278	3,206	352	47,865
All*	Total	322,444	963,486	1,596,060	1,110,057	469,307	62,274	4,523,628

Source: * Bridged-Race Population Estimate 2005, U.S. Census Bureau & NCHS (Released in August, 2006)

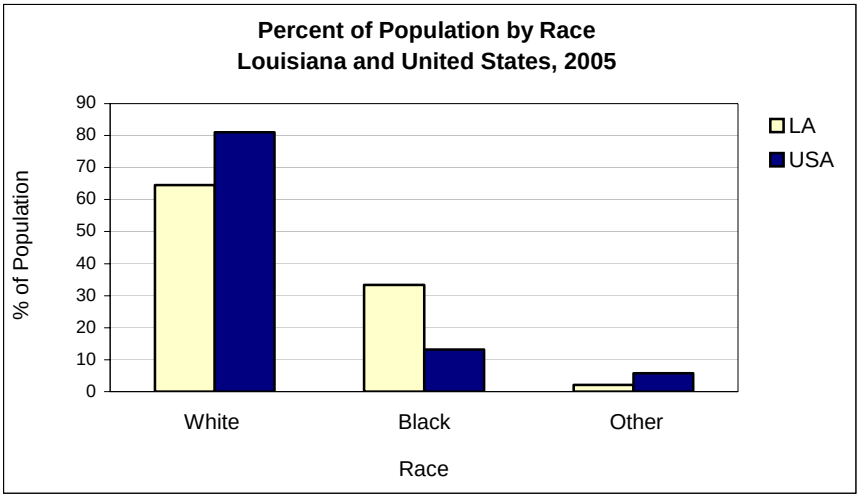
A comparison of the year 2005 population estimates shows that Louisiana and the United States have very similar age distributions.

Percent of Total Population by Age Group
Louisiana and United States, 2005

	Age Group (Years) <5	5-19	20-44	45-64	65-84	85 & +	All Ages
Louisiana	7.1	21.3	35.3	24.5	10.4	1.4	100.0
United States	6.8	20.7	35.4	24.6	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 33.4% of the state's population, versus 13.2% nationally.

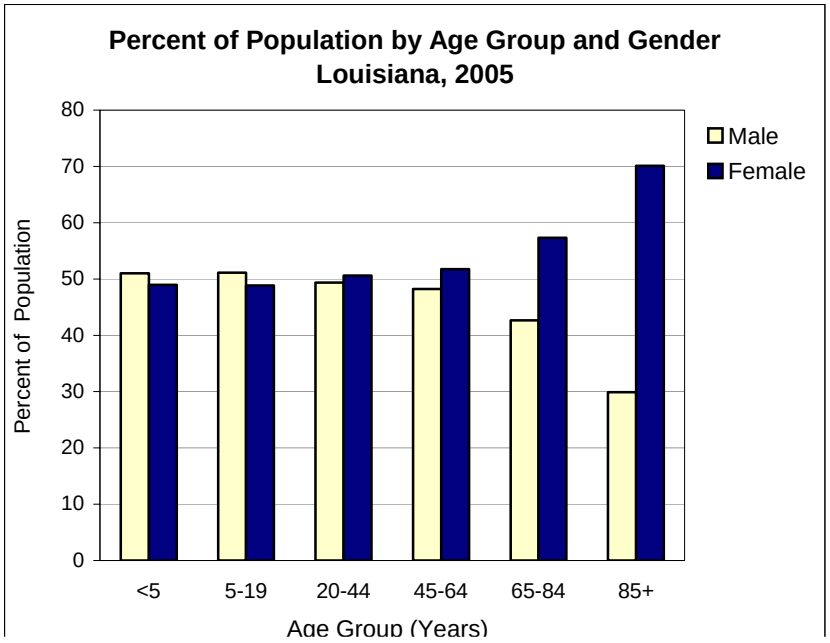


Source: Calculation based on Bridged-Race Population Estimate 2005, U.S. Census Bureau & NCHS

Percent of Total Population by Race Louisiana and United States, 2005				
	Race			
Location	White	Black	Other	Total
Louisiana	64.5	33.4	2.1	100.0
United States	81.0	13.2	5.8	100.0

Source: Calculation based on Bridged-Race Population Estimate 2005, U.S. Census Bureau & NCHS (Released on August 2006)

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



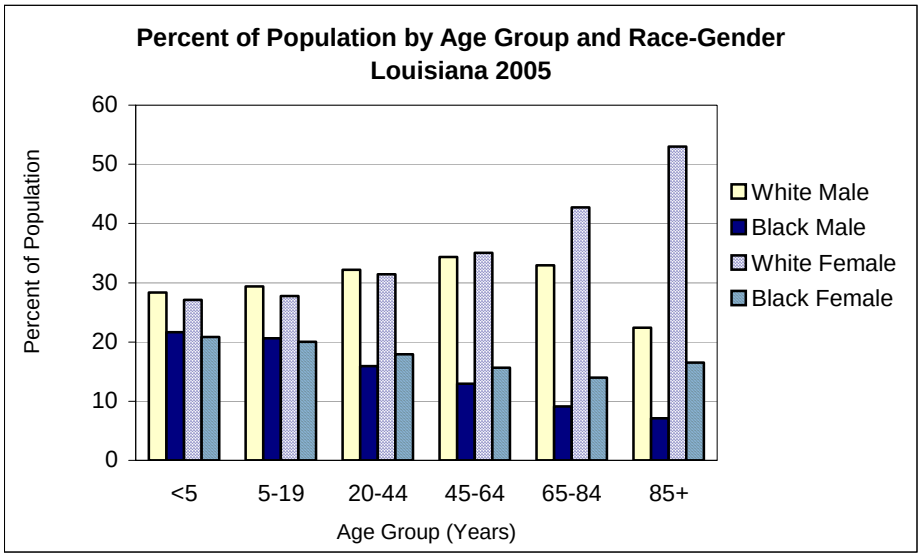
Source: Calculation based on Bridged-Race Population Estimate 2005, U.S. Census Bureau & NCHS

Percent of Population by Gender, Race and Age Group Louisiana, 2005							
		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	32.9	22.4
	Black	21.6	20.6	15.9	12.9	9.1	7.1
	Other	1.0	1.1	1.3	0.9	0.6	0.4
	Total	51.0	51.1	49.4	48.2	42.7	29.9
Female	*White*	27.1	27.8	31.4	35.1	42.7	53.0
	Black	20.8	20.0	17.9	15.7	14.0	16.5
	Other	1.0	1.1	1.2	1.0	0.7	0.6
	Total	49.0	48.9	50.6	51.8	57.3	70.1

Source: Calculation based on Bridged-Race Population Estimate 2005, 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. Census Bureau has also provided the estimated parish-level population data for 2005. The changes in Louisiana's mid-year parish populations by 2000 census and the 2005 estimates are presented in the table below:

Louisiana 2005 Population by Parish				
	7/1/2000	***7/1/2005***	***% Change***	***7/1/2005***
Parish	***Census***	***Estimates***	***2000-2005***	***% as Total of State Pop.***
State Total	4468976	4526241	1.3	100.0
Acadia	58861	59515	1.1	1.3
Allen	25440	25255	-0.7	0.6
Ascension	76627	89696	17.1	2.0
Assumption	23388	23095	-1.3	0.5
Avoyelles	41481	42358	2.1	0.9
Beauregard	32986	33417	1.3	0.7
Bienville	15752	15706	-0.3	0.3
Bossier	98310	105594	7.4	2.3
Caddo	252161	255383	1.3	5.6
Calcasieu	183577	185862	1.2	4.1
Caldwell	10560	10556	0.0	0.2
Cameron	9991	9552	-4.4	0.2
Catahoula	10920	10534	-3.5	0.2
Claiborne	16851	16291	-3.3	0.4
Concordia	20247	19262	-4.9	0.4
DeSoto	25494	25737	1.0	0.6
E. Baton Rouge	412852	417218	1.1	9.2
E. Carroll	9421	8751	-7.1	0.2
E. Feliciana	21360	20811	-2.6	0.5
Evangeline	35434	35518	0.2	0.8
Franklin	21263	20367	-4.2	0.4

Louisiana 2005 Population by Parish				
Parish	7/1/2000 Census	7/1/2005 Estimates	% Change 2000-2005	7/1/2005 % as Total of State Pop.
Grant	18698	18614	-0.4	0.4
Iberia	73266	73897	0.9	1.6
Iberville	33320	32503	-2.5	0.7
Jackson	15397	15609	1.4	0.3
Jefferson	455466	458029	0.6	10.1
Jefferson Davis	31435	31252	-0.6	0.7
Lafayette	190503	197268	3.6	4.4
Lafourche	89974	92169	2.4	2.0
LaSalle	14282	14032	-1.8	0.3
Lincoln	42509	43471	2.3	1.0
Livingston	91814	103507	12.7	2.3
Madison	13728	12449	-9.3	0.3
Morehouse	31021	29970	-3.4	0.7
Natchitoches	39080	39252	0.4	0.9
Orleans	484674	458393	-5.4	10.1
Ouachita	147250	148863	1.1	3.3
Plaquemines	26757	29432	10.0	0.7
Pointe Coupee	22763	22363	-1.8	0.5
Rapides	126337	128383	1.6	2.8
Red River	9622	9822	2.1	0.2
Richland	20981	20513	-2.2	0.5
Sabine	23459	23772	1.3	0.5
St. Bernard	67229	67419	0.3	1.5
St. Charles	48072	48359	0.6	1.1
St. Helena	10525	10128	-3.8	0.2
St. James	21216	20842	-1.8	0.5
St. John	43044	44590	3.6	1.0
St. Landry	87700	89709	2.3	2.0
St. Martin	48583	49746	2.4	1.1
St. Mary	53500	51698	-3.4	1.1
St. Tammany	191268	213633	11.7	4.7
Tangipahoa	100588	103232	2.6	2.3
Tensas	6618	6121	-7.5	0.1
Terrebonne	104503	107146	2.5	2.4
Union	22803	22159	-2.8	0.5
Vermilion	53807	54502	1.3	1.2
Vernon	52531	51729	-1.5	1.1
Washington	43926	44595	1.5	1.0
Webster	41831	41331	-1.2	0.9
W. Baton Rouge	21601	21621	0.1	0.5
W. Carroll	12314	11929	-3.1	0.3
W. Feliciana	15111	15370	1.7	0.3
Winn	16894	16341	-3.3	0.4

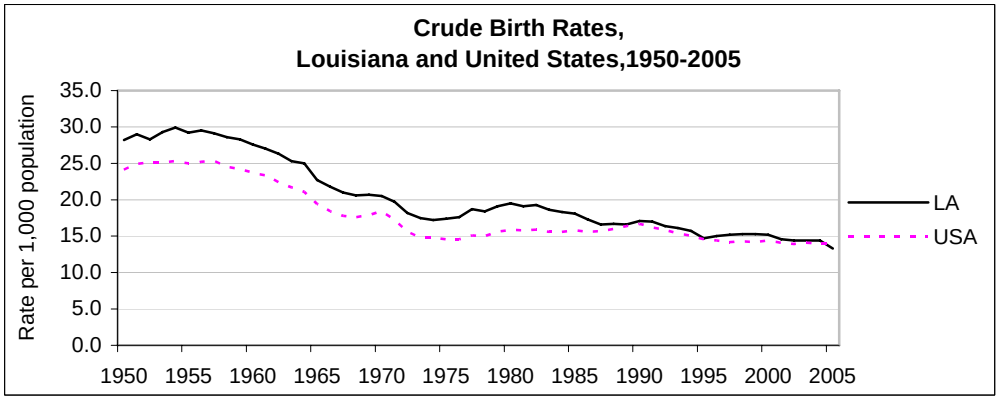
Source: United States Census Bureau, 2000 Census and Bridged-Race Population Estimate 2005, U.S. Census Bureau & NCHS

B. BIRTHS

NOTE: The 2005 birth data used in this report are preliminary.

Number of Live Births and Birth Rates

In the year 2005, there were 60,065 births to Louisiana residents, a decrease from the 64,956 births in 2004. Louisiana's 2005 crude birth rate was 13.3 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]



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 2005 ranking is the 28th highest in the nation. Among neighboring states, Louisiana's birth rate is the fourth highest.

Crude Birth Rates
Louisiana, Neighboring States, and United States, 2005

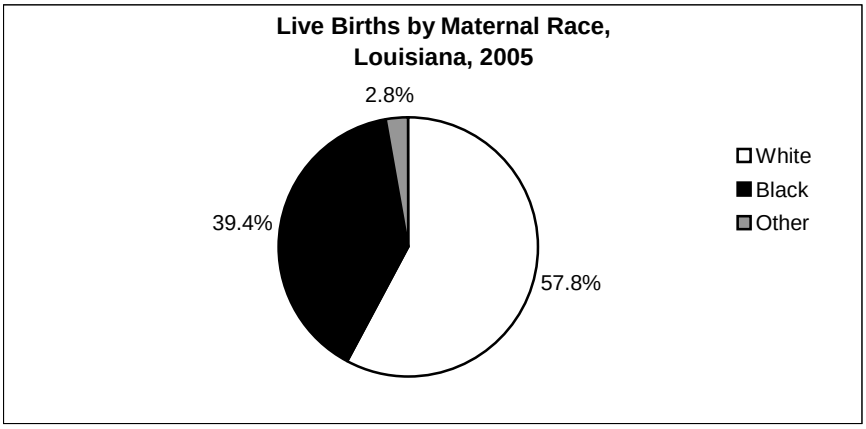
State	*Birth Rate**	*National Ranking*
Alabama	13.3	31
Arkansas	14.1	18
Louisiana	13.5	28
Mississippi	14.5	14
Texas	16.9	2
United States	14.0	N/A

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

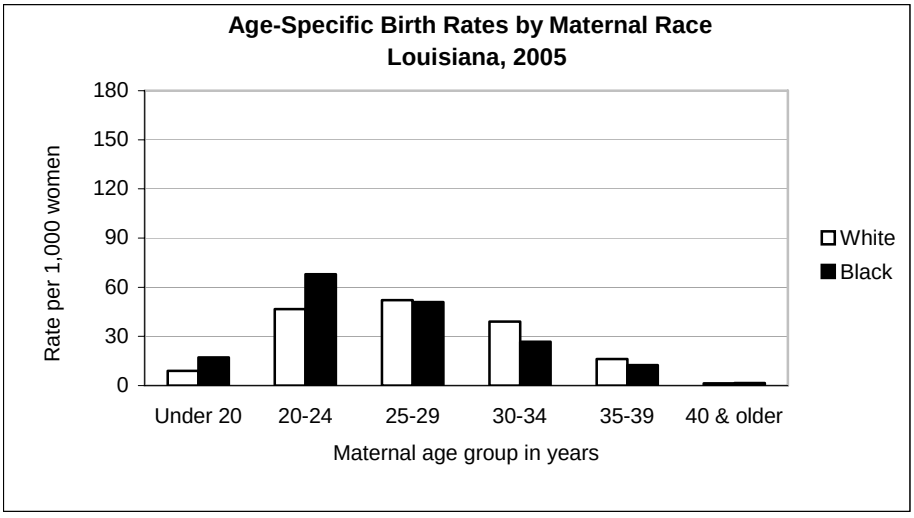
[1] Clarke SC and Ventura SJ. *Birth and Fertility for States: United States*, 1990.National Center for Health Statistics. Vital Health Statistics 21(52), 1994.

Although black women aged 15-44 years represent 36.4% of the female population of Louisiana belonging to that same age group, 39.4% of the state's live births in the year 2005 were to black mothers. The birth rate is 11.9 for whites and 15.7 for blacks. In 2004, the race-specific birth rates peaked at 68.0 for black mothers age 20-24, and at 52.1 for white mothers at age 25-29. The second highest birth rate for black mothers was 51.0 at age 25-29, and, for white mothers, 46.6 at age 20-24. The third highest birth rates were 32.8 for black mothers age 15-19 and 39.0 for white mothers age 30-34.

In 2005, Vernon Parish had the highest birth rate at 18.3 births per 1,000 population and West Feliciana Parish had the lowest birth rate at 6.6 births per 1,000 population.



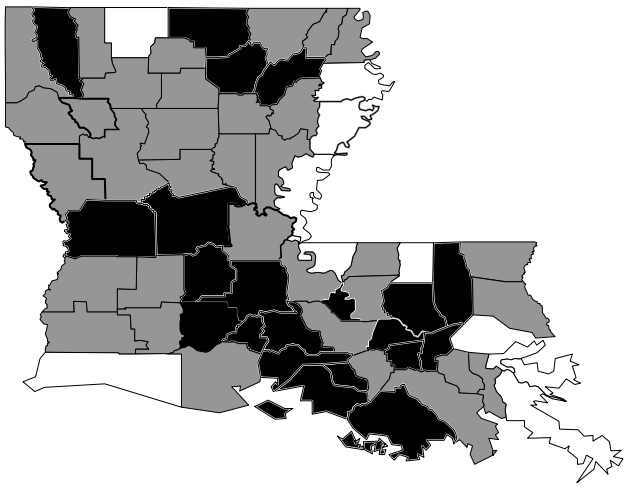
Source: Louisiana State Center for Health Statistics



Source: Louisiana State Center for Health Statistics

Live Birth Rate Per 1,000 Population
Louisiana, 2005

YEAR 2005



6.6 - 10.5
10.6 - 14.5
14.6 - 18.5

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2005

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
STATE	60465	60065	13.3	ALL	167	8012	19683	16557	10098	4510	977	58	****
	35187	34709		WHITE	39	3343	9978	10374	7182	3137	614	41	****
	23616	23686		BLACK	128	4521	9311	5718	2488	1187	315	16	****
	1662	1670		OTHER	0	148	394	465	428	186	48	****	0
ACADIA	579	967	16.2	ALL	****	138	368	263	124	60	9	****	0
	409	729		WHITE	0	88	263	217	105	47	8	****	0
	165	231		BLACK	****	50	105	42	17	12	****	****	0
	5	7		OTHER	0	0	0	****	****	****	0	0	0
ALLEN	****	322	12.7	ALL	****	54	116	90	48	11	****	0	0
	0	243		WHITE	0	36	80	73	43	10	****	0	0
	****	67		BLACK	****	16	33	11	****	****	0	0	0
	0	12		OTHER	0	****	****	6	****	0	0	0	0
ASCENSION	****	1472	16.7	ALL	****	153	355	460	334	152	17	0	0
	****	1076		WHITE	0	79	217	362	277	127	14	0	0
	****	382		BLACK	****	73	136	96	51	22	****	0	0
	0	14		OTHER	0	****	****	****	6	****	0	0	0
ASSUMPTION	****	276	12	ALL	0	33	99	83	38	20	****	****	0
	0	158		WHITE	0	12	50	61	25	9	****	0	0
	****	114		BLACK	0	21	48	21	11	11	****	****	0
	0	****		OTHER	0	0	****	****	****	0	0	0	0
AVOYELLES	****	610	14.4	ALL	0	104	232	149	91	25	8	****	0
	0	378		WHITE	0	52	139	103	65	15	****	0	0
	****	220		BLACK	0	46	91	45	23	10	****	****	0
	0	12		OTHER	0	6	****	****	****	0	0	0	0
BEAUREGARD	331	446	13.3	ALL	0	52	165	119	77	28	5	0	0
	289	388		WHITE	0	43	143	109	66	23	****	0	0
	37	51		BLACK	0	9	21	7	9	****	****	0	0
	5	7		OTHER	0	0	****	****	****	****	0	0	0
BIENVILLE	****	188	12	ALL	****	29	78	44	25	7	****	0	****
	0	91		WHITE	****	12	34	27	13	****	0	0	0
	****	97		BLACK	****	17	44	17	12	****	****	0	****
	0	0		OTHER	0	0	0	0	0	0	0	0	0
BOSSIER	827	1629	15.6	ALL	5	197	548	482	271	95	30	****	0
	622	1157		WHITE	****	105	371	376	212	71	17	****	0
	185	412		BLACK	****	87	161	93	45	18	7	0	0
	20	60		OTHER	0	5	16	13	14	6	6	0	0
CADDO	5841	3608	14.1	ALL	17	610	1237	924	551	209	58	****	0
	2978	1522		WHITE	5	148	447	443	315	132	31	****	0
	2728	2025		BLACK	12	458	777	459	225	68	25	****	0
	135	61		OTHER	0	****	13	22	11	9	****	0	0
CALCASIEU	3013	2625	14.1	ALL	7	369	945	744	379	142	35	****	0
	2184	1815		WHITE	****	209	601	564	302	107	26	****	0
	778	766		BLACK	5	157	333	170	63	30	8	0	0
	51	44		OTHER	0	****	11	10	14	5	****	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 2005

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
CALDWELL	0	133	12.6	ALL	****	18	48	38	19	7	****	0	0
	0	104		WHITE	****	11	38	30	17	6	****	0	0
	0	29		BLACK	0	7	10	8	****	****	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
CAMERON	0	75	7.9	ALL	****	6	31	19	13	5	0	0	0
	0	70		WHITE	****	6	28	19	11	5	0	0	0
	0	****		BLACK	0	0	****	0	****	0	0	0	0
	0	****		OTHER	0	0	****	0	****	0	0	0	0
CATAHOULA	0	115	10.9	ALL	0	19	41	31	18	5	****	0	0
	0	75		WHITE	0	7	26	23	14	****	****	0	0
	0	40		BLACK	0	12	15	8	****	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
CLAIBORNE	41	167	10.3	ALL	****	29	60	38	22	13	****	0	0
	12	61		WHITE	0	9	18	15	12	6	****	0	0
	29	104		BLACK	****	19	42	23	9	7	****	0	0
	0	****		OTHER	0	****	0	0	****	0	0	0	0
CONCORDIA	295	146	7.6	ALL	0	21	59	43	19	****	0	0	0
	66	64		WHITE	0	10	21	18	13	****	0	0	0
	227	79		BLACK	0	11	37	24	5	****	0	0	0
	****	****		OTHER	0	0	****	****	****	0	0	0	0
DESOTO	****	370	14.4	ALL	0	57	154	78	53	21	7	0	0
	0	193		WHITE	0	25	75	45	34	13	****	0	0
	****	173		BLACK	0	31	78	31	19	8	6	0	0
	0	****		OTHER	0	****	****	****	0	0	0	0	0
E BATON ROUGE	10137	5668	13.6	ALL	20	655	1741	1556	1044	507	133	11	****
	5782	2339		WHITE	****	138	477	709	616	316	72	8	0
	4112	3130		BLACK	17	503	1230	798	359	164	55	****	****
	243	199		OTHER	0	14	34	49	69	27	6	0	0
EAST CARROLL	0	97	11.1	ALL	****	15	26	28	18	8	0	0	0
	0	28		WHITE	0	****	6	9	8	****	0	0	0
	0	69		BLACK	****	13	20	19	10	5	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
E FELICIANA	****	264	12.7	ALL	0	30	88	74	39	29	****	****	0
	****	153		WHITE	0	14	41	49	29	17	****	****	0
	0	109		BLACK	0	16	47	25	9	11	****	0	0
	0	****		OTHER	0	0	0	0	****	****	0	0	0
EVANGELINE	445	527	14.8	ALL	****	103	198	125	58	36	5	****	0
	219	342		WHITE	0	54	125	91	47	23	****	0	0
	219	181		BLACK	****	49	72	32	10	13	****	****	0
	7	****		OTHER	0	0	****	****	****	0	0	0	0
FRANKLIN	****	285	14	ALL	****	46	105	93	26	8	****	0	0
	****	150		WHITE	****	24	41	59	18	5	****	0	0
	****	133		BLACK	****	22	62	34	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, 2005

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
GRANT	0	247	13.3	ALL	0	40	83	73	39	11	****	0	0
	0	211		WHITE	0	29	71	65	36	9	****	0	0
	0	33		BLACK	0	10	11	7	****	****	0	0	0
	0	****		OTHER	0	****	****	****	0	0	0	0	0
IBERIA	1030	1113	15.1	ALL	****	183	412	281	146	70	18	0	0
	510	594		WHITE	****	72	192	170	104	44	11	0	0
	488	490		BLACK	****	110	209	102	37	24	6	0	0
	32	29		OTHER	0	****	11	9	5	****	****	0	0
IBERVILLE	341	447	13.8	ALL	5	63	161	132	52	29	****	****	0
	57	191		WHITE	0	14	56	73	32	14	****	0	0
	282	252		BLACK	5	49	104	58	18	15	****	****	0
	****	****		OTHER	0	0	****	****	****	0	0	0	0
JACKSON	0	216	13.8	ALL	****	37	78	66	18	16	0	0	0
	0	145		WHITE	0	26	48	47	12	12	0	0	0
	0	71		BLACK	****	11	30	19	6	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
JEFFERSON	6690	5247	11.5	ALL	8	595	1410	1482	1131	508	108	****	****
	3864	2955		WHITE	****	234	628	878	780	355	72	****	****
	2429	1895		BLACK	5	334	700	492	239	102	23	0	0
	397	397		OTHER	0	27	82	112	112	51	13	0	0
JEFF DAVIS	362	437	14	ALL	0	69	163	116	64	21	****	0	0
	293	344		WHITE	0	43	129	95	57	17	****	0	0
	66	90		BLACK	0	26	34	20	6	****	****	0	0
	****	****		OTHER	0	0	0	****	****	****	0	0	0
LAFAYETTE	5042	2905	14.7	ALL	****	300	863	862	541	282	52	****	0
	3359	1847		WHITE	****	123	476	579	426	202	38	****	0
	1571	980		BLACK	****	174	376	247	98	74	9	0	0
	112	78		OTHER	0	****	11	36	17	6	5	0	0
LAFOURCHE	828	1083	11.8	ALL	6	144	347	317	175	80	13	****	0
	712	830		WHITE	****	94	249	263	147	70	6	0	0
	98	211		BLACK	5	40	83	47	20	8	7	****	0
	18	42		OTHER	0	10	15	7	8	****	0	0	0
LASALLE	0	192	13.7	ALL	0	27	82	40	33	8	****	0	0
	0	163		WHITE	0	24	64	35	30	8	****	0	0
	0	25		BLACK	0	****	15	5	****	0	0	0	0
	0	****		OTHER	0	0	****	0	****	0	0	0	0
LINCOLN	838	562	12.9	ALL	0	73	189	174	86	35	5	0	0
	424	292		WHITE	0	24	82	96	70	19	****	0	0
	411	259		BLACK	0	49	104	74	14	15	****	0	0
	****	11		OTHER	0	0	****	****	****	****	****	0	0
LIVINGSTON	****	1634	15.8	ALL	****	169	495	535	288	118	26	0	0
	****	1535		WHITE	****	149	465	504	278	112	25	0	0
	0	90		BLACK	****	18	30	28	8	****	****	0	0
	0	9		OTHER	0	****	0	****	****	****	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence
Louisiana, 2005

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
MADISON	****	84	6.7	ALL	0	18	31	18	11	****	****	0	0
	0	23		WHITE	0	****	7	6	5	****	0	0	0
	****	61		BLACK	0	15	24	12	6	****	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
MOREHOUSE	354	408	13.6	ALL	****	64	174	108	41	16	****	0	0
	207	175		WHITE	0	17	65	59	25	8	****	0	0
	145	231		BLACK	****	46	108	49	16	8	****	0	0
	****	****		OTHER	0	****	****	0	0	0	0	0	0
NATCHITOCHES	599	554	14.1	ALL	****	98	207	128	92	25	****	0	0
	251	251		WHITE	0	37	84	58	55	16	****	0	0
	338	294		BLACK	****	61	120	68	33	9	****	0	0
	10	9		OTHER	0	0	****	****	****	0	0	0	0
ORLEANS	4810	4494	9.8	ALL	11	651	1369	1130	765	436	121	11	0
	1382	968		WHITE	0	26	109	209	340	220	56	8	0
	3251	3384		BLACK	11	621	1245	872	383	191	58	****	0
	177	142		OTHER	0	****	15	49	42	25	7	0	0
OUACHITA	3536	2248	15.1	ALL	9	321	754	612	375	146	30	****	0
	2007	1181		WHITE	****	104	359	344	259	96	17	****	0
	1477	1031		BLACK	8	216	384	255	107	49	12	0	0
	52	36		OTHER	0	****	11	13	9	****	****	0	0
PLAQUEMINES	****	301	10.2	ALL	0	27	94	90	64	22	****	0	0
	****	216		WHITE	0	21	60	69	47	16	****	0	0
	0	68		BLACK	0	5	29	17	12	****	****	0	0
	****	17		OTHER	0	****	5	****	5	****	0	0	0
POINTE COUPEE	****	304	13.6	ALL	0	46	97	93	47	18	****	****	0
	0	167		WHITE	0	9	48	63	33	12	****	****	0
	****	136		BLACK	0	37	48	30	14	6	****	0	0
	0	****		OTHER	0	0	****	0	0	0	0	0	0
RAPIDES	3166	1915	14.9	ALL	****	271	721	501	287	115	16	0	0
	2075	1152		WHITE	****	136	389	333	207	74	12	0	0
	1026	727		BLACK	****	131	322	161	71	35	****	0	0
	65	36		OTHER	0	****	10	7	9	6	0	0	0
RED RIVER	****	139	14.2	ALL	0	27	48	31	27	6	0	0	0
	0	73		WHITE	0	10	22	20	16	5	0	0	0
	****	66		BLACK	0	17	26	11	11	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
RICHLAND	****	299	14.6	ALL	****	46	97	101	34	16	****	0	0
	0	155		WHITE	****	15	48	55	28	7	0	0	0
	****	144		BLACK	****	31	49	46	6	9	****	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
SABINE	****	305	12.8	ALL	****	42	117	76	45	16	6	****	0
	****	205		WHITE	****	25	73	55	32	14	****	****	0
	0	76		BLACK	0	13	31	17	10	****	****	0	0
	0	24		OTHER	0	****	13	****	****	0	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2005

Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
ST BERNARD	****	555	8.2	ALL	****	89	163	155	91	43	10	0	0
	****	451		WHITE	0	70	134	125	72	41	9	0	0
	0	81		BLACK	****	19	25	21	9	****	****	0	0
	****	23		OTHER	0	0	****	9	10	0	0	0	0
ST CHARLES	****	641	13.3	ALL	****	67	170	197	146	47	12	****	0
	0	406		WHITE	0	36	80	137	104	39	9	****	0
	****	222		BLACK	****	31	87	57	37	6	****	0	0
	0	13		OTHER	0	0	****	****	5	****	0	0	0
ST HELENA	0	105	10.4	ALL	0	28	40	21	9	5	****	0	0
	0	38		WHITE	0	10	11	9	****	****	****	0	0
	0	67		BLACK	0	18	29	12	7	****	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
ST JAMES	0	310	14.9	ALL	****	39	95	105	50	16	****	0	0
	0	128		WHITE	****	5	24	62	27	9	0	0	0
	0	181		BLACK	0	34	71	43	22	7	****	0	0
	0	****		OTHER	0	0	0	0	****	0	0	0	0
ST JOHN	375	681	15.3	ALL	****	72	221	203	118	50	15	0	0
	149	296		WHITE	0	16	76	96	72	27	9	0	0
	220	369		BLACK	****	56	142	102	41	21	5	0	0
	6	16		OTHER	0	0	****	5	5	****	****	0	0
ST LANDRY	1676	1330	14.8	ALL	****	220	505	335	168	81	17	0	0
	1006	680		WHITE	****	85	234	185	119	52	****	0	0
	664	644		BLACK	****	135	270	147	47	29	13	0	0
	6	6		OTHER	0	0	****	****	****	0	0	0	0
ST MARTIN	0	780	15.7	ALL	****	97	270	216	114	71	9	****	0
	0	448		WHITE	0	37	141	140	82	41	6	****	0
	0	321		BLACK	****	59	125	73	30	29	****	0	0
	0	11		OTHER	0	****	****	****	****	****	0	0	0
ST MARY	484	766	14.8	ALL	****	127	298	190	89	48	13	0	0
	253	425		WHITE	0	58	152	118	58	31	8	0	0
	212	306		BLACK	****	66	135	61	24	15	****	0	0
	19	35		OTHER	0	****	11	11	7	****	****	0	0
ST TAMMANY	3368	2636	12.3	ALL	0	188	594	758	698	324	69	5	0
	2734	2239		WHITE	0	139	477	646	626	284	63	****	0
	582	349		BLACK	0	44	107	102	61	29	5	****	0
	52	48		OTHER	0	5	10	10	11	11	****	0	0
TANGIPAHOA	1517	1628	15.8	ALL	8	232	595	451	218	100	22	****	0
	810	940		WHITE	****	101	300	279	164	81	14	0	0
	698	671		BLACK	7	130	292	166	51	17	7	****	0
	9	17		OTHER	0	****	****	6	****	****	****	****	0
TENSAS	0	64	10.5	ALL	****	14	20	20	8	****	0	0	0
	0	16		WHITE	0	****	6	6	****	****	0	0	0
	0	48		BLACK	****	13	14	14	6	0	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0

Live Births By Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 2005

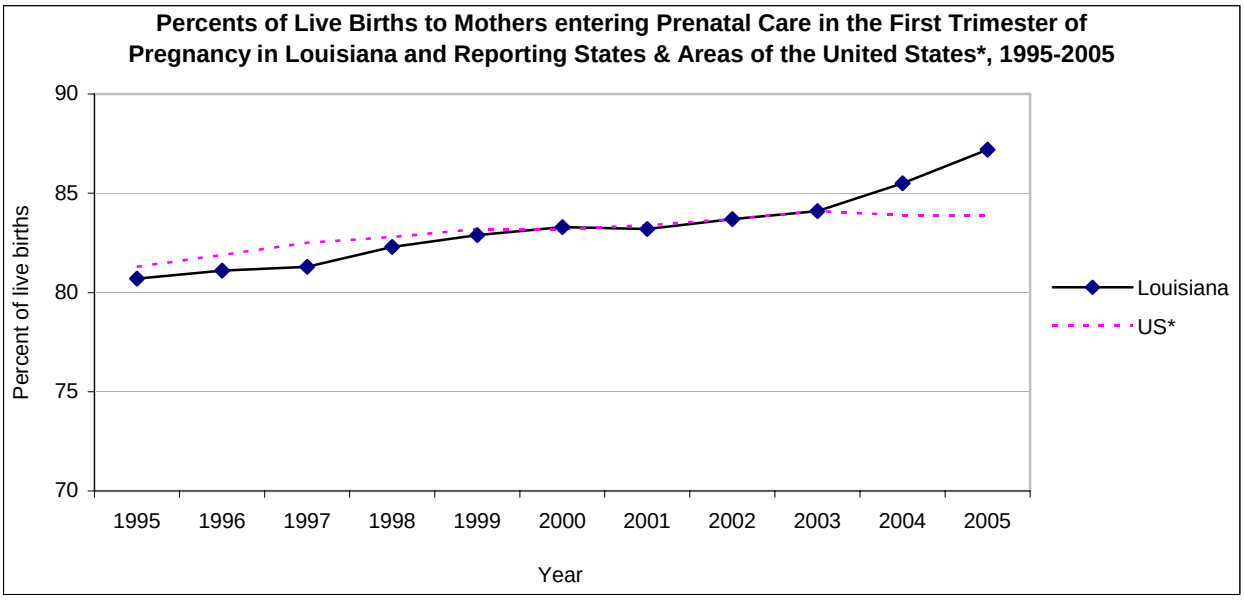
Parish	Total by Occurrence	Total by Residence	Rate+	Race	Maternal age group in years								
					< 15	15-19	20-24	25-29	30-34	35-39	40-44	45 &+	Unk.
TERREBONNE	2168	1578	14.7	ALL	****	250	570	412	222	102	18	0	0
	1413	1092		WHITE	****	141	380	305	174	77	14	0	0
	586	350		BLACK	****	73	139	83	33	16	****	0	0
	169	136		OTHER	0	36	51	24	15	9	****	0	0
UNION	****	330	14.9	ALL	****	49	130	89	37	16	5	0	0
	****	216		WHITE	0	30	78	65	27	11	5	0	0
	0	111		BLACK	****	18	51	24	9	5	0	0	0
	0	****		OTHER	0	****	****	0	****	0	0	0	0
VERMILION	141	758	13.9	ALL	****	106	254	204	108	74	9	****	0
	67	596		WHITE	0	66	190	173	95	62	8	****	0
	70	148		BLACK	****	39	60	26	10	11	****	0	0
	****	14		OTHER	0	****	****	5	****	****	0	0	0
VERNON	917	945	18.3	ALL	0	109	419	230	144	32	10	****	0
	685	746		WHITE	0	83	330	184	117	25	7	0	0
	185	150		BLACK	0	23	68	33	19	****	****	****	0
	47	49		OTHER	0	****	21	13	8	****	0	0	0
WASHINGTON	****	549	12.3	ALL	****	81	212	158	61	30	5	0	0
	****	349		WHITE	****	51	126	104	41	22	****	0	0
	****	198		BLACK	****	29	85	54	20	8	****	0	0
	0	****		OTHER	0	****	****	0	0	0	0	0	0
WEBSTER	675	508	12.3	ALL	****	85	193	119	81	25	****	0	0
	352	322		WHITE	0	37	127	80	61	14	****	0	0
	316	181		BLACK	****	48	65	39	16	11	****	0	0
	7	5		OTHER	0	0	****	0	****	0	0	0	0
W BATON ROUGE	0	320	14.8	ALL	****	36	106	98	52	24	****	0	0
	0	200		WHITE	****	18	60	64	38	17	****	0	0
	0	118		BLACK	0	18	46	32	14	7	****	0	0
	0	****		OTHER	0	0	0	****	0	0	0	0	0
WEST CARROLL	****	142	11.9	ALL	0	29	46	43	17	6	****	0	0
	0	115		WHITE	0	22	33	40	13	6	****	0	0
	****	27		BLACK	0	7	13	****	****	0	0	0	0
	0	0		OTHER	0	0	0	0	0	0	0	0	0
W FELICIANA	0	102	6.6	ALL	0	14	25	33	15	12	****	0	0
	0	58		WHITE	0	****	10	22	10	10	****	0	0
	0	43		BLACK	0	10	15	10	5	****	****	0	0
	0	****		OTHER	0	0	0	****	0	0	0	0	0
WINN	****	213	13	ALL	0	31	71	73	24	13	****	0	0
	0	139		WHITE	0	14	44	56	17	7	****	0	0
	****	72		BLACK	0	17	26	16	7	6	0	0	0
	0	****		OTHER	0	0	****	****	0	0	0	0	0
OUT OF STATE**	676	1076		ALL	****	90	302	323	206	105	39	7	****
	355	833		WHITE	0	63	209	267	173	83	31	6	****
	292	222		BLACK	****	26	89	49	31	17	6	****	****
	29	21		OTHER	0	****	****	7	****	5	****	0	0

+Rate per 1,000 population. ** Not included in state totals.
**** Suppressed to protect confidentiality.
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, 2005).

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 37 states, New York City, District of Columbia, and territories, 2005.

Excludes data for Florida, Idaho, Kansas, Kentucky, New Hampshire, New York (excluding New York City), Pennsylvania, South Carolina, Tennessee, Texas, Vermont, 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. 56, No.6, page 95, December 5, 2007 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. 56, No.6, December 5, 2007, pages 95 and 89 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. According to the most recent data (January 2008), 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	16
Mississippi	84.4	21
Texas	81.8	29
*Total Reporting States and Areas**	83.9	N/A

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* + *Available as of Jan 23, 2008*

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.

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.

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 60,065 Louisiana residents who gave birth in 2005, 81.6% received adequate care according to the Kessner index.

Percent of Mothers Receiving Adequate+ Prenatal Care by Parish Louisiana, 2001-2005

Parish	2001	2002	2003	2004	2005
State Total	77.77	78.91	80.06	80.98	81.64
Acadia	61.50	61.20	65.67	65.52	64.99
Allen	81.63	85.50	82.43	85.88	90.13
Ascension	81.82	83.53	83.99	84.65	87.74
Assumption	77.00	70.11	66.92	74.43	68.86
Avoyelles	76.31	76.70	83.13	82.50	84.83
Beauregard	77.69	75.91	74.58	70.04	73.80
Bienville	78.02	80.00	77.89	83.87	81.62
Bossier	79.81	80.09	81.59	80.71	81.79
Caddo	71.64	72.61	73.90	76.16	76.29

Percent of Mothers Receiving Adequate+ Prenatal Care by Parish Louisiana, 2001-2005					
Parish	2001	2002	2003	2004	2005
Calcasieu	86.54	88.26	85.96	90.89	89.82
Caldwell	86.40	88.31	83.50	86.96	80.00
Cameron	93.14	95.70	89.25	91.40	97.26
Catahoula	56.45	72.66	74.80	72.48	78.57
Claiborne	79.38	84.15	71.95	78.92	75.15
Concordia	54.51	58.45	55.19	63.28	64.79
DeSoto	73.10	69.60	72.89	75.41	70.49
East Baton Rouge	78.29	79.68	80.86	80.05	84.23
East Carroll	66.90	71.01	67.44	61.70	71.88
East Feliciana	73.99	76.32	75.77	86.85	87.60
Evangeline	76.80	80.66	75.64	83.99	83.17
Franklin	60.87	66.67	64.52	68.73	67.97
Grant	82.95	84.85	86.45	88.70	87.55
Iberia	57.32	69.90	67.03	66.42	69.24
Iberville	70.26	71.88	75.00	72.31	75.85
Jackson	71.62	75.76	79.33	81.62	84.43
Jefferson	77.60	78.04	82.56	84.78	83.71
Jefferson Davis	68.97	72.35	70.13	73.39	77.78
Lafayette	87.15	91.36	88.93	85.76	88.74
Lafourche	83.89	84.29	73.72	80.62	78.15
LaSalle	83.84	79.49	89.14	90.68	89.95
Lincoln	69.66	68.98	75.84	78.37	81.47
Livingston	88.90	86.17	85.73	87.40	91.90
Madison	71.29	72.86	70.54	70.27	74.39
Morehouse	73.46	75.06	78.50	78.54	79.40
Natchitoches	75.39	79.41	77.02	74.91	72.29
Orleans	76.90	74.69	76.89	78.19	76.42
Ouachita	82.11	82.28	82.52	80.38	82.00
Plaquemines	78.63	81.27	80.82	83.52	84.41
Pointe Coupee	69.61	70.00	81.05	77.13	85.28
Rapides	79.42	82.78	87.71	88.48	87.23
Red River	61.42	71.01	72.50	73.72	72.99
Richland	82.31	80.94	78.91	81.47	84.69
Sabine	81.61	77.22	76.88	76.52	74.83
St. Bernard	82.10	79.88	88.28	88.77	86.19
St. Charles	75.67	76.72	83.44	82.53	84.54
St. Helena	82.54	73.08	82.65	72.45	73.08
St. James	67.33	68.65	62.81	73.93	78.10
St. John	64.63	69.90	74.23	78.92	81.26
St. Landry	68.00	69.91	75.34	71.63	75.76
St. Martin	80.60	85.59	86.23	78.58	85.25
St. Mary	68.96	69.09	73.52	78.43	77.01
St. Tammany	84.80	85.37	87.14	87.29	87.65
Tangipahoa	81.41	77.97	80.49	79.97	80.71
Tensas	49.43	55.68	47.50	60.00	50.00
Terrebonne	78.67	81.82	76.71	84.54	77.09
Union	71.52	76.61	82.12	78.78	81.11
Vermilion	82.98	88.85	88.23	86.58	88.33
Vernon	81.07	82.05	76.52	69.21	66.17
Washington	77.48	78.02	81.82	83.33	79.70

Percent of Mothers Receiving Adequate+ Prenatal Care by Parish Louisiana, 2001-2005					
Parish	2001	2002	2003	2004	2005
Webster	82.02	84.02	81.42	81.51	84.26
West Baton Rouge	78.99	79.87	79.17	81.85	83.44
West Carroll	79.53	77.70	83.33	89.06	82.27
West Feliciana	78.63	79.65	87.20	87.27	91.00
Winn	73.60	80.21	82.35	80.20	80.86

+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 2,500 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, with 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 2005, 6,889 of the 60,065 infants born to Louisiana residents were low birthweight babies. This represents 11.5% of Louisiana's live births for the year, compared to 8.2% 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 2005, outranked only by Mississippi.

Percent of Live Births Less Than 2500 Grams Louisiana, Neighboring States, and United States, 2005		
State	Percent of Live Births	National Ranking
Alabama	10.7	3
Arkansas	8.9	13
Louisiana	11.3	2
Mississippi	11.8	1
Texas	8.3	19
United States	8.2	N/A

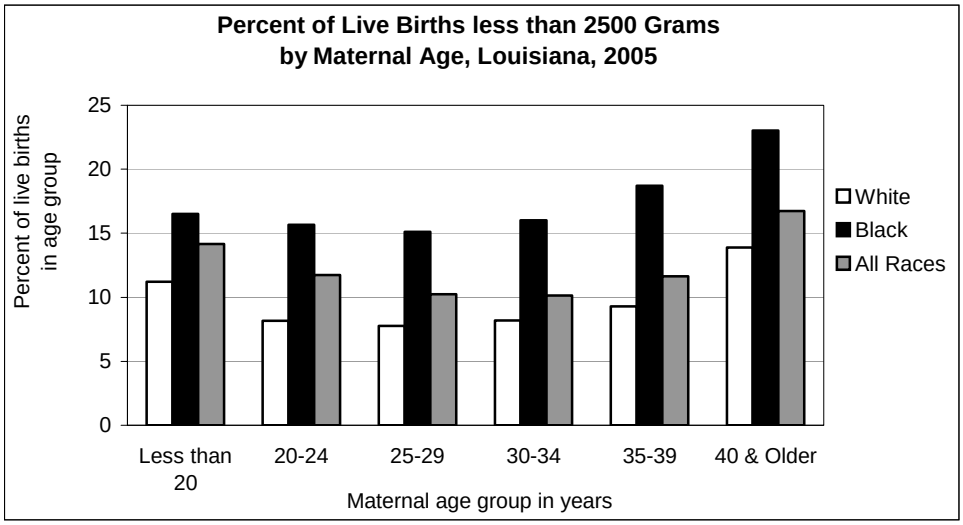
Source: Morgan, K.O. and Morgan, S (Editors) 2007. Health Care State Rankings 2007: Health Care in the 50 United States. (15th Ed.): Morgan Quitno Press, Lawrence, KS.

Black women in the state gave birth to infants of low birthweight about twice as frequently as white women did, at 16.0% compared to 8.6% of live births, respectively. Black teenagers under 15 were more

[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.

likely to have low birthweight babies than white women under 15. Births by age group in 2005 shows that mothers between 20-24 years of age had the highest percentage of low birthweight babies (3.9% of live births), followed by mothers 25-29 years (2.8%).

Infants weighing less than 1,500 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 1,500 grams.[7] In the year 2005, 2.3% 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 in 2005 gave birth to very low birthweight infants nearly twice as frequently as white mothers did, at 1.4% compared to 0.8% of live births, respectively. Infants born to the youngest and the oldest mothers were more likely to be very low birthweight.



Source: Louisiana State Center for Health Statistics

In the year 2005, Concordia Parish had the highest percentage of low birthweight babies in Louisiana at 22.6% of live births, while St. Tammany Parish had the lowest at 7.5% of live births.

[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.

Teen Birth

Teen (15 to 19 years) birth rate for Louisiana in 2005 is shown in the table below:

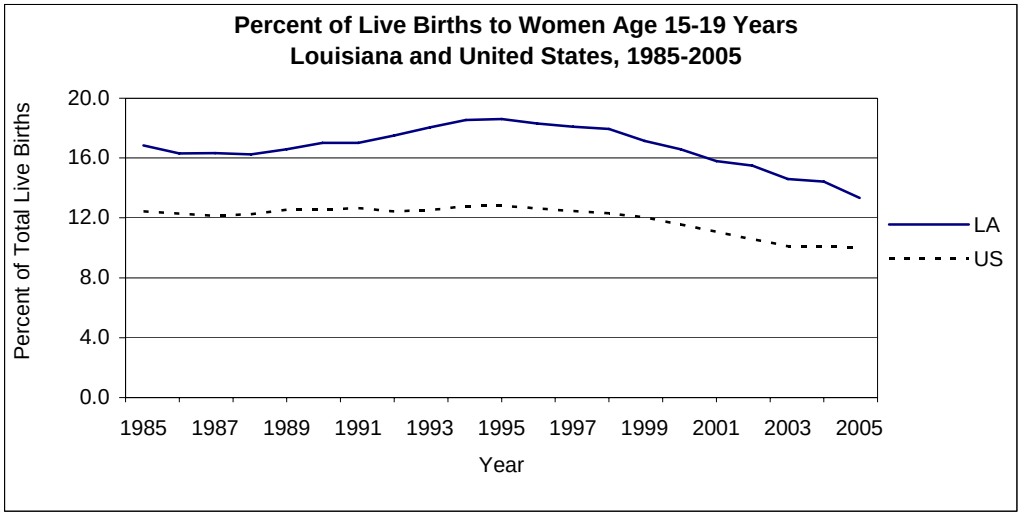
Teen Birth Rate per 1,000 women by Parish, Louisiana 2005		
	15-19 years	
Parish	Birth	Rate
State Total	8012	48.3
Acadia	138	61.9
Allen	54	70.2
Ascension	153	48.2
Assumption	33	38.0
Avoyelles	104	72.5
Beauregard	52	46.1
Bienville	29	58.6
Bossier	197	52.0
Caddo	610	64.6
Calcasieu	369	57.2
Caldwell	18	56.4
Cameron	6	16.0
Catahoula	19	53.4
Claiborne	29	52.9
Concordia	21	31.2
DeSoto	57	57.8
E. Baton Rouge	655	36.0
E. Carroll	15	47.3
E. Feliciana	30	45.5
Evangeline	103	75.8
Franklin	46	62.8
Grant	40	61.1
Iberia	183	66.3
Iberville	63	56.6
Jackson	37	67.9
Jefferson	595	39.2
Jefferson Davis	69	61.3
Lafayette	300	39.4
Lafourche	144	39.8
LaSalle	27	61.8
Lincoln	73	27.4
Livingston	169	45.4
Madison	18	36.1
Morehouse	64	62.1
Natchitoches	98	49.0
Orleans	651	35.4
Ouachita	321	51.8
Plaquemines	27	25.1
Pointe Coupee	46	59.9
Rapides	271	60.6
Red River	27	76.1
Richland	46	69.3
Sabine	42	48.4

Teen Birth Rate per 1,000 women by Parish, Louisiana 2005		
	15-19 years	
Parish	Birth	Rate
St. Bernard	89	38.3
St. Charles	67	34.1
St. Helena	28	69.7
St. James	39	44.5
St. John	72	38.8
St. Landry	220	63.4
St. Martin	97	54.7
St. Mary	127	68.6
St. Tammany	188	24.7
Tangipahoa	232	53.2
Tensas	14	65.4
Terrebonne	250	64.0
Union	49	64.8
Vermilion	106	54.0
Vernon	109	68.6
Washington	81	54.4
Webster	85	59.6
W. Baton Rouge	36	45.7
W. Carroll	29	78.0
W. Feliciana	14	37.8
Winn	31	58.6

Source: Louisiana State Center for Health Statistics

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 age 15-19 years has decreased over the last 20 years nationwide; this percentage, however, is higher in Louisiana than in United States overall. 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

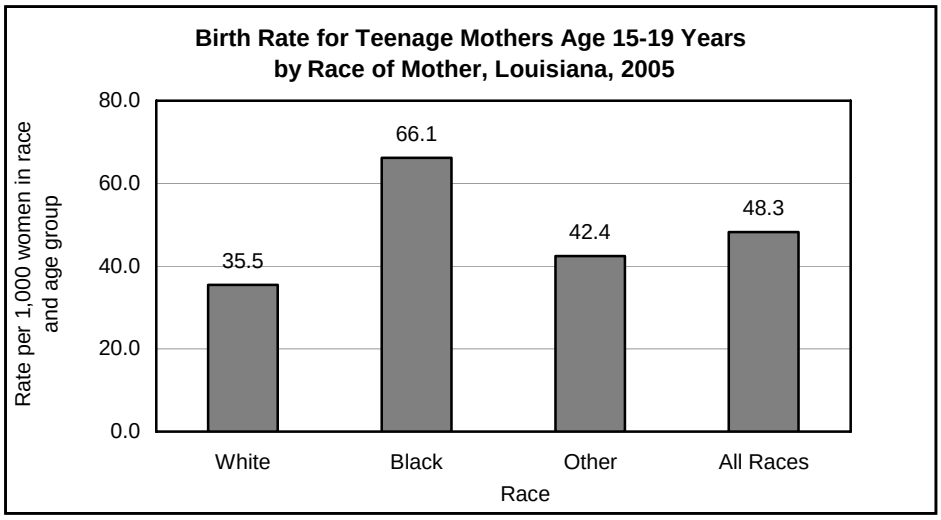
The following table shows teen birth rates for women aged 15-19 years in Louisiana and neighboring states. Louisiana has consistently ranked among the top ten states in terms of rate of live births to teens. In the year 2005, Louisiana had the 12th highest rate of live births to teens aged 15-19 in the nation, ranking lower than Mississippi, Texas, Alabama, 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, 2005

State	Rate per 1,000 Live Births	National Ranking
Alabama	50.7	10
Arkansas	59.9	4
Louisiana	50.0	12
Mississippi	62.4	3
Texas	62.7	1
United States	41.2	N/A

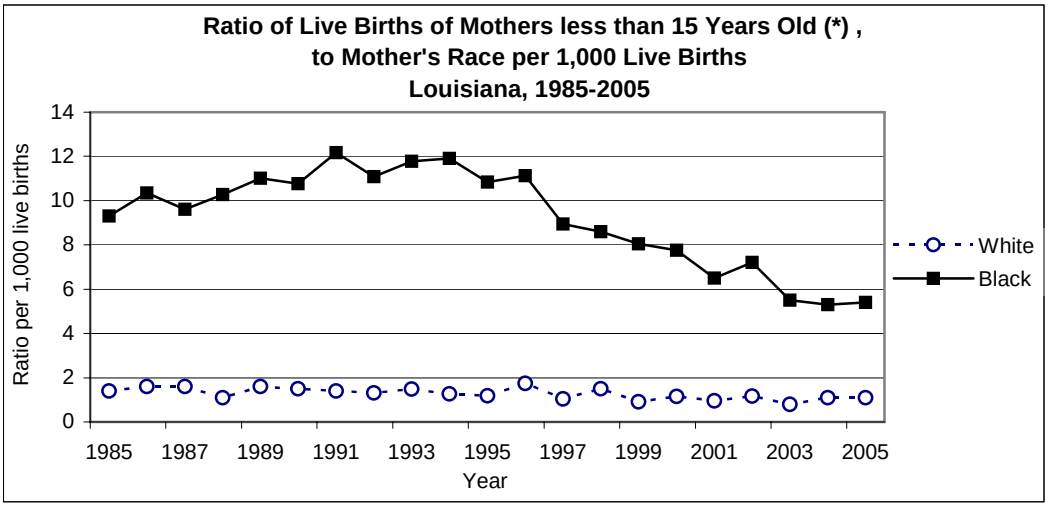
Source: Morgan, K.O. and Morgan, S (Editors) 2007. Health Care State Rankings 2007: Health Care in the 50 United States. (15th Ed.): Morgan Quitno Press, Lawrence, KS.

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 2005 (66.1) was nearly twice than that of white teenagers (35.5) and teenagers of other races (42.4), of that same age group, as illustrated in the following graph.



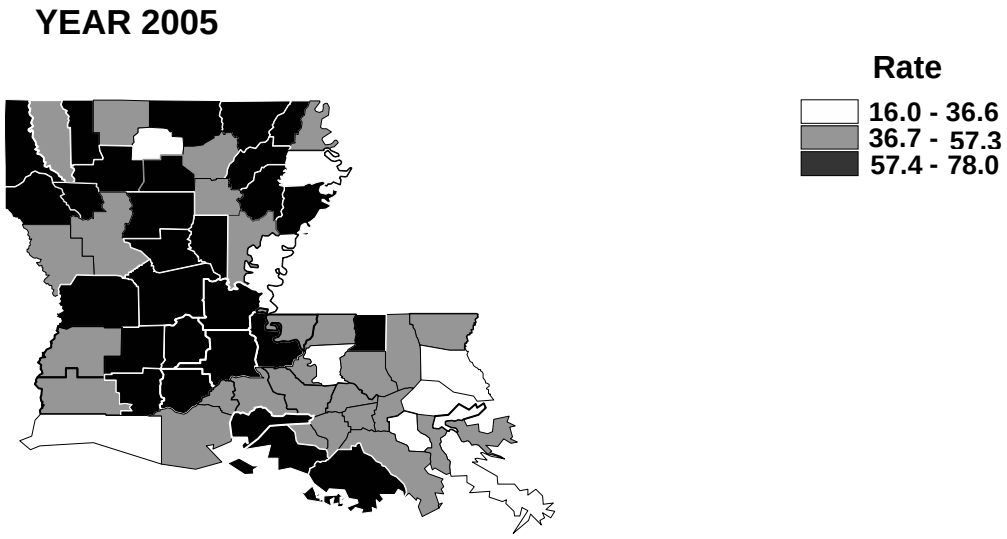
Source: Louisiana State Center for Health Statistics

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 a child 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, 2005



Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2005				
Parish	Total Births	Percent with Adequate Prenatal Care+	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Louisiana	60065	81.64	13.34	13.62
White	34709	88.23	9.63	9.74
Black	23686	71.96	19.09	19.63
Other	1670	81.76	8.86	8.86
Acadia	967	64.99	14.27	14.58
White	729	71.69	12.07	12.07
Black	231	44.35	21.65	22.94
Other	7	57.14	0.00	0.00
Allen	322	90.13	16.77	17.39
White	243	93.28	14.81	14.81
Black	67	81.25	23.88	26.87
Other	12	75.00	16.67	16.67
Ascension	1472	87.74	10.39	10.46
White	1076	93.10	7.34	7.34
Black	382	72.89	19.11	19.37
Other	14	85.71	7.14	7.14
Assumption	276	68.86	11.96	11.96
White	158	77.71	7.59	7.59
Black	114	55.36	18.42	18.42
Other	****	100.00	0.00	0.00
Avoyelles	610	84.83	17.05	17.05
White	378	90.08	13.76	13.76
Black	220	75.46	20.91	20.91
Other	12	90.91	50.00	50.00
Beauregard	446	73.80	11.66	11.66
White	388	76.24	11.08	11.08
Black	51	57.14	17.65	17.65
Other	7	57.14	0.00	0.00
Bienville	188	81.62	15.43	17.02
White	91	82.22	13.19	15.38
Black	97	81.05	17.53	18.56
Other	0	0.00	0.00	0.00
Bossier	1629	81.79	12.09	12.40
White	1157	86.78	9.08	9.42
Black	412	66.25	21.12	21.36
Other	60	91.67	8.33	8.33
Caddo	3608	76.29	16.91	17.38
White	1522	87.93	9.72	10.05
Black	2025	67.32	22.62	23.21
Other	61	85.25	6.56	6.56
Calcasieu	2625	89.82	14.06	14.32
White	1815	93.27	11.52	11.63
Black	766	81.93	20.50	21.15
Other	44	85.71	6.82	6.82

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2005				
Parish	Total Births	Percent with Adequate Prenatal Care+	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Caldwell	133	80.00	13.53	14.29
White	104	83.33	10.58	11.54
Black	29	67.86	24.14	24.14
Other	0	0.00	0.00	0.00
Cameron	75	97.26	8.00	9.33
White	70	97.06	8.57	10.00
Black	****	100.00	0.00	0.00
Other	****	100.00	0.00	0.00
Catahoula	115	78.57	16.52	16.52
White	75	94.52	9.33	9.33
Black	40	48.72	30.00	30.00
Other	0	0.00	0.00	0.00
Claiborne	167	75.15	17.37	18.56
White	61	88.33	14.75	14.75
Black	104	67.96	18.27	20.19
Other	****	50.00	50.00	50.00
Concordia	146	64.79	14.38	14.38
White	64	85.25	15.63	15.63
Black	79	48.72	13.92	13.92
Other	****	66.67	0.00	0.00
DeSoto	370	70.49	15.41	15.41
White	193	81.58	12.95	12.95
Black	173	59.30	17.92	17.92
Other	****	25.00	25.00	25.00
E. Baton Rouge	5668	84.23	11.56	11.91
White	2339	91.49	5.90	6.03
Black	3130	79.13	16.07	16.61
Other	199	79.19	7.04	7.04
East Carroll	97	71.88	15.46	17.53
White	28	82.14	7.14	7.14
Black	69	67.65	18.84	21.74
Other	0	0.00	0.00	0.00
E. Feliciana	264	87.60	11.36	11.36
White	153	94.00	9.15	9.15
Black	109	78.30	14.68	14.68
Other	****	100.00	0.00	0.00
Evangeline	527	83.17	19.54	19.73
White	342	86.47	15.79	15.79
Black	181	76.54	27.07	27.62
Other	****	100.00	0.00	0.00
Franklin	285	67.97	16.14	17.54
White	150	89.26	16.00	16.67
Black	133	43.08	16.54	18.80
Other	****	100.00	0.00	0.00

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2005				
Parish	Total Births	Percent with Adequate Prenatal Care+	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Grant	247	87.55	16.19	16.19
White	211	91.26	13.74	13.74
Black	33	65.63	30.30	30.30
Other	****	66.67	33.33	33.33
Iberia	1113	69.24	16.44	16.71
White	594	80.27	12.12	12.29
Black	490	56.49	22.45	22.86
Other	29	58.62	3.45	3.45
Iberville	447	75.85	14.09	15.21
White	191	89.84	7.33	7.33
Black	252	64.92	19.44	21.43
Other	****	100.00	0.00	0.00
Jackson	216	84.43	17.13	17.59
White	145	89.44	17.93	17.93
Black	71	74.29	15.49	16.90
Other	0	0.00	0.00	0.00
Jefferson	5247	83.71	11.34	11.49
White	2955	88.73	7.92	8.02
Black	1895	75.24	17.63	17.89
Other	397	86.89	6.80	6.80
Jefferson Davis	437	77.78	15.79	15.79
White	344	78.89	12.50	12.50
Black	90	75.00	28.89	28.89
Other	****	33.33	0.00	0.00
Lafayette	2905	88.74	10.33	10.43
White	1847	94.68	6.66	6.71
Black	980	76.96	17.76	17.96
Other	78	96.15	3.85	3.85
Lafourche	1083	78.15	13.30	13.85
White	830	81.77	11.33	11.45
Black	211	62.98	18.96	21.33
Other	42	83.33	23.81	23.81
LaSalle	192	89.95	14.06	14.06
White	163	92.50	14.72	14.72
Black	25	72.00	12.00	12.00
Other	****	100.00	0.00	0.00
Lincoln	562	81.47	12.99	12.99
White	292	89.00	8.22	8.22
Black	259	73.23	18.92	18.92
Other	11	72.73	0.00	0.00
Livingston	1634	91.90	10.34	10.53
White	1535	92.82	9.71	9.84
Black	90	75.56	20.00	21.11
Other	9	100.00	22.22	22.22

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2005				
Parish	Total Births	Percent with Adequate Prenatal Care+	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Madison	84	74.39	21.43	21.43
White	23	95.65	13.04	13.04
Black	61	66.10	24.59	24.59
Other	0	0.00	0.00	0.00
Morehouse	408	79.40	15.69	16.18
White	175	91.91	9.71	9.71
Black	231	70.18	19.91	20.78
Other	****	50.00	50.00	50.00
Natchitoches	554	72.29	17.69	17.87
White	251	81.45	14.74	14.74
Black	294	63.54	20.75	21.09
Other	9	100.00	0.00	0.00
Orleans	4494	76.42	14.49	14.73
White	968	90.29	2.69	2.69
Black	3384	72.26	18.35	18.68
Other	142	81.29	2.82	2.82
Ouachita	2248	82.00	14.28	14.68
White	1181	89.66	8.81	8.89
Black	1031	73.18	20.95	21.73
Other	36	83.33	2.78	2.78
Plaquemines	301	84.41	8.97	8.97
White	216	87.26	9.72	9.72
Black	68	77.27	7.35	7.35
Other	17	76.47	5.88	5.88
Pointe Coupee	304	85.28	15.13	15.13
White	167	90.24	5.39	5.39
Black	136	79.85	27.21	27.21
Other	****	0.00	0.00	0.00
Rapides	1915	87.23	14.15	14.36
White	1152	93.06	11.81	11.89
Black	727	78.37	18.02	18.43
Other	36	77.78	11.11	11.11
Red River	139	72.99	19.42	19.42
White	73	90.28	13.70	13.70
Black	66	53.85	25.76	25.76
Other	0	0.00	0.00	0.00
Richland	299	84.69	15.38	16.39
White	155	93.42	9.68	10.97
Black	144	75.35	21.53	22.22
Other	0	0.00	0.00	0.00
Sabine	305	74.83	13.77	14.43
White	205	81.68	12.20	13.17
Black	76	53.95	17.11	17.11
Other	24	83.33	16.67	16.67

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2005				
Parish	Total Births	Percent with Adequate Prenatal Care+	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
St. Bernard	555	86.19	16.04	16.76
White	451	88.18	15.52	15.52
Black	81	75.00	23.46	28.40
Other	23	86.96	0.00	0.00
St. Charles	641	84.54	10.45	10.61
White	406	89.53	8.87	8.87
Black	222	75.57	13.96	14.41
Other	13	83.33	0.00	0.00
St. Helena	105	73.08	26.67	26.67
White	38	86.84	26.32	26.32
Black	67	65.15	26.87	26.87
Other	0	0.00	0.00	0.00
St. James	310	78.10	12.58	12.90
White	128	88.10	3.91	4.69
Black	181	70.95	18.78	18.78
Other	****	100.00	0.00	0.00
St. John	681	81.26	10.57	10.87
White	296	89.58	5.41	5.41
Black	369	73.83	15.18	15.72
Other	16	100.00	0.00	0.00
St. Landry	1330	75.76	16.54	16.84
White	680	84.43	12.50	12.65
Black	644	66.40	20.96	21.43
Other	6	100.00	0.00	0.00
St. Martin	780	85.25	12.44	12.69
White	448	91.80	8.26	8.26
Black	321	75.95	18.38	19.00
Other	11	90.91	9.09	9.09
St. Mary	766	77.01	16.58	16.71
White	425	85.07	13.65	13.65
Black	306	65.23	21.57	21.90
Other	35	81.82	8.57	8.57
St. Tammany	2636	87.65	7.13	7.13
White	2239	89.70	6.21	6.21
Black	349	75.37	12.61	12.61
Other	48	81.25	10.42	10.42
Tangipahoa	1628	80.71	14.25	14.74
White	940	86.83	10.74	10.85
Black	671	72.44	19.37	20.42
Other	17	70.59	5.88	5.88
Tensas	64	50.00	21.88	23.44
White	16	92.86	6.25	6.25
Black	48	36.96	27.08	29.17
Other	0	0.00	0.00	0.00

Births by Parish of Residence, Race of Mother, and Selected Characteristics Louisiana, 2005				
Parish	Total Births	Percent with Adequate Prenatal Care+	% Births to Mothers 15-19 Years Old	% Births to Mothers Under 20 Years Old
Terrebonne	1578	77.09	15.84	16.10
White	1092	82.42	12.91	13.00
Black	350	64.08	20.86	21.71
Other	136	68.15	26.47	26.47
Union	330	81.11	14.85	16.06
White	216	87.79	13.89	13.89
Black	111	67.29	16.22	19.82
Other	****	100.00	33.33	33.33
Vermilion	758	88.33	13.98	14.12
White	596	89.71	11.07	11.07
Black	148	82.31	26.35	27.03
Other	14	92.86	7.14	7.14
Vernon	945	66.17	11.53	11.53
White	746	68.74	11.13	11.13
Black	150	54.79	15.33	15.33
Other	49	61.22	6.12	6.12
Washington	549	79.70	14.75	15.12
White	349	86.05	14.61	14.90
Black	198	69.39	14.65	15.15
Other	****	0.00	50.00	50.00
Webster	508	84.26	16.73	16.93
White	322	88.99	11.49	11.49
Black	181	75.98	26.52	27.07
Other	5	80.00	0.00	0.00
W. Baton Rouge	320	83.44	11.25	11.56
White	200	90.31	9.00	9.50
Black	118	72.41	15.25	15.25
Other	****	50.00	0.00	0.00
West Carroll	142	82.27	20.42	20.42
White	115	88.70	19.13	19.13
Black	27	53.85	25.93	25.93
Other	0	0.00	0.00	0.00
W. Feliciana	102	91.00	13.73	13.73
White	58	94.74	6.90	6.90
Black	43	85.71	23.26	23.26
Other	****	100.00	0.00	0.00
Winn	213	80.86	14.55	14.55
White	139	87.59	10.07	10.07
Black	72	68.57	23.61	23.61
Other	****	50.00	0.00	0.00

C. DEATHS

Note: The 2005 death data used in this report are preliminary

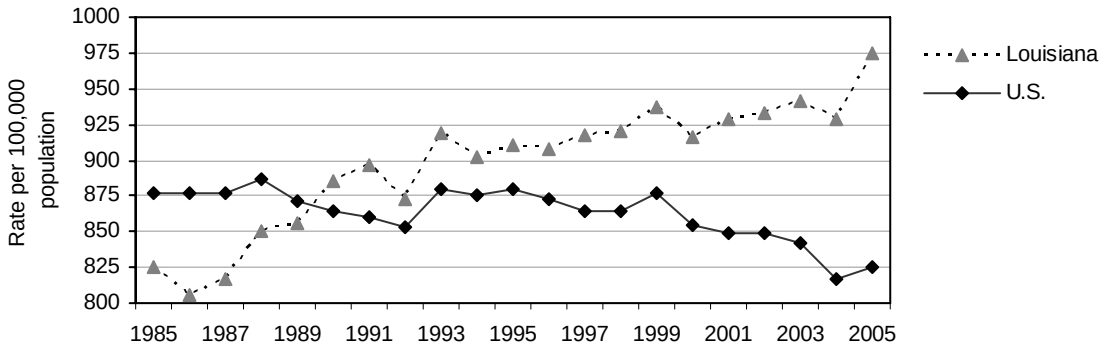
Death Counts and Crude Mortality Rates

There were 44,108 deaths among Louisiana residents in 2005, representing an increase from 41,942 deaths in 2004. Of the deaths in 2005, 30,059 (68.1%) were among whites, 13,772 (31.2%) among blacks, and 277 (0.6%) among other races. By age group, 22% were in the age group 45-64 years, 43.5% in the age group 65-84 years, and 23.5% 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 increased from 928.8 per 100,000 population in 2004 to 975.1 per 100,000 population in 2005.

The United States death rate in 2005 was 825.8 per 1,000 population and 816.7 in 2004.

Figure 5.2 Crude Death Rates
Louisiana and United States, 1985-2005



Source: Louisiana State Center for Health Statistics
National Center for Health Statistics Preliminary Data 2005

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 gender, 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 gender, which were not taken into account when the adjustments for age were made. In the table below, crude rates for 2005 are preliminary[1].

Mortality Rates
Louisiana, Neighboring States, and United States, 2005

State	Crude Rate*	Age-Adjusted Rate**
Alabama	1033.1	997.9
Arkansas	1009.5	930.2
Louisiana	980.0	1020.6
Mississippi	999.6	1026.9
Texas	684.5	828.8
United States	825.8	798.8

*Rate per 100,000 population, preliminary data 2005. **Rate per 100,000 U.S. Standard population 2000.
Source: National Center for Health Statistics, Preliminary Death Data 2005

Number of Deaths by Age Group and Gender. Louisiana, 2005

Gender	Age Group								
	Under 5	5-14	15-24	25-44	45-64	65-84	85+	Unknown	Total
Male	424	80	700	1988	5840	9661	3383	4	22090
Female	321	74	210	1060	3858	9519	6976	0	22018
Total	745	154	910	3048	9698	19180	10359	4	44108

Source: Louisiana State Center for Health Statistics

Number And Rate of Deaths by Race-Gender, Age Groups, and Parish
Louisiana, 2005

Parish	Total	Rate	Race/ Gender	Age group 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	44108	9.8	ALL	614	131	65	99	344	566	1115	1933	4050	5648	7625	11555	10359	****
	14834		WM	140	31	9	30	133	214	394	700	1435	2110	2865	4163	2607	****
	15225		WF	109	26	14	18	50	79	165	354	805	1381	2251	4521	5452	0
	7099		BM	204	45	22	28	118	224	370	503	1022	1235	1298	1270	759	****
	6673		BF	156	28	20	22	39	39	171	357	760	887	1169	1527	1498	0
	157		OM	****	****	0	****	****	8	11	10	14	24	25	40	17	0
	120		OF	****	0	0	0	****	****	****	9	14	11	17	34	26	0
Acadia	674	11.3	ALL	10	****	****	0	****	7	22	32	57	82	130	181	148	0
	257		WM	5	0	0	0	0	****	13	19	28	35	48	79	26	0
	299		WF	****	****	****	0	0	****	****	10	19	34	55	72	100	0
	57		BM	****	0	****	0	****	****	****	****	7	5	13	13	8	0
	61		BF	****	0	0	0	0	0	****	****	****	8	14	17	14	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Allen	270	10.7	ALL	7	0	0	****	****	****	5	8	25	35	57	69	56	0
	107		WM	****	0	0	****	****	****	0	****	11	16	21	34	16	0
	94		WF	****	0	0	0	****	0	0	****	****	10	23	22	30	0
	33		BM	****	0	0	0	****	0	****	****	7	5	6	****	****	0
	28		BF	****	0	0	0	0	****	****	****	****	****	6	8	7	0
	5		OM	0	0	0	0	0	****	****	0	****	****	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	****	0	****	****	0	0
Ascension	544	6.2	ALL	16	****	****	****	****	8	20	32	69	71	101	114	100	0
	203		WM	6	****	0	0	****	7	5	17	33	35	37	40	19	0
	204		WF	****	****	****	****	****	0	6	5	15	16	34	62	56	0
	69		BM	****	0	****	****	0	****	6	5	13	13	14	5	6	0
	66		BF	****	0	****	0	0	0	****	****	8	7	16	7	18	0
	****		OM	0	0	0	0	0	0	0	****	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	0	0	****	0

Number And Rate of Deaths by Race-Gender, Age Groups, and Parish
Louisiana, 2005

Parish	Total	Rate	Race/ Gender	Age group 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	203	8.8	ALL	****	****	0	****	****	****	****	7	20	26	38	47	56	0
	72		WM	****	****	0	0	****	****	0	****	8	9	13	16	21	0
	61		WF	0	0	0	0	0	0	0	****	5	5	10	15	24	0
	34		BM	0	0	0	0	0	****	****	****	****	****	11	7	****	0
	35		BF	0	0	0	****	0	0	****	0	5	7	****	9	8	0
	****		OM	0	0	0	0	0	0	0	0	0	****	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Avoyelles	527	12.4	ALL	6	****	****	****	****	10	8	14	40	62	106	142	132	0
	203		WM	****	0	****	****	****	****	5	11	15	27	55	48	30	0
	212		WF	****	0	0	0	****	****	****	****	8	22	24	66	82	0
	59		BM	0	****	0	0	0	****	****	0	10	9	14	12	9	0
	51		BF	0	0	0	0	0	****	0	0	7	****	13	16	11	0
	****		OM	0	0	0	0	0	****	0	0	0	****	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Beauregard	364	10.9	ALL	****	****	0	0	****	6	7	12	34	61	66	97	76	0
	163		WM	****	****	0	0	****	****	****	****	19	32	34	40	26	0
	162		WF	****	****	0	0	0	****	5	5	9	25	22	45	48	0
	17		BM	0	0	0	0	0	****	0	****	5	****	****	****	0	0
	21		BF	0	0	0	0	0	****	0	0	****	****	6	8	****	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	****	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bienville	201	12.8	ALL	****	0	0	0	0	****	****	****	16	25	35	54	59	0
	66		WM	****	0	0	0	0	0	0	0	8	10	17	18	12	0
	59		WF	0	0	0	0	0	****	0	0	****	****	5	21	24	0
	41		BM	****	0	0	0	0	****	****	****	****	8	6	6	13	0
	35		BF	****	0	0	0	0	0	****	****	****	****	7	9	10	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bossier	838	8	ALL	12	****	0	****	****	7	23	30	66	114	159	241	179	0
	361		WM	****	0	0	****	0	****	12	17	32	50	94	99	52	0
	316		WF	****	0	0	0	0	****	****	6	18	39	44	105	96	0
	72		BM	5	****	0	****	****	****	****	5	8	10	11	16	7	0
	86		BF	****	****	0	****	0	****	****	****	8	15	9	20	24	0
	****		OM	0	0	0	0	0	0	0	0	0	0	****	****	0	0
	****		OF	0	0	0	0	0	0	****	0	0	0	0	0	0	0
Caddo	2695	10.6	ALL	45	5	0	****	19	34	59	111	231	303	436	719	731	0
	729		WM	7	0	0	****	7	9	17	30	66	82	119	226	165	0
	891		WF	9	0	0	0	****	5	****	14	45	59	108	265	378	0
	533		BM	19	****	0	****	6	14	32	35	65	95	102	106	55	0
	535		BF	10	****	0	0	****	6	6	32	53	66	107	120	131	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	****	****	0
	****		OF	0	0	0	0	0	0	0	0	****	****	0	****	0	0
Calcasieu	1888	10.2	ALL	21	8	****	****	11	19	47	80	174	254	323	503	442	0
	742		WM	8	****	0	0	****	12	27	36	74	110	131	206	131	0
	700		WF	****	****	****	****	****	****	9	18	43	71	102	197	245	0
	234		BM	8	0	0	0	****	5	6	14	36	44	46	46	27	0
	207		BF	****	****	0	****	****	****	5	12	19	28	43	53	39	0
	****		OM	0	0	0	0	0	0	0	0	****	0	0	****	0	0
	****		OF	0	0	0	0	0	0	0	0	****	****	****	0	0	0

Number And Rate of Deaths by Race-Gender, Age Groups, and Parish
Louisiana, 2005

Parish	Total	Rate	Race/ Gender	Age group 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.
Lake Charles	939	12.6	ALL	12	****	****	0	8	6	18	30	71	117	165	265	244	0
	286		WM	****	0	0	0	****	****	5	5	21	43	41	99	66	0
	292		WF	0	0	****	0	****	0	****	****	8	17	48	83	125	0
	190		BM	7	0	0	0	****	****	5	12	27	35	36	40	22	0
	169		BF	****	****	0	0	****	****	5	9	14	22	39	43	31	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	****	0	****	0	0	0
Caldwell	127	12	ALL	****	0	0	0	0	****	****	****	11	20	17	39	30	0
	51		WM	0	0	0	0	0	0	****	****	8	10	10	16	5	0
	57		WF	****	0	0	0	0	****	****	****	****	8	6	17	19	0
	7		BM	0	0	0	0	0	0	0	0	****	****	****	****	****	0
	12		BF	****	0	0	0	0	0	0	****	0	0	0	****	5	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cameron	72	7.5	ALL	0	0	0	0	0	****	****	****	7	9	21	17	13	0
	31		WM	0	0	0	0	0	0	****	****	****	****	10	9	****	0
	38		WF	0	0	0	0	0	****	0	****	****	7	9	7	9	0
	****		BM	0	0	0	0	0	0	0	0	0	0	****	****	0	0
	0		BF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Catahoula	122	11.6	ALL	0	0	0	0	0	0	****	6	16	15	20	37	27	0
	48		WM	0	0	0	0	0	0	****	****	8	6	10	11	9	0
	47		WF	0	0	0	0	0	0	0	****	****	6	7	18	13	0
	18		BM	0	0	0	0	0	0	0	****	5	****	****	****	****	0
	9		BF	0	0	0	0	0	0	0	0	****	****	****	****	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Claiborne	201	12.3	ALL	6	****	0	****	0	****	****	****	8	25	31	49	71	0
	52		WM	0	0	0	0	0	0	****	0	****	8	10	17	15	0
	58		WF	0	0	0	0	0	0	0	0	****	7	6	13	30	0
	41		BM	****	0	0	0	0	****	****	****	****	5	10	8	7	0
	49		BF	****	****	0	****	0	0	****	****	****	5	5	11	19	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	****		OF	****	0	0	0	0	0	0	0	0	0	0	0	0	0
Concordia	229	11.9	ALL	****	****	0	****	****	****	****	8	14	35	45	61	52	0
	75		WM	0	0	0	****	****	****	****	****	6	13	14	29	****	0
	69		WF	0	0	0	0	0	0	****	****	****	11	15	15	23	0
	47		BM	0	****	0	****	****	****	0	****	****	6	11	9	9	0
	37		BF	****	0	0	0	0	0	0	0	****	5	5	7	16	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	****	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Desoto	298	11.6	ALL	5	****	0	****	****	****	5	10	26	42	52	80	70	0
	72		WM	0	****	0	0	****	****	****	0	****	15	15	21	12	0
	91		WF	****	0	0	0	****	0	****	****	8	8	15	23	31	0
	57		BM	****	0	0	****	0	0	****	****	6	10	13	14	5	0
	78		BF	****	0	0	0	0	****	0	5	8	9	9	22	22	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Number And Rate of Deaths by Race-Gender, Age Groups, and Parish
Louisiana, 2005

Parish	Total	Rate	Race/ Gender	Age group 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.
E Baton Rouge	3460	8.3	ALL	59	12	****	****	29	47	100	167	343	413	553	898	835	0
	946		WM	6	0	0	0	7	16	23	38	88	116	175	269	208	0
	1097		WF	8	****	0	0	****	5	13	24	48	70	154	343	428	0
	722		BM	25	8	****	****	16	19	45	58	119	126	112	125	65	0
	674		BF	20	****	0	0	****	7	19	47	88	95	110	153	129	0
	12		OM	0	0	0	0	0	0	0	0	0	6	****	****	****	0
	9		OF	0	0	0	0	0	0	0	0	0	0	****	5	****	0
East Caroll	88	10.1	ALL	****	****	****	****	****	0	****	****	9	11	13	21	20	0
	18		WM	0	0	0	0	0	0	****	0	****	****	****	7	****	0
	14		WF	0	0	0	0	0	0	0	0	****	0	****	****	8	0
	30		BM	****	****	****	0	****	0	0	****	5	8	****	5	0	0
	26		BF	0	****	****	****	0	0	****	****	****	****	****	6	9	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E Feliciana	232	11.1	ALL	****	****	****	0	****	****	10	12	30	38	44	53	35	0
	83		WM	****	0	0	0	****	****	****	****	12	18	14	22	10	0
	49		WF	0	****	0	0	0	0	****	****	****	6	6	15	12	0
	53		BM	****	0	****	0	****	****	****	****	11	8	12	7	5	0
	47		BF	****	0	0	0	0	0	****	****	****	6	12	9	8	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Evageline	414	11.7	ALL	6	****	0	****	****	****	6	15	38	46	78	125	92	0
	157		WM	****	0	0	****	****	****	****	8	11	20	29	50	29	0
	156		WF	****	0	0	0	****	0	****	****	12	11	25	51	50	0
	54		BM	****	****	0	0	0	0	****	****	11	10	12	13	****	0
	46		BF	0	****	0	0	0	0	0	****	****	****	12	11	12	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	****	0	0	0	0
Franklin	268	13.2	ALL	****	0	0	0	****	****	8	14	20	22	54	67	76	0
	90		WM	0	0	0	0	0	0	****	6	12	10	16	28	14	0
	110		WF	0	0	0	0	****	****	****	****	****	9	23	27	39	0
	28		BM	****	0	0	0	****	****	0	****	****	****	6	5	8	0
	40		BF	0	0	0	0	0	0	0	****	****	****	9	7	15	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grant	210	11.3	ALL	6	****	0	****	****	****	6	5	18	34	37	55	43	0
	99		WM	5	0	0	****	****	****	5	****	9	18	23	19	14	0
	75		WF	0	****	0	****	0	****	****	****	****	10	8	26	22	0
	18		BM	****	0	0	0	0	0	0	****	****	****	****	****	****	0
	18		BF	0	0	0	0	0	0	0	0	****	****	****	6	6	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Iberia	698	9.4	ALL	14	****	****	****	****	6	23	35	54	72	144	154	187	0
	244		WM	****	****	0	0	****	****	10	15	15	26	52	69	48	0
	238		WF	****	0	0	0	0	****	****	****	13	13	47	59	98	0
	104		BM	6	0	0	****	****	****	9	8	11	19	19	14	15	0
	108		BF	****	****	****	0	****	0	****	6	14	14	26	12	26	0
	****		OM	0	0	0	0	0	0	****	****	****	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	****	0	0	0	0	0	0

Number And Rate of Deaths by Race-Gender, Age Groups, and Parish
Louisiana, 2005

Parish	Total	Rate	Race/ Gender	Age group 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.
Iberville	364	11.2	ALL	****	0	****	0	****	5	****	18	50	58	62	85	73	0
	102		WM	0	0	0	0	0	****	****	8	12	22	14	25	18	0
	102		WF	****	0	0	0	0	0	****	****	8	7	18	27	35	0
	78		BM	****	0	****	0	****	****	0	****	14	17	14	14	9	0
	82		BF	0	0	****	0	****	****	****	****	16	12	16	19	11	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackson	205	13.1	ALL	****	0	0	0	****	5	****	5	14	18	38	53	65	0
	80		WM	****	0	0	0	****	****	****	****	5	10	16	22	19	0
	69		WF	0	0	0	0	0	****	****	****	****	****	7	19	36	0
	34		BM	0	0	0	0	0	****	****	****	****	****	8	8	5	0
	22		BF	0	0	0	0	0	0	0	****	****	****	7	****	5	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jefferson	4340	9.5	ALL	50	11	8	11	32	46	101	180	369	543	684	1206	1099	0
	1658		WM	16	0	****	****	11	17	41	78	143	233	290	506	316	0
	1788		WF	8	****	0	****	****	6	15	36	100	151	267	529	672	0
	455		BM	17	6	****	****	12	19	32	39	72	83	62	71	39	0
	374		BF	8	****	****	****	6	****	11	24	50	68	57	78	59	0
	40		OM	****	0	0	****	****	****	****	****	****	5	7	15	5	0
	25		OF	0	0	0	0	0	0	****	****	****	****	****	7	8	0
Jeff Davis	365	11.7	ALL	6	****	0	****	0	6	15	17	28	44	67	80	98	0
	153		WM	****	****	0	****	0	6	6	10	16	22	24	33	31	0
	149		WF	****	****	0	0	0	0	6	6	****	12	31	35	53	0
	25		BM	0	0	0	0	0	0	****	****	****	5	****	****	6	0
	36		BF	****	0	0	0	0	0	****	0	****	5	7	7	8	0
	****		OM	0	0	0	0	0	0	0	0	0	0	****	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	0	****	0	0
Lafayette	1485	7.5	ALL	34	****	****	****	10	24	33	78	126	186	256	390	338	0
	536		WM	6	****	****	****	****	12	15	36	52	61	98	164	84	0
	556		WF	8	****	0	0	****	5	6	10	25	53	76	164	206	0
	206		BM	12	****	0	0	****	7	6	17	31	43	44	24	17	0
	179		BF	8	0	****	****	****	0	****	15	17	27	36	37	31	0
	****		OM	0	0	0	0	0	0	****	0	0	****	****	0	0	0
	****		OF	0	0	0	0	0	0	0	0	****	****	****	****	0	0
Lafource	800	8.7	ALL	10	****	****	****	5	6	11	31	60	114	157	232	170	0
	362		WM	****	****	0	****	****	5	6	16	25	61	75	109	56	0
	335		WF	****	0	0	0	****	****	0	8	22	35	63	98	105	0
	46		BM	****	0	****	0	****	0	****	****	****	12	8	10	****	0
	51		BF	****	0	0	0	****	0	****	****	10	6	9	13	5	0
	****		OM	0	0	0	0	0	0	****	0	0	0	****	****	****	0
	****		OF	0	0	0	0	0	0	0	0	0	0	****	****	0	0
Lasalle	181	12.9	ALL	****	****	0	****	****	0	5	****	15	20	40	48	46	0
	79		WM	****	0	0	0	****	0	****	****	7	10	18	21	16	0
	85		WF	0	0	0	****	0	0	****	0	5	8	16	24	29	0
	7		BM	0	0	0	0	0	0	0	0	****	****	****	****	0	0
	9		BF	****	****	0	0	0	0	0	0	****	****	****	****	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	****	0	0	0

Number And Rate of Deaths by Race-Gender, Age Groups, and Parish
Louisiana, 2005

Parish	Total	Rate	Race/ Gender	Age group 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	368	8.5	ALL	9	****	0	0	****	****	7	12	22	46	59	88	121	0
	108		WM	****	0	0	0	0	0	****	****	5	20	21	31	21	0
	123		WF	****	0	0	0	0	****	0	****	****	8	16	30	59	0
	72		BM	****	0	0	0	****	0	****	7	9	12	12	12	16	0
	65		BF	****	****	0	0	0	****	****	****	****	6	10	15	25	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Livingston	799	7.7	ALL	7	****	****	****	15	13	26	45	99	122	147	192	125	0
	387		WM	****	****	****	****	10	10	14	24	56	64	85	78	40	0
	365		WF	5	****	0	****	5	****	9	19	30	54	55	101	80	0
	27		BM	0	0	0	0	0	0	****	****	8	****	****	6	****	0
	19		BF	0	0	0	0	0	0	****	****	5	0	****	6	****	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	****	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Madison	165	13.3	ALL	****	0	****	0	0	****	5	6	13	26	35	41	34	0
	29		WM	0	0	0	0	0	****	****	****	****	7	****	5	7	0
	39		WF	0	0	0	0	0	0	0	0	****	****	10	10	13	0
	44		BM	****	0	0	0	0	****	****	****	****	7	12	7	6	0
	53		BF	****	0	****	0	0	0	****	****	5	8	9	19	8	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morehouse	375	12.5	ALL	****	****	0	0	0	****	7	20	31	32	57	113	107	0
	98		WM	****	0	0	0	0	0	****	5	7	14	19	33	17	0
	139		WF	0	0	0	0	0	0	****	****	7	5	16	55	52	0
	73		BM	****	0	0	0	0	****	****	7	12	10	11	12	14	0
	65		BF	****	****	0	0	0	****	0	6	5	****	11	13	24	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Natchitoches	379	9.7	ALL	****	****	0	****	****	7	7	15	38	50	57	101	93	0
	130		WM	0	****	0	****	****	****	****	6	13	16	26	33	24	0
	108		WF	****	0	0	0	0	0	****	****	****	9	14	29	49	0
	59		BM	****	0	0	0	0	****	****	****	9	16	8	11	5	0
	80		BF	****	0	0	****	****	****	0	****	12	8	9	28	14	0
	****		OM	0	0	0	0	0	0	0	0	0	****	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	0	0	****	0
Orleans	4955	10.8	ALL	50	10	8	16	49	110	180	210	532	644	774	1287	1084	****
	823		WM	****	0	0	0	****	5	18	26	78	102	117	280	191	0
	920		WF	****	****	0	0	0	****	5	11	44	48	92	313	400	0
	1683		BM	21	****	5	9	38	89	109	111	237	291	295	319	154	****
	1480		BF	23	****	****	7	8	8	46	59	170	199	263	361	329	0
	27		OM	****	0	0	0	0	****	****	****	****	****	6	8	****	0
	22		OF	0	0	0	0	0	****	****	****	****	****	****	6	8	0
Ouachita	1496	10	ALL	32	****	****	6	10	10	33	61	122	193	229	434	360	0
	493		WM	7	****	****	****	5	5	9	20	37	68	85	163	91	0
	528		WF	****	****	0	****	****	****	****	8	17	56	81	167	187	0
	217		BM	13	0	0	****	****	****	12	14	35	37	33	43	23	0
	254		BF	9	****	****	****	0	0	11	19	33	32	28	60	58	0
	****		OM	0	0	0	0	0	0	0	0	0	0	****	****	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	****	0	****	0

Number And Rate of Deaths by Race-Gender, Age Groups, and Parish
Louisiana, 2005

Parish	Total	Rate	Race/ Gender	Age group 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.
Plaquemines	223	7.6	ALL	0	0	****	****	****	****	****	11	22	26	50	60	43	0
	86		WM	0	0	0	****	0	****	****	5	9	12	17	25	13	0
	88		WF	0	0	****	0	0	****	0	5	****	8	22	22	25	0
	23		BM	0	0	0	0	****	0	****	****	6	****	6	****	****	0
	24		BF	0	0	0	0	****	0	0	0	****	****	****	9	****	0
	****		OM	0	0	0	0	****	0	0	0	0	0	****	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Point Coupee	238	10.6	ALL	****	0	0	0	****	****	****	10	21	33	53	61	54	0
	71		WM	****	0	0	0	****	0	0	****	7	9	19	21	11	0
	76		WF	0	0	0	0	0	0	****	****	****	8	12	23	26	0
	46		BM	0	0	0	0	0	****	****	5	5	10	9	10	5	0
	45		BF	0	0	0	0	0	0	****	****	5	6	13	7	12	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rapides	1346	10.5	ALL	23	6	0	****	9	15	31	54	114	158	241	368	324	0
	437		WM	5	****	0	0	****	5	12	12	40	65	91	121	81	0
	501		WF	****	0	0	****	****	****	5	16	24	34	73	171	167	0
	204		BM	5	****	0	****	****	6	9	11	24	35	46	30	31	0
	197		BF	9	0	0	0	****	****	5	15	26	23	31	42	43	0
	****		OM	0	0	0	0	0	0	0	0	0	****	0	****	****	0
	****		OF	0	0	0	0	0	0	0	0	0	0	0	****	****	0
Red River	124	12.6	ALL	****	****	0	0	****	****	5	****	11	15	20	35	30	0
	42		WM	****	****	0	0	0	****	****	****	****	6	6	11	7	0
	36		WF	0	0	0	0	0	0	0	0	0	****	7	15	12	0
	20		BM	****	0	0	0	****	0	****	0	****	****	****	****	****	0
	25		BF	0	0	0	0	0	0	0	****	****	****	****	6	7	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	****	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Richland	267	13	ALL	****	****	****	0	****	****	****	9	17	29	48	81	68	0
	71		WM	0	0	0	0	****	****	****	0	5	6	19	21	16	0
	97		WF	0	0	0	0	****	0	****	****	****	9	13	37	32	0
	45		BM	****	****	****	0	****	0	****	****	6	8	****	5	12	0
	54		BF	****	0	0	0	0	0	****	****	****	6	12	18	8	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sabine	256	10.8	ALL	5	0	****	0	****	****	****	13	19	26	55	63	67	0
	105		WM	****	0	0	0	****	****	****	****	7	13	27	29	18	0
	109		WF	****	0	****	0	0	****	0	****	6	6	16	28	46	0
	21		BM	****	0	0	0	0	0	0	****	****	****	7	****	0	0
	18		BF	0	0	0	0	0	0	0	****	****	****	****	****	****	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	****	0	0
	****		OF	0	0	0	0	0	0	0	****	0	0	****	0	0	0
St. Bernard	841	12.5	ALL	6	****	****	****	5	9	24	36	73	120	125	274	165	0
	364		WM	5	****	0	****	****	6	14	14	37	68	54	115	46	0
	425		WF	0	0	****	****	****	****	6	12	32	43	58	151	118	0
	26		BM	0	0	0	0	0	****	****	5	0	****	8	5	****	0
	24		BF	****	0	0	0	0	0	****	****	****	****	5	****	0	0
	****		OM	0	0	0	0	0	0	0	0	0	****	0	0	0	0
	****		OF	0	0	0	0	0	0	0	****	0	0	0	0	0	0

Number And Rate of Deaths by Race-Gender, Age Groups, and Parish
Louisiana, 2005

Parish	Total	Rate	Race/ Gender	Age group 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. Charles	380	7.9	ALL	5	****	****	****	0	****	15	26	45	42	63	100	76	0
	142		WM	0	0	0	0	0	****	9	17	16	18	17	45	18	0
	134		WF	****	****	0	0	0	0	****	****	9	9	30	39	41	0
	57		BM	****	****	****	****	0	****	****	****	13	7	9	11	5	0
	44		BF	****	0	0	0	0	0	****	****	6	7	7	5	12	0
	****		OM	****	0	0	0	0	0	0	0	****	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	****	0	0	0	0
St. Helena	107	10.6	ALL	****	0	0	0	****	0	****	****	14	12	20	24	28	0
	29		WM	0	0	0	0	0	0	0	****	****	****	8	7	6	0
	18		WF	0	0	0	0	0	0	0	****	****	0	0	7	7	0
	31		BM	****	0	0	0	****	0	****	0	****	7	7	5	6	0
	29		BF	****	0	0	0	0	0	0	****	****	****	5	5	9	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. James	171	8.2	ALL	0	****	0	0	0	****	****	12	10	27	38	36	39	0
	45		WM	0	0	0	0	0	****	0	5	****	5	14	11	7	0
	38		WF	0	0	0	0	0	****	0	****	****	5	6	9	14	0
	43		BM	0	****	0	0	0	0	****	****	****	9	10	10	****	0
	45		BF	0	0	0	0	0	0	****	****	****	8	8	6	14	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. John	341	7.6	ALL	****	****	0	0	****	6	15	31	36	48	49	85	66	0
	98		WM	0	****	0	0	0	****	****	8	10	14	14	28	19	0
	101		WF	0	0	0	0	****	****	****	6	****	12	15	31	28	0
	78		BM	****	0	0	0	****	****	6	8	14	13	8	15	7	0
	64		BF	0	0	0	0	0	0	****	9	8	9	12	11	12	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Landry	931	10.4	ALL	20	****	****	****	8	9	18	52	94	117	150	225	232	0
	291		WM	****	****	0	0	0	6	5	18	29	42	56	85	48	0
	273		WF	****	****	0	0	****	0	****	7	12	22	35	77	113	0
	176		BM	8	0	0	****	5	****	8	17	25	26	33	26	24	0
	190		BF	9	****	****	****	****	0	****	10	27	27	26	37	47	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	****	0	0	0	0	0
St. Martin	445	8.9	ALL	10	****	****	0	5	6	10	20	46	67	84	111	83	0
	132		WM	****	0	0	0	****	****	****	****	23	28	30	27	11	0
	143		WF	****	0	0	0	****	****	****	****	5	20	22	41	46	0
	92		BM	****	****	****	0	0	****	****	9	8	10	20	24	11	0
	76		BF	****	0	0	0	0	0	****	6	10	9	12	18	15	0
	****		OM	0	****	0	0	0	0	0	0	0	0	0	****	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
St. Mary	544	10.5	ALL	****	****	****	0	5	8	10	25	67	69	114	112	129	0
	181		WM	****	0	0	0	****	5	****	10	27	21	44	40	28	0
	175		WF	****	0	0	0	0	0	****	****	8	19	23	48	70	0
	105		BM	0	****	****	0	****	****	5	7	17	17	27	16	10	0
	77		BF	0	0	0	0	****	****	****	****	14	12	17	8	19	0
	****		OM	0	0	0	0	0	0	0	0	0	0	****	0	****	0
	****		OF	0	0	0	0	0	0	0	0	****	0	****	0	0	0

Number And Rate of Deaths by Race-Gender, Age Groups, and Parish
Louisiana, 2005

Parish	Total	Rate	Race/ Gender	Age group 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. Tammany	1807	8.5	ALL	17	6	****	5	15	17	42	79	146	232	329	481	436	0
	870		WM	****	****	0	****	11	10	27	47	85	133	189	222	139	0
	752		WF	6	****	0	****	****	****	9	18	32	76	109	225	267	0
	112		BM	6	****	0	****	****	****	5	8	14	17	19	24	12	0
	64		BF	****	0	****	0	****	0	****	5	10	6	11	9	18	0
	7		OM	0	0	0	0	0	****	0	****	****	0	****	0	0	0
	****		OF	0	0	0	0	0	0	0	0	****	0	0	****	0	0
Tangipahoa	1067	10.3	ALL	13	****	6	****	12	19	35	55	104	162	181	250	222	0
	393		WM	****	****	****	****	9	10	17	19	49	61	72	84	67	0
	416		WF	****	0	****	****	****	7	10	18	24	50	66	118	116	0
	124		BM	6	****	****	****	****	****	****	9	19	28	23	17	12	0
	131		BF	****	****	****	0	0	0	5	9	12	23	20	30	26	0
	****		OM	0	0	0	0	0	0	****	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	0	****	****	0
Tensas	83	13.6	ALL	0	0	0	0	0	0	0	0	9	17	16	25	16	0
	19		WM	0	0	0	0	0	0	0	0	****	5	****	5	****	0
	17		WF	0	0	0	0	0	0	0	0	****	****	****	8	****	0
	26		BM	0	0	0	0	0	0	0	0	****	5	8	7	****	0
	21		BF	0	0	0	0	0	0	0	0	****	****	****	5	8	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Terrebonne	937	8.7	ALL	15	5	****	****	7	16	23	54	76	136	190	212	198	0
	395		WM	5	****	0	****	****	7	****	27	26	65	91	93	69	0
	325		WF	0	****	****	0	****	****	7	12	23	40	60	76	99	0
	100		BM	5	0	0	0	****	****	8	10	16	15	21	14	7	0
	87		BF	****	0	****	****	****	****	****	****	7	13	11	24	20	0
	14		OM	0	0	0	0	0	****	****	****	****	****	****	****	****	0
	16		OF	****	0	0	0	****	0	0	****	****	****	****	****	****	0
Union	260	11.7	ALL	****	0	****	0	****	5	****	9	16	23	45	66	85	0
	92		WM	****	0	0	0	****	****	****	5	6	11	20	24	19	0
	99		WF	0	0	0	0	0	****	0	****	****	6	14	29	44	0
	30		BM	****	0	****	0	0	****	****	0	****	****	7	5	8	0
	39		BF	****	0	0	0	****	0	****	****	5	****	****	8	14	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vermillion	547	10	ALL	5	0	0	****	7	6	8	20	53	56	98	133	160	0
	248		WM	****	0	0	****	5	****	7	12	36	23	54	57	48	0
	229		WF	****	0	0	0	****	****	****	****	10	21	26	61	100	0
	43		BM	0	0	0	0	****	****	0	****	****	8	12	9	****	0
	25		BF	0	0	0	0	0	0	0	0	****	****	6	5	8	0
	****		OM	0	0	0	0	0	0	0	0	0	****	0	****	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Vernon	355	6.9	ALL	8	****	0	0	5	8	10	13	27	46	74	90	73	0
	160		WM	****	****	0	0	****	****	****	****	11	21	46	42	23	0
	153		WF	****	0	0	0	****	****	****	7	8	21	23	36	46	0
	18		BM	****	0	0	0	0	****	****	0	****	****	****	****	****	0
	19		BF	****	0	0	0	0	0	****	****	****	****	****	6	****	0
	****		OM	0	0	0	0	0	0	0	0	0	0	0	0	****	0
	****		OF	0	0	0	0	0	0	0	****	****	0	0	****	0	0

Number And Rate of Deaths by Race-Gender, Age Groups, and Parish
Louisiana, 2005

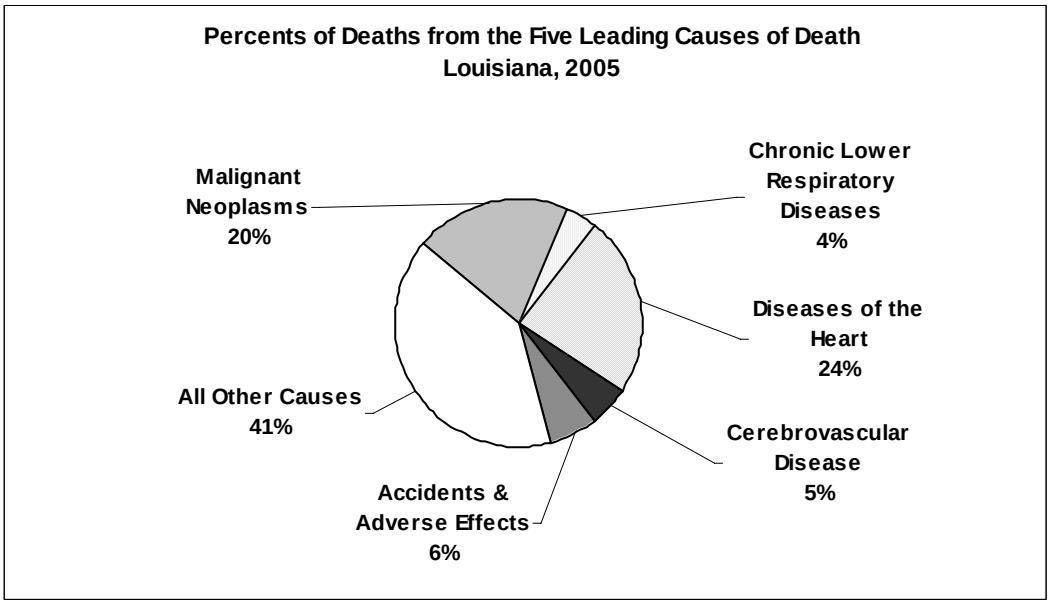
Parish	Total	Rate	Race/ Gender	Age group in years													
				<1	1-4	5-9	10-14	15-19	20-24	25-34	35-44	45-54	55-64	65-74	75-84	85+	Unk.
Washington	596	13.4	ALL	5	0	0	****	5	6	11	19	42	97	120	155	135	0
	233		WM	****	0	0	0	****	****	****	12	22	44	49	59	37	0
	195		WF	0	0	0	****	0	****	****	****	12	23	37	55	63	0
	70		BM	****	0	0	0	****	****	****	****	****	14	14	17	9	0
	97		BF	****	0	0	0	****	0	****	****	****	16	19	24	26	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	****		OF	0	0	0	0	0	0	0	0	0	0	****	0	0	0
Webster	535	12.9	ALL	8	****	****	****	****	****	8	19	41	68	106	134	139	0
	180		WM	****	****	****	0	****	****	****	8	17	23	41	48	36	0
	193		WF	****	0	****	****	0	0	0	****	15	17	37	52	63	0
	70		BM	****	****	0	0	****	****	****	****	****	17	12	11	11	0
	92		BF	****	0	****	0	0	0	****	****	5	11	16	23	29	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W Baton Rouge	214	9.9	ALL	8	0	0	0	****	****	7	10	25	28	44	53	33	0
	55		WM	****	0	0	0	0	****	****	****	9	8	7	15	7	0
	54		WF	****	0	0	0	0	****	0	****	****	7	9	18	12	0
	59		BM	****	0	0	0	****	****	****	5	9	8	18	6	****	0
	46		BF	****	0	0	0	****	0	****	0	****	5	10	14	10	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Carroll	142	11.9	ALL	****	0	0	0	****	****	****	****	8	19	21	47	37	0
	53		WM	0	0	0	0	0	0	****	****	5	****	11	18	13	0
	62		WF	0	0	0	0	****	****	0	****	****	9	6	21	19	0
	13		BM	0	0	0	0	0	0	****	0	0	6	****	****	****	0
	14		BF	****	0	0	0	0	0	****	0	****	0	****	5	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
W Felicina	124	8.1	ALL	****	0	0	0	****	0	****	7	25	23	25	20	16	0
	38		WM	****	0	0	0	****	0	****	****	5	7	10	5	5	0
	28		WF	0	0	0	0	0	0	0	****	****	****	7	9	7	0
	35		BM	0	0	0	0	0	0	****	****	13	11	****	****	****	0
	23		BF	0	0	0	0	0	0	****	****	5	****	7	****	****	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Winn	180	11	ALL	****	0	0	0	****	****	****	7	18	24	27	55	42	0
	57		WM	0	0	0	0	****	****	0	****	****	11	9	24	6	0
	64		WF	0	0	0	0	****	0	0	****	5	****	8	20	23	0
	31		BM	0	0	0	0	0	****	0	****	8	5	7	****	****	0
	28		BF	****	0	0	0	0	0	****	****	****	****	****	7	9	0
	0		OM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	0		OF	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Age-Adjusted Mortality Rate for Total Deaths

The age-adjusted death rate from all causes for Louisiana in 2005 was 1015.2 per 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

There were 44,108 deaths to Louisiana residents in 2005. The five leading causes were: diseases of the heart; malignant neoplasms (cancer); cerebrovascular disease (stroke); accidents; and chronic lower respiratory diseases. Of all deaths in Louisiana in 2005 60.1% were attributable to those causes, as shown in the figure above. The top four causes of death have consistently been the leading causes in Louisiana for the past 20 years, though the specific order has alternated. The fifth-ranked cause has shown more variation, shifting between diabetes mellitus, 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.

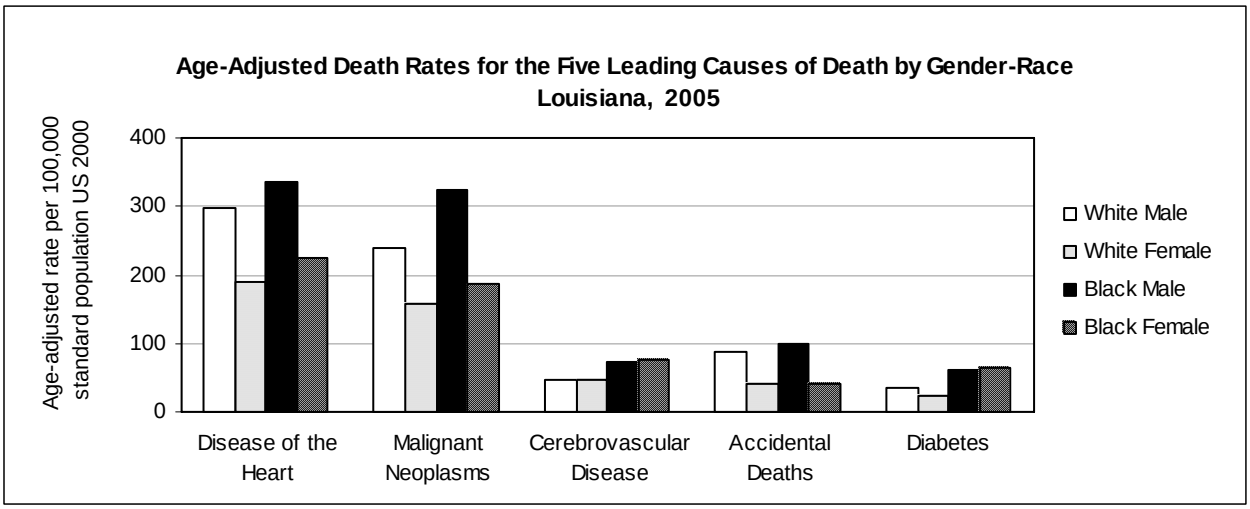
The leading causes of death in Louisiana were determined by ranking the crude death rates from the highest to lowest, and then adjusting these rates for age:

- Diseases of the heart
- Malignant Neoplasms
- Accidents and adverse effects
- Cerebrovascular disease
- Chronic Lower Respiratory Diseases

Age-Adjusted Mortality Rates* for the Top Ten Causes of Death Louisiana and United States[3], 2005				
LA Rank**	Cause of Death	Age-Adjusted Mortality Rate*		U.S. Rank**
		Louisiana	United States***	
-	*All Causes*	1015.2	798.8	-
1	*Diseases of the Heart*	244.7	210.3	*1*
2	*Malignant Neoplasms*	201.9	183.8	*2*
3	*Accidents*	63.4	38.1	*5*
4	*Cerebrovascular Disease*	55.0	46.6	*3*
5	*Chronic Lower Respiratory Diseases*	43.1	43.2	*4*
6	*Diabetes Mellitus*	37.7	24.5	*6*
7	*Alzheimer's Disease*	33.5	22.9	*7*
8	*Nephritis, Nephrotic Syndrome, and Nephrosis*	26.4	14.3	*9*
9	*Influenza and Pneumonia*	22.4	20.3	*8*
10	*Septicemia*	18.9	11.2	*10*

* LA OPH/ State Center for Health Statistics calculated age-adjusted rates (per 100,000 U.S. standard population 2000)
2005, U.S. Census Bureau population estimates used in computing crude rates
** Rank based on crude death rates

The following chart displays age-adjusted mortality rates for the five leading causes of death in Louisiana in 2005. 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-gender groups in 2005.

Age-Adjusted Death Rates* for Leading Causes of Mortality by Race-Gender Louisiana, 2005	
Cause of Death/Race/Gender	Age-adjusted Rate*
Diseases of the Heart	244.7
White Male	296.9
White Female	191.0
Black Male	335.1
Black Female	223.7
Malignant Neoplasm	201.9
White Male	240.4
White Female	158.5
Black Male	328.8

Age-Adjusted Death Rates* for Leading Causes of Mortality by Race-Gender Louisiana, 2005	
Cause of Death/Race/Gender	**Age-adjusted Rate***
Black Female	186.1
Accidents	63.4
White Male	87.3
White Female	42.1
Black Male	100.7
Black Female	41.1
Cerebrovascular Diseases	55.0
White Male	47.5
White Female	48.1
Black Male	73.1
Black Female	75.1
Chronic Lower Respiratory Disease	43.1
White Male	58.8
White Female	39.9
Black Male	48.8
Black Female	21.8
Diabetes Mellitus	37.7
White Male	35.4
White Female	24.5
Black Male	62.4
Black Female	63.4
Alzheimer's Disease	33.5
White Male	27.8
White Female	40.0
Black Male	28.8
Black Female	25.0
Nephritis, Nephrotic Syndrome and Nephrosis	26.4
White Male	27.0
White Female	18.0
Black Male	46.2
Black Female	39.7
Influenza and Pneumonia	22.4
White Male	25.7
White Female	20.4
Black Male	28.8
Black Female	18.3
Septicemia	18.9
White Male	16.1
White Female	15.6
Black Male	34.1
Black Female	25.6
Homicide	12.2
White Male	5.2
White Female	2.5
Black Male	50.3
Black Female	6.8
Suicide	10.7
White Male	22.0
White Female	6.1
Black Male	7.1
Black Female	1.5

*Age-adjusted Rate per 100,000 U.S. standard population 2000
Source: Louisiana State Center for Health Statistics
United States Census Bureau, 2005 Census Estimates for Crude Rates

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).

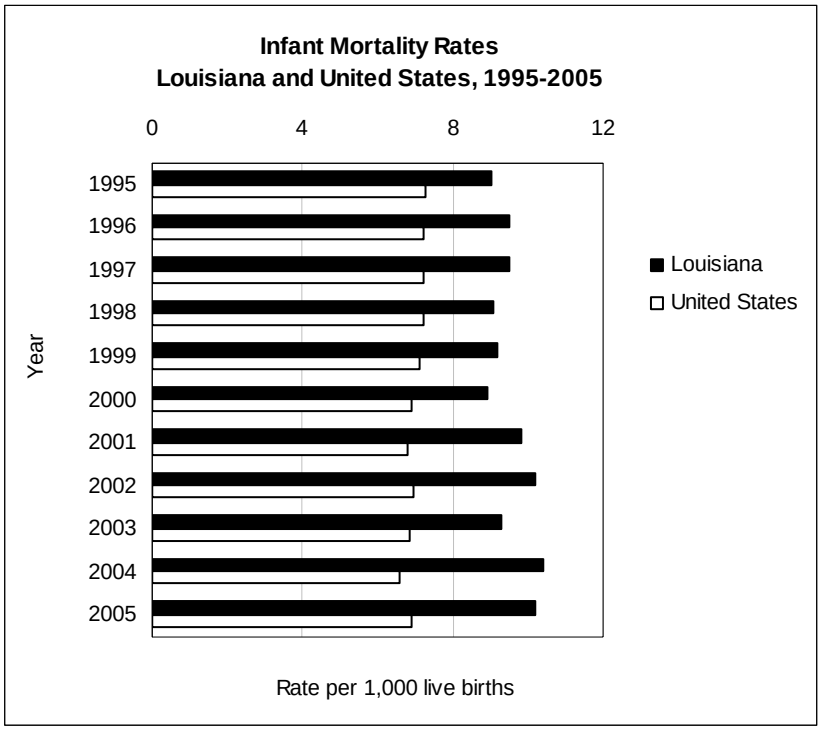
Infant Mortality Rates by Race of Child. Louisiana, 2005*

Race	Number of Deaths	Infant Mortality Rate	Neonatal Mortality Rate	Post- Neonatal Mortality Rate	Hebdomadal Mortality Rate	Perinatal Mortality Rate
Total	614	10.2	5.8	4.4	4.5	12.5
White	249	7.2	4.2	3.0	3.3	9.4
Black	360	15.2	8.5	6.7	6.5	17.7
Other	5	3.0	2.4	0.6	1.2	4.2

*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 2005, there were 614 deaths in Louisiana to children under one year of age, i.e., a rate of 10.2. 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 1,000 live births in 1983 to 8.9 in 2000. The national infant mortality rate in 2005 is 6.9[4] per 1,000 live births.



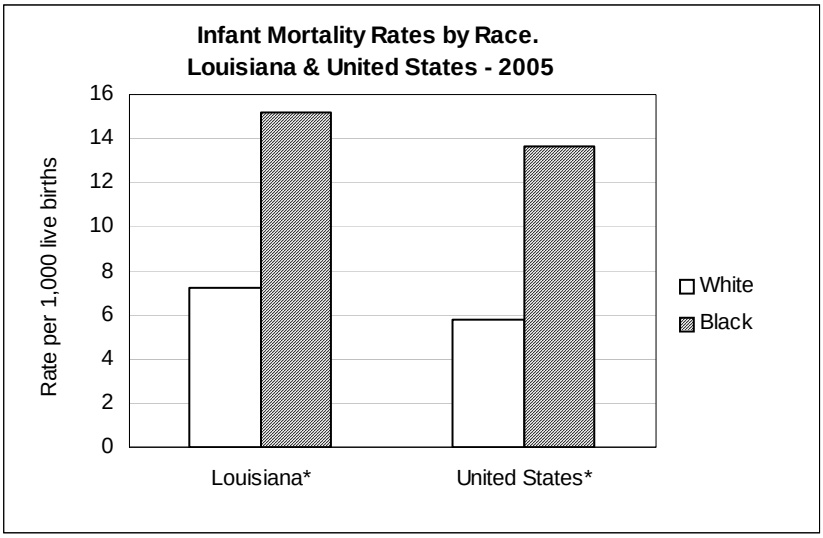
Source: Louisiana State Center for Health Statistics, Preliminary Data 2005
National Center for Health Statistics, Preliminary Data 2005

For comparison purposes, the table below shows infant mortality rates for Louisiana and its neighboring states. (The table below uses National Center for Health Statistics preliminary 2005 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, 2005***		
State	***Rate***	***National Ranking******
Alabama	9.1	4
Arkansas	7.5	16
Louisiana	9.7	3
Mississippi	11.0	1
Texas	6.4	30
United States	6.9	

Rate per 1,000 live births
** NCHS, National Vital Statistics Reports Vol. 54, No 20 (Preliminary Death Data 2005)
*** 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 2005, there were 249 white, 360 black, and 5 other-race infant deaths in Louisiana. The infant mortality rates were 7.2, 15.2, and 3.0 deaths per 1,000 race-specific live births, respectively.



Source: Louisiana State Center for Health Statistics, Preliminary Data 2005
NCHS, NVSR, Preliminary Data for 2005

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, 2000-2005			
Parish	**Mother's Race**	**2005 Number of Infant Deaths**	**2005 Infant Mortality Rate+**
State	All	614	10.2
	White	249	7.2
	Black	360	15.2
	Other	5	3
Acadia	All	10	10.3
	White	6	8.2
	Black	4	17.3
	Other	0	0
Allen	All	7	21.7
	White	4	16.5
	Black	3	44.8
	Other	0	0
Ascension	All	16	10.9
	White	10	9.3
	Black	6	15.7
	Other	0	0
Assumption	All	1	3.6
	White	1	6.3
	Black	0	0
	Other	0	0
Avoyelles	All	6	9.8
	White	6	15.9
	Black	0	0
	Other	0	0
Beauregard	All	2	4.5
	White	2	5.2
	Black	0	0
	Other	0	0
Bienville	All	3	16
	White	1	11
	Black	2	20.6
	Other	0	0
Bossier	All	12	7.4
	White	6	5.2
	Black	6	14.6
	Other	0	0
Caddo	All	45	12.5
	White	16	10.5
	Black	29	14.3
	Other	0	0
Calcasieu	All	21	8
	White	10	5.5
	Black	11	14.4
	Other	0	0
Caldwell	All	3	22.6
	White	1	9.6
	Black	2	69
	Other	0	0
Cameron	All	0	0
	White	0	0
	Black	0	0
	Other	0	0

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 2000-2005			
Parish	**Mother's Race**	**2005 Number of Infant Deaths**	**2005 Infant Mortality Rate+**
Catahoula	All	0	0
	White	0	0
	Black	0	0
	Other	0	0
Claiborne	All	6	35.9
	White	0	0
	Black	5	48.1
	Other	1	500
Concordia	All	1	6.8
	White	0	0
	Black	1	12.7
	Other	0	0
Desoto	All	5	13.5
	White	2	10.4
	Black	3	17.3
	Other	0	0
E Baton Rouge	All	59	10.4
	White	14	6
	Black	45	14.4
	Other	0	0
East Carroll	All	1	10.3
	White	0	0
	Black	1	14.5
	Other	0	0
E Feliciana	All	4	15.2
	White	2	13.1
	Black	2	18.3
	Other	0	0
Evangeline	All	6	11.4
	White	4	11.7
	Black	2	11
	Other	0	0
Franklin	All	3	10.5
	White	0	0
	Black	3	22.6
	Other	0	0
Grant	All	6	24.3
	White	5	23.7
	Black	1	30.3
	Other	0	0
Iberia	All	14	12.6
	White	4	6.7
	Black	10	20.4
	Other	0	0

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 2000-2005			
Parish	**Mother's Race**	**2005 Number of Infant Deaths**	**2005 Infant Mortality Rate+**
Iberville	All	4	8.9
	White	3	15.7
	Black	1	4
	Other	0	0
Jackson	All	2	9.3
	White	2	13.8
	Black	0	0
	Other	0	0
Jefferson	All	50	9.5
	White	24	8.1
	Black	25	13.2
	Other	1	2.5
Jeff Davis	All	6	13.7
	White	3	8.7
	Black	3	33.3
	Other	0	0
Lafayette	All	34	11.7
	White	14	7.6
	Black	20	20.4
	Other	0	0
Lafourche	All	10	9.2
	White	6	7.2
	Black	4	19
	Other	0	0
LaSalle	All	2	10.4
	White	1	6.1
	Black	1	40
	Other	0	0
Lincoln	All	9	16
	White	7	24
	Black	2	7.7
	Other	0	0
Livingston	All	7	4.3
	White	7	4.6
	Black	0	0
	Other	0	0
Madison	All	2	23.8
	White	0	0
	Black	2	32.8
	Other	0	0
Morehouse	All	4	9.8
	White	1	5.7
	Black	3	13
	Other	0	0

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 2000-2005			
Parish	**Mother's Race**	**2005 Number of Infant Deaths**	**2005 Infant Mortality Rate+**
Natchitoches	All	4	7.2
	White	1	4
	Black	3	10.2
	Other	0	0
Orleans	All	50	11.1
	White	5	5.2
	Black	44	13
	Other	1	7
Ouachita	All	32	14.2
	White	10	8.5
	Black	22	21.3
	Other	0	0
Plaquemines	All	0	0
	White	0	0
	Black	0	0
	Other	0	0
Pointe Coupee	All	1	3.3
	White	1	6
	Black	0	0
	Other	0	0
Rapides	All	23	12
	White	9	7.8
	Black	14	19.3
	Other	0	0
Red River	All	2	14.4
	White	1	13.7
	Black	1	15.2
	Other	0	0
Richland	All	4	13.4
	White	0	0
	Black	4	27.8
	Other	0	0
Sabine	All	5	16.4
	White	4	19.5
	Black	1	13.2
	Other	0	0
St Bernard	All	6	10.8
	White	5	11.1
	Black	1	12.3
	Other	0	0
St Charles	All	5	7.8
	White	1	2.5
	Black	3	13.5
	Other	1	76.9

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 2000-2005			
Parish	**Mother's Race**	**2005 Number of Infant Deaths**	**2005 Infant Mortality Rate+**
St Helena	All	3	28.6
	White	0	0
	Black	3	44.8
	Other	0	0
St James	All	0	0
	White	0	0
	Black	0	0
	Other	0	0
St John	All	1	1.5
	White	0	0
	Black	1	2.7
	Other	0	0
St Landry	All	20	15
	White	3	4.4
	Black	17	26.4
	Other	0	0
St Martin	All	10	12.8
	White	5	11.2
	Black	5	15.6
	Other	0	0
St Mary	All	2	2.6
	White	2	4.7
	Black	0	0
	Other	0	0
St Tammany	All	17	6.4
	White	10	4.5
	Black	7	20.1
	Other	0	0
Tangipahoa	All	13	8
	White	4	4.3
	Black	9	13.4
	Other	0	0
Tensas	All	0	0
	White	0	0
	Black	0	0
	Other	0	0
Terrebonne	All	15	9.5
	White	5	4.6
	Black	9	25.7
	Other	1	7.4
Union	All	3	9.1
	White	1	4.6
	Black	2	18
	Other	0	0

Infants Deaths and Infant Mortality Rates by Parish and Race of Mother Louisiana, 2000-2005			
Parish	**Mother's Race**	**2005 Number of Infant Deaths**	**2005 Infant Mortality Rate+**
Vermilion	All	5	6.6
	White	5	8.4
	Black	0	0
	Other	0	0
Vernon	All	8	8.5
	White	4	5.4
	Black	4	26.7
	Other	0	0
Washington	All	5	9.1
	White	1	2.9
	Black	4	20.2
	Other	0	0
Webster	All	8	15.7
	White	4	12.4
	Black	4	22.1
	Other	0	0
W Baton Rouge	All	8	25
	White	5	25
	Black	3	25.4
	Other	0	0
West Carroll	All	1	7
	White	0	0
	Black	1	37
	Other	0	0
W Feliciana	All	1	9.8
	White	1	17.2
	Black	0	0
	Other	0	0
Winn	All	1	4.7
	White	0	0
	Black	1	13.9
	Other	0	0

**** 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

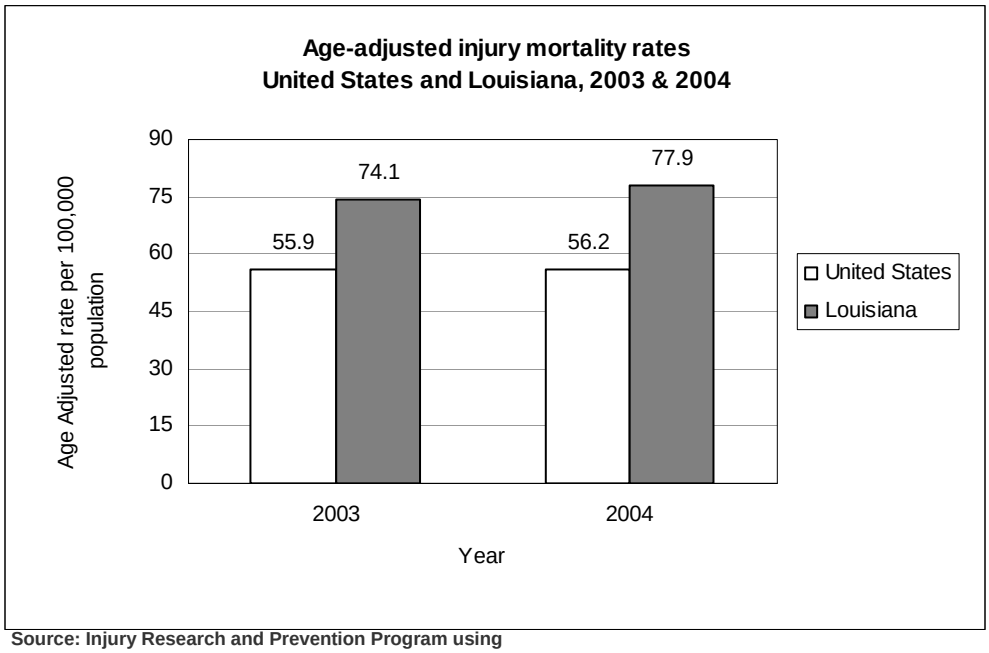
The term excludes adverse effects of either medical care or therapeutic use of drugs.

Background

Injuries are the number one killer of children and young adults ages 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 considerably.



Source: Injury Research and Prevention Program using LA OPH Health Statistics Program Death Data-2004

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		
Demographics	**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	-----

Injury Deaths by Public Age Group, Gender and Race. Louisiana 2004		
Demographics	**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 RESEARCH & 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.

[1,3,4] http://www.cdc.gov/nchs/products/pubs/pubd/hestats/prelimdeaths05/prelimdeaths.htm

II. MORBIDITY

A. INFECTIOUS DISEASES

West Nile Encephalitis

In 2001, the first case of West Nile encephalitis in humans was diagnosed in Louisiana. West Nile infection may present as 1- a completely asymptomatic infection (about 90% of all infections), 2- a mild fever (about 10% of cases) or 3- a neuro-invasive disease (NID; less than 1% of all infections). NID presents as meningitis or encephalitis that can be life-threatening, with 10% mortality and 10% long-term sequelae impairing normal life. NID tracking is the best measure used to track the progress of West Nile infections. A large outbreak occurred in 2002 with 204 cases of NID reported. From then on, the number of NID cases decreased. Clinical presentation of neuro-invasive diseases or of West Nile fever is always confirmed serologically.

West Nile Infections in Louisiana, 2001-2005

Disease	Year				
	2001	2002	2003	2004	2005
Neuro-Invasive Disease	1	204	101	84	118
Fever	0	124	23	24	54
Asymptomatic	0	0	4	7	16
Total	1	328	128	115	188

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, 43 hospitals voluntarily participate in submission of monthly laboratory 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-laboratory reporting sites to participate in this surveillance activity. Because the 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 years (2000 to 2005). The results can be seen in the following Table.

Antibiotic Resistance in Louisiana Hospitals, 2000-2005

Bacteriae	Trend Analysis	2000	2001	2002	2003	2004	2005	Z (C-A trend test)	p-value
	Resistant	547	662	548	432	371	250		
S. Pneumoniae	Susceptible	729	744	696	604	485	364	-0.24	0.81
	% Resistant	42.87	47.08	44.05	41.70	43.34	40.72		
	Resistant	4560	6682	9489	9711	9514	6637		
S. Aureus	Susceptible	7377	8347	8152	7425	6180	3632	50.33	<.0001
	% Resistant	38.20	44.46	53.79	56.67	60.62	64.63		
	Resistant	451	496	647	288	600	486		
Enterococcus	Susceptible	8577	10013	9327	4446	8346	4796	14.15	<.0001
	% Resistant	5.00	4.95	6.49	6.08	6.71	9.20		

The rates of drug-resistant S. pneumoniae have not been increasing over the past seven years (Z for trend =-0.2392, p=0.8109). During the same period, however, the rates of methicillin-resistant S. aureus have increased. These increases were highly significant (Z for trend =50.33, p<0.0001). Rates of vancomycin-resistant Enterococcus also appeared to vary significantly over the past seven years (Z for trend =14.15, p<0.0001).

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 HCV 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.

Prior to 2003, cases of hepatitis C that corresponded to the 2003 classification of “hepatitis C, past or present infection” (HCV-PPI) was entered into a hepatitis register. The following table shows a summary of all cases meeting the HCV-PPI case definition, including cases from the hepatitis register and cases

reported after HCV-PPI was added as a reportable disease. The number of cases entered in the register shows some deep troughs due to surveillance artifacts. Overall, the number of cases reported each year is increasing. There is also a pool of undiagnosed HCV-PPI cases in Louisiana. As these people enter into medical care they are diagnosed and reported. The hepatitis register currently contains 33,000 reported HCV cases, representing forty-one percent of the estimated 80,000 cases in Louisiana.

Reported Cases of HCV-PPI in Louisiana, 1990 - 2005

Year	Number of cases	Rate / 100,000
1990	84	2
1991	259	6.1
1992	764	17.9
1993	1279	29.8
1994	1116	25.9
1995	1813	41.9
1996	3099	71.4
1997	3256	74.8
1998	2795	64.8
1999	559	12.8
2000	3682	83.2
2001	1773	39.9
2002	683	15.2
2003	4159	92.5
2004	4406	97.7
2005	4119	91.1

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, and then decreased in the last 3 years. The incidence rate ranges from 0.8 to 1.6 cases/100,000 population. 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; groups A and W135 are uncommon. Knowledge of meningococcal groups in a certain area is important because the quadrivalent vaccine available in the USA is effective only against A, C, Y and W135; therefore, the vaccine is 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 decreases 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. Ninety-nine percent 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 20 years, ranging from 20-50 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- haemolyticus (24%), followed by V. vulnificus (24%), V. cholerae non O1 (21%) and all other Vibrios (including V. algino-lyticus, V. damse-lae, V. fluvialis, V. hollisae, and V. mimicus).

Vibrio parahemolyticus

Consumption of crustacean and molluscan shellfish has been commonly implicated in the transmission of V. parahaemolyticus. Raw oysters are the primary source of ingestion-associated V. parahaemolyticus infection. A review of infections between 1996 and 2005 found that 85% of patients with V. parahaemolyticus gastroenteritis and 90% 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 134 culture-confirmed V. vulnificus infections on the Gulf Coast reported to the CDC through the Vibrio Surveillance System between 1996 and 2005:

- 32% were classified as wound infections
- 9% as primary septicemia
- 19% as gastroenteritis
- 40% 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 disease, immune suppression such as HIV, long term steroid use, alcoholism, chronic kidney disease and the elderly population).

Sixty-six percent 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%). Twelve percent 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 ("salt-loving") Vibrio, first recognized in 1973 as being pathogenic in humans. 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 1975 in a patient with diarrheain Bahrain. It is biochemically similar to Aeromonas 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 16 cases of P. damsela infection reported between 1982 and 1996, 4 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 (e.g., raw or poorly cooked seafood, especially oysters, clams, shrimp, or crabs). Small outbreaks are sometimes reported. These infections usually occur in individuals with increased susceptibility to infections such as immunocompromised individuals with gastric disease (low gastric acidity) or liver disease.

V. cholerae non-O1 infections can be asymptomatic or produce a variety of symptoms ranging from simple diarrhea to 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

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.

2006 Status

Louisiana reported 207 cases of TB in the year 2006, for a case rate of 5.0 per 100, 000 population. This represents a 19.4 percent decrease from the year 2005 figure of 257 cases (5.8 cases per 100,000 population). This reduction is directly related to storm evacuation from the highest incidence parish, Orleans, whose population has not returned to pre-hurricane Katrina levels. The natural decline of tuberculosis is 6% a year.

Tuberculosis Case Counts
Louisiana, 2002-2006

2002	*2003*	*2004*	*2005*	*2006*
230	260	249	257	207

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

In 2006, Louisiana's state ranking for TB case rates (i.e., cases per 100,000) was the tenth highest in the nation. The state's year 2006 rate was similar to those in neighboring states but was significantly higher than the national rate of 4.6 per 100,000, which declined from 2005 to 2006 by 3.1%.

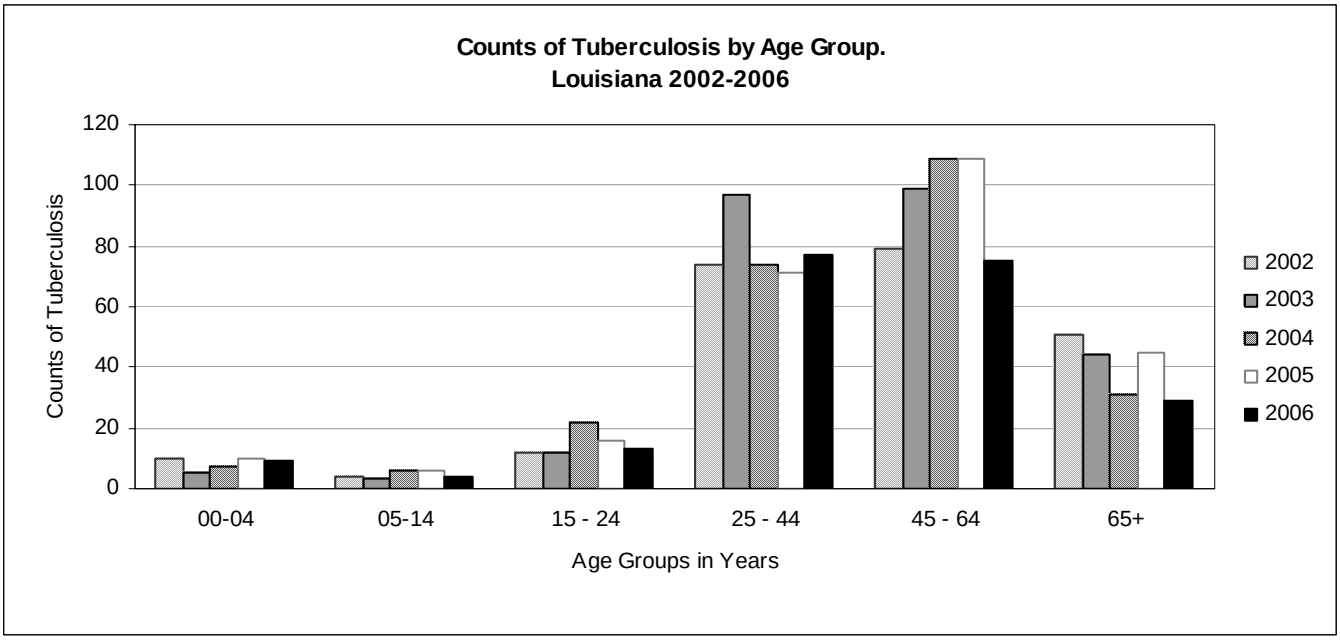
Tuberculosis Cases and Rates*
Louisiana and Neighboring States, 2006

State	Number of Cases	Case Rate
Alabama	195	4.3
Arkansas	102	3.6
Louisiana	207	5.0
Mississippi	116	4.0
Texas	1,585	6.7
United States	13,767	4.6

*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 2006, one case of multi-drug-resistant tuberculosis (MDR-TB) was reported, while the incidence of INH resistant TB declined to 2.7% (the recommended threshold for initiating a four-drug anti-TB regimen for new (suspected) cases of TB is 4%).

As shown in the following graph, a decrease in the number of reported cases of TB in Louisiana was observed in all age groups except 25 to 44. The increase in this age group is an indication of continued recent transmission.



Louisiana Tuberculosis Cases and Rates By Region and Parish, 2006 State Total = 207 State Case Rate = 5.0 per 100,000		
Region/Parish	Cases	Rate/100,000
Region 1	62	9.6
Jefferson	24	5.8
Orleans	30	15.7
Plaquemines	1	5.0
St Bernard	7	27.7
Region 2	11	1.8
Ascension	2	2.1
East Baton Rouge	8	1.9
East Feliciana	0	0.0
Iberville	1	3.4
Pointe Coupee	0	0.0
West Baton Rouge	0	0.0
West Feliciana	0	0.0
Region 3	16	4.0
Assumption	0	0.0
Lafourche	3	3.3
St Charles	2	3.8
St James	0	0.0
St John	3	6.2
St Mary	5	9.9
Terrebonne	3	2.8
Region 4	21	3.8
Acadia	3	5.1
Evangeline	3	8.9
Iberia	1	1.4
Lafayette	7	3.6
St Landry	3	3.3
St Martin	2	4.0
Vermilion	2	3.7
Region 5	16	5.7
Allen	1	4.7
Beauregard	0	0.0
Calcasieu	11	5.8
Cameron	3	39.9
Jefferson Davis	1	3.3
Region 6	7	2.4
Avoyelles	1	2.4
Catahoula	0	0.0
Concordia	3	14.8
Grant	0	0.0
LaSalle	0	0.0
Rapides	3	2.3
Vernon	0	0.0
Winn	0	0.0

Louisiana Tuberculosis Cases and Rates
By Region and Parish, 2006
State Total = 207
State Case Rate = 5.0 per 100,000

Region/Parish	Cases	Rate/100,000
Region 7	35	12.7
Bienville	0	0.0
Bossier	3	2.9
Caddo	24	9.4
Claiborne	4	24.0
DeSoto	0	0.0
Natchitoches	0	0.0
Red River	0	0.0
Sabine	1	4.2
Webster	3	7.1
Region 8	15	4.5
Caldwell	0	0.0
East Carroll	0	0.0
Franklin	1	4.7
Jackson	1	6.4
Lincoln	1	2.3
Madison	0	0.0
Morehouse	1	3.2
Ouachita	7	4.7
Richland	2	9.6
Tensas	0	0.0
Union	2	8.7
West Carroll	0	0.0
Region 9	25	9.1
Livingston	6	5.4
St Helena	1	8.9
St Tammany	13	5.9
Tangipahoa	5	4.5
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 a major threat to our nation's health, infecting 15 million Americans each year. By age 24, more than one-third of all sexually active Americans will be infected with bacterial and viral STDs, costing $8.4 billion each year in direct medical costs.

Syphilis, chlamydia, gonorrhea, herpes simplex virus and human papillomavirus can have serious health consequences. Chlamydia and gonorrhea, in particular, can make it much more difficult for women to get pregnant. All types of STDs increase the risk of transmitting or acquiring HIV, if exposed.

STD Rates* and National Rankings**
Louisiana, 2000-2006

	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	6.2	2	212.0	2	381.5	12
2006	7.8	-	253.7	-	420.4	-

***** Rate per 100,000 Population, Census 2000
** States ranked from highest to lowest disease incidence. Nationwide ranks for 2006 currently not available.
Sources: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2006
Centers for Disease Control and Infection, STD Surveillance Report 2005

Syphilis

Syphilis is a sexually transmitted disease (STD) caused by the bacterium *Treponema pallidum*. It has often been called “the great imitator” because so many of the signs and symptoms are indistinguishable from those of other diseases.

Louisiana had the 2nd highest rate of primary and secondary (P&S) syphilis nationwide in the year 2005. In Louisiana, there were 348 reported cases of P&S syphilis cases for the year 2006. In comparison with the number of reported cases of P&S syphilis cases in the year 2005 (288 cases), the number of reported cases increased by 20.8% in 2006.

Early Syphilis (Primary, Secondary, and Early Latent) Rates* by Gender and Race Louisiana, 2000-2006									
	White			African American			Other		
Year	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
2006	4.8	5.2	5.0	55.0	38.6	46.4	17.2	6.3	11.8

* Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2006

The Louisiana incidence rate for primary and secondary syphilis for 2006 was 7.8 per 100,000 population, while the latest national rate available (year 2005) was 6.2. The 2006 Louisiana P&S syphilis rate was still 1.26 times higher than the 2005 national P&S syphilis rate. The *Healthy People 2010* rate objective for primary and secondary syphilis is 0.2.

Primary and Secondary Syphilis Rates Louisiana, Neighboring States, and United States, 2000-2005						
State	2000	2001	2002	2003	2004	2005
Alabama	2.8	3.2	3.4	2.5	3.7	3.7
Arkansas	4.1	1.8	1.3	1.9	1.7	1.9
Louisiana	4.8	3.9	3.4	4.1	7.4	6.2
Mississippi	4.9	4.9	1.7	1.4	2	1.7
Texas	2	2.3	2.8	3	3.7	3.9
United States	2.2	2.2	2.4	2.5	2.7	3.0

Gonorrhea

Gonorrhea is an STD caused by *Neisseria gonorrhoeae*, a bacterium that can grow and multiply easily in the warm, moist areas of the reproductive tract, including the cervix (opening to the womb), uterus (womb), and fallopian tubes (egg canals) in women, and in the urethra (urine canal) in women and men. The bacterium can also grow in the mouth, throat, eyes, and anus.

Gonorrhea is a very common infectious disease. CDC estimates that more than 700,000 persons in the U.S. get new gonorrheal infections each year. Only about half of these infections are reported to CDC. In 2005, 339,593 cases of gonorrhea were reported to CDC. In the period from 1975 to 1997, the national gonorrhea rate declined following the implementation of the national gonorrhea control program in the mid-1970s. After a small increase in 1998, the gonorrhea rate has decreased slightly since 1999. In 2004, the rate of reported gonorrheal infections was 113.5 per 100,000 persons.

In the year 2006, 11,340 cases of gonorrhea were reported in Louisiana, with a corresponding rate of 253.7 cases per 100,000 population. In comparison with the number of reported cases for the year 2005, the rates increased in 2006 by 19.7%. The 2006 rate among males was 250.4 per 100,000 population, while the rate among females was 252.6 per 100,000. The male rate for year 2006 increased by 13.1% when compared to the year 2005, while the female rate increased by 21.1%. The numbers of reported cases were 4,269 among African American males, 322 for white males, and 47 for other males in 2006. The numbers of reported cases among African American females were 3,988, white females were 714, and other females were 47 in 2006. Also in 2006, African Americans had the highest rate and number of reported cases; nearly 73% of total reported cases of gonorrhea were among African Americans.

Gonorrhea Rates* by Gender and Race
Louisiana, 2000-2006

Year	White			African American			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
2006	23.0	49.0	36.3	624.6	519.0	568.7	57.7	59.1	58.4

* Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2006

The Louisiana incidence rate of gonorrhea for 2006 was 253.7 per 100,000 population, while the most recent national rate available (year 2005) was 115.6. The 2006 Louisiana gonorrhea rate was 2.2 times higher than the 2005 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, 2000-2005

State	2000	2001	2002	2003	2004	2005
Alabama	276	251.4	227.5	207.4	207.7	207.6
Arkansas	142.7	172.2	171.5	156.9	157.7	162.6
Louisiana	302.9	274.2	254.8	264.4	230.4	212.0
Mississippi	332.9	272.8	241.7	220.4	200.6	247.0
Texas	164.2	144	129.4	112.9	108.1	116.1
United States	131.6	128.5	125	116.2	110	115.6

Chlamydia

Chlamydia is a common STD caused by the bacteria *Chlamydia trachomatis*, which can damage a woman's reproductive organs. Even though symptoms of chlamydia are usually mild or absent, serious complications that cause irreversible damage, including infertility, can occur "silently" before a woman ever recognizes a problem. Chlamydia also can cause discharge from the penis of an infected man.

In 2006, 18,788 chlamydia cases were reported to the Louisiana STD Control Program from the state's 9 Health Regions. This count corresponds to a rate of 420.4 cases per 100,000 population, an increase of 8.8% compared with the rate of 386.4 in 2005. The numbers of reported cases of Chlamydia infections in females was 14,968 to a corresponding rate of 649.1 per 100,000 female population. The number of reported cases for males was 3,564 with a corresponding rate of 164.8 per 100,000 male population. In 2006, the number of reported cases for females was 4.2 times higher than those for males. The rate of Chlamydia infection among African American females was 1,135.1 per 100,000 black female population, while that among white females was 139.7 per 100,000 white female population, and 196.3 per 100,000 other females population.

Chlamydia Rates* by Gender and Race
Louisiana, 2000-2006

	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
2006	30.9	139.7	87.3	350.3	1135.1	771.9	68.8	196.3	171.6

* Rate per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals, Office of Public Health, STD Control Program 2006

Chlamydia Rates
Louisiana, Neighboring States, and United States, 2000-2005

State	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**
Alabama	350.7	326.6	351	316.7	295.8	377.7
Arkansas	243.8	272.3	273.5	289.9	288.5	309.1
Louisiana	408.2	399.2	412.7	467.8	485.7	381.5
Mississippi	458.6	414.6	414.8	424.6	654.7	732.6
Texas	343.3	334.5	333.4	317.7	317.5	319.7
United States	257.5	278.3	296.5	304.3	319.6	332.5

Sexually Transmitted Disease Rates+ by Parish Louisiana, 2006			
Parish	**Primary & Secondary Syphilis**	**Gonorrhea**	**Chlamydia**
State Total	7.8	246.1	405.2
Acadia	42.5	295.6	404.3
Allen	0.0	165.1	302.7
Ascension	15.7	152.7	285.8
Assumption	4.3	179.6	359.2
Avoyelles	4.8	217.0	373.7
Beauregard	0.0	66.7	106.1
Bienville	0.0	177.8	558.7
Bossier	2.0	274.6	548.3
Caddo	2.0	571.1	854.2
Calcasieu	1.1	209.2	328.5
Caldwell	0.0	75.8	236.7
Cameron	0.0	30.0	20.0
Catahoula	0.0	128.2	348.0
Claiborne	0.0	243.3	439.1
Concordia	4.9	158.0	444.5
DeSoto	0.0	376.6	623.7
East Baton Rouge	23.7	390.5	503.3
East Carroll	0.0	350.3	658.1
East Feliciana	0.0	159.2	271.5
Evangeline	19.8	270.9	406.4
Franklin	0.0	301.0	432.7
Grant	5.3	69.5	230.0
Iberia	1.4	405.4	547.3
Iberville	6.0	222.1	447.2
Jackson	0.0	181.9	474.1
Jefferson	5.9	174.3	318.6
Jefferson Davis	0.0	130.4	318.1
Lafayette	10.5	343.3	496.6
Lafourche	5.6	200.1	315.6
LaSalle	0.0	77.0	126.0
Lincoln	0.0	350.5	646.9
Livingston	4.4	76.2	184.1
Madison	7.3	400.6	764.9
Morehouse	0.0	354.6	602.8
Natchitoches	5.1	496.4	903.3
Orleans	10.7	162.4	234.8
Ouachita	4.1	366.7	635.7
Plaquemines	0.0	59.8	145.8
Pointe Coupee	4.4	219.7	434.9
Rapides	0.8	186.0	353.8
Red River	0.0	259.8	561.2
Richland	4.8	214.5	476.6
Sabine	0.0	93.8	238.7
St. Bernard	1.5	29.7	64.0
St. Charles	6.2	164.3	322.4
St. Helena	0.0	180.5	351.5
St. James	4.7	174.4	377.1
St. John	4.6	278.8	513.4
St. Landry	6.8	320.4	403.6
St. Martin	12.3	251.1	399.3
St. Mary	1.9	239.3	487.9
St. Tammany	2.1	70.6	204.4
Tangipahoa	31.8	267.4	570.6

Sexually Transmitted Disease Rates+ by Parish Louisiana, 2006			
Parish	**Primary & Secondary Syphilis**	**Gonorrhea**	**Chlamydia**
Tensas	15.1	151.1	302.2
Terrebonne	1.9	171.3	334.9
Union	4.4	166.6	451.7
Vermilion	5.6	223.0	289.9
Vernon	0.0	152.3	375.0
Washington	6.8	330.1	405.2
Webster	0.0	208.0	396.8
West Baton Rouge	9.3	199.1	398.1
West Carroll	0.0	113.7	162.4
West Feliciana	6.6	59.6	119.1
Winn	0.0	177.6	390.7

+Rates per 100,000 Population, Census 2000
Source: Louisiana Department of Health and Hospitals Office of Public Health, STD Control Program 2006

D. HIV/AIDS

Background

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 assuring that individuals understand how the virus is transmitted and that they adopt behaviors that reduce possible exposure to HIV. In addition, individuals are encouraged to access testing in order that they are aware of their HIV status and, if positive, are encouraged to access treatment which may improve the length and quality of life.

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 $618,900 - most of which is paid for by the government.

Summary

As of December 31, 2006, there were 14,941 persons reported to be living with HIV/AIDS in Louisiana. In 2006 alone, 768 new AIDS cases and 1,053 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 58 of Louisiana's 64 parishes in 2006. The HIV diagnosis rate among black persons remains disproportionately high. In 2006, 68% of newly diagnosed HIV/AIDS cases and 71% of newly diagnosed AIDS cases were among black persons. The 2006 HIV diagnosis rate for black persons was five times higher than that of white persons.

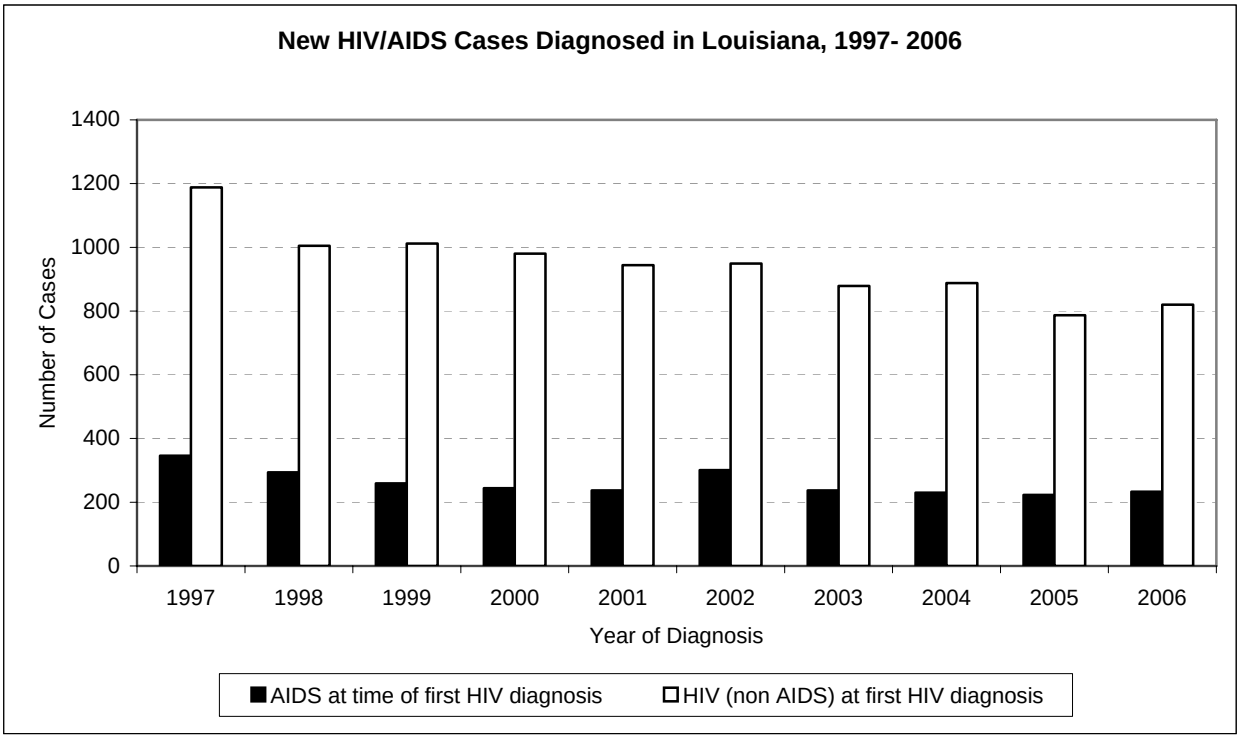
In 2006, the largest proportion of cases diagnosed was attributed to men who have sex with men (MSM), after adjusting for unreported risk. For black persons, high-risk heterosexual activity has remained the leading exposure category, while, among white persons, the predominant exposure to HIV is among 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 number of deaths among persons with AIDS remained relatively stable.

2006 Status

Highly active antiretroviral therapies (HAART) have been shown to be effective in treating HIV infection. These relatively 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 available therapies for some people, the number of new AIDS cases diagnosed each year in Louisiana remains relatively stable.

In the year 2005 (for which the most recent statistics are available), Louisiana ranked sixth highest in reported AIDS case rates nationwide, a slight decrease from fifth highest in the year 2004. The state ranked tenth in the number of new AIDS cases reported in the United States for the year 2005, an increase from eleventh highest 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, 2004 and 2005							
	2004		2005		Cumulative Totals		
State	Cases	Rate/100,000	Cases	Rate/100,000	Cases	Children less than 13	Total
Alabama	464	10.3	518	11.4	8,176	76	8,252
Arkansas	178	6.5	242	8.7	3,667	36	3,703
Louisiana	983	21.8	961	21.2	16,821	131	16,952
Mississippi	463	16.0	387	13.2	6,319	57	6,376
Texas	3,172	14.1	3,113	13.6	66,836	391	67,227
United States	42,403	14.4	40,733	13.7	916,435	9,017	925,452

Source: CDC HIV/AIDS Surveillance Report (Vol. 17, No. 1)
*The cumulative total includes all cases of AIDS reported to the health departments from 1984 (when AIDS became reportable) through December 31, 2005.

In Louisiana, the Baton Rouge area had the highest number of HIV/AIDS cases diagnosed in 2006. Since 1996, the New Orleans and Baton Rouge areas have had similar HIV/AIDS case diagnosis rates. However, in 2006, Baton Rouge had a significantly higher case diagnosis rate than the New Orleans area, likely due to the migration in population that followed hurricane Katrina. Among the large cities in the nation, the metropolitan Baton Rouge area ranked 6th and the metropolitan New Orleans area ranked 7th in AIDS case rates in 2005.

Persons Living with HIV/AIDS

The number of persons living with HIV/AIDS continues to increase in Louisiana each year. On December 31, 2006, 14,941 persons in Louisiana were reported to be living with HIV/AIDS in the state. 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 2006, 16 parishes out of 64 (25%) had greater than 300 persons living with HIV per 100,000 persons in the population. The HIV/AIDS Program has funded community-based organizations, medical facilities, and home health providers 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, 2006			
Parish	**Persons Living with HIV/AIDS**	**Parish**	**Persons Living with HIV/AIDS**
Statewide	14,941	**Region VI**	734
		Avoyelles	172
Region I	5,402	Catahoula	29
Jefferson	1,337	Concordia	29
Orleans	3,952	Grant	25
Plaquemines	25	La Salle	9
St. Bernard	88	Rapides	338
		Vernon	43
Region II	3,607	Winn	89
Ascension	141		
East Baton Rouge	2,806	**Region VII**	1,182
East Feliciana	119	Bienville	19
Iberville	260	Bossier	138
Pointe Coupee	43	Caddo	778
West Baton Rouge	88	Claiborne	76
West Feliciana	150	De Soto	48
		Natchitoches	64
Region III	556	Red River	9
Assumption	30	Sabine	16
Lafourche	99	Webster	34
St. Charles	68		
St. James	50		
St. John the Baptist	97	**Region VIII**	782
St. Mary	62	Caldwell	31
Terrebonne	150	East Carroll	38
		Franklin	11
		Jackson	22
Region IV	1,101	Lincoln	42
Acadia	77	Madison	51
Evangeline	48	Morehouse	43
Iberia	91	Ouachita	427
Lafayette	529	Richland	40
St. Landry	196	Tensas	33
St. Martin	84	Union	36
Vermilion	76	West Carroll	8
Region V	794	**Region IX**	783
Allen	221	Livingston	136
Beauregard	36	St. Helena	15
Calcasieu	490	St. Tammany	289
Cameron	<5	Tangipahoa	201
Jefferson Davis	44	Washington	142

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 minorities, women, 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 24% in 2006.

Black persons continue to be disproportionately impacted by HIV/AIDS. In 2006, 68% of newly diagnosed HIV/AIDS cases in Louisiana were among black persons, who comprise only 33% of the total state population. The 2006 HIV diagnosis rate among black persons was five times higher than the rate among white persons, and nearly 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 29.1% in 2006. 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 increased to 32% in 2006. Black women accounted for 77% of all new HIV/AIDS cases among women in 2006.

Newly-diagnosed HIV/AIDS Cases, by Demographics and Exposure Group
Louisiana, 1999-2006

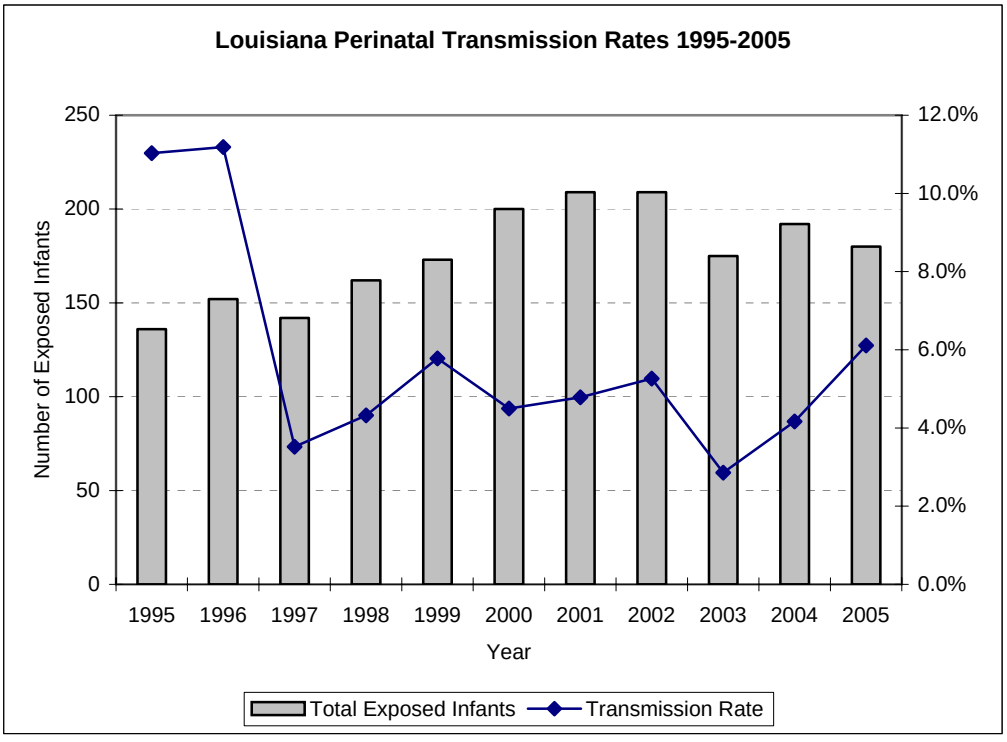
Year	1999	2000	2001	2002	2003	2004	2005	2006
Total Cases	1,259	1,196	1,157	1,201	1,063	1,070	980	1,053
Sex								
Male	885	800	740	816	692	729	634	714
Female	374	396	417	385	371	341	346	339
Race								
Black	932	886	870	897	809	828	718	716
White	289	273	251	273	220	214	217	278
Other	37	36	34	30	34	26	40	46
Unknown	***	***	***	***	0	***	5	13
Exposure Group								
Cases with Specified Risk	709	643	596	669	563	507	540	545
MSM *	40.1%	43.4%	42.4%	45.6%	44.2%	50.3%	52.4%	53.2%
IDU *	24.8%	20.2%	20.5%	18.4%	18.5%	13.0%	11.5%	12.1%
MSM & IDU	8.0%	5.3%	5.2%	4.5%	4.1%	4.9%	4.3%	5.1%
HRH *	24.8%	27.5%	29.2%	28.8%	31.8%	29.0%	29.3%	28.6%
Transf/Hemo *	1.1%	1.4%	<1%	<1%	0%	0%	0%	0%
Perinatal	1.1%	2.2%	2.2%	2.1%	1.4%	2.8%	2.6%	<1%

MSM: Men who have Sex with Men;
IDU: Injection Drug Users;
HRH: High Risk Heterosexual;
Transf/Hemo:Transfusion/Transplant/Hemophiliac;
*** Count less than 5
Source: Louisiana Department of Health and Hospitals, Office of Public Health, HIV/AIDS Program

Perinatal HIV Transmission

Between early 1985 and the end of 2005, an estimated 2,517 infants were born in Louisiana to women living with HIV infection; 11.9% of the exposed children were infected with HIV at or around the time of birth. The introduction and widespread use of prophylactic antiretroviral drug protocols for pregnant HIV-positive women and their newborns in the mid 1990s led to a decline in annual perinatal transmission rates from nearly 19% in 1994 to 3% in 2003. Since 2003, the annual rate of mother-to-child transmission of HIV has increased. Factors that appear to have contributed to this increase include insufficient or no prenatal care, inadequate HIV testing of pregnant women, and failure of mothers to receive appropriate antiretroviral drug regimens during pregnancy and labor and delivery. The Office of Public Health's current HIV prevention efforts are aimed at increasing the number of pregnant women screened for HIV, providing statewide training to health care providers on current CDC and United States Public Health Service (USPHS) guidelines for testing and treatment of HIV-positive pregnant women and their newborns, and linking women with HIV and their exposed children to medical care and Ryan White funded case management services.

In June 2006, the Louisiana legislature passed a new law (Act 153) that now requires that an HIV test must be a part of any pregnant woman's care, unless the woman refuses testing. Since HIV testing is considered a routine part of the woman's medical care, a separate written consent for HIV testing is no longer required. In addition, physicians may test any child whose mother did not have a diagnostic HIV test on record at the time of delivery.



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

E. CANCER

2000–2004 Status

In Louisiana, cancer incidence rates among all race/sex groups have been declining gradually in recent years. Among men, the decline began in the early 1990s, and, among women, about five years later. Declining rates are also seen for mortality, although the declines began in the late 1990s and are sharper than for incidence. More people are surviving cancer now than ever before (nationally, 5-year survival for cases diagnosed in 1996-2003 was 66%, versus 50% for those diagnosed 20 years earlier). Survival rates vary, however, according to race, age-group, and type of cancer.

Five Most Common Cancers
Louisiana,2000–2004
(Five-Year Case Counts - Invasive Cases Only)

Type	*Number of Cases*
All Cancers	105,082
Lung	17,206
Prostate	16,486
Breast	14,640
Colon & Rectum	12,444
Non-Hodgkin's Lymphoma	4,060

Source: Louisiana Tumor Registry

Cancer includes many different 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 third. 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 examination 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. See also the CDC's Behavioral Risk Factor Surveillance System website: www.cdc.gov/brfss.

Five Most Common Cancers In Males, Louisiana 2000–2004					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	596.3	All Cancers	687.0	All Cancers	56,730
Prostate	161.0	Prostate	240.0	Prostate	16,486
Lung	107.3	Lung	130.4	Lung	10,267
Colon & Rectum	69.8	Colon & Rectum	77.5	Colon & Rectum	6,465
Bladder	40.3	Kidney & Renal Pelvis	22.3	Non-Hodgkin's Lymphoma	2,120
Non-Hodgkin's Lymphoma	24.6	Stomach	21.1	Kidney & Renal Pelvis	2,106

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

Five Most Common Cancers In Females, Louisiana 2000–2004					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	406.4	All Cancers	399.6	All Cancers	48,352
Breast	121.6	Breast	123.7	Breast	14,527
Lung	60.5	Colon & Rectum	57.5	Lung	6,939
Colon & Rectum	46.1	Lung	48.9	Colon & Rectum	5,979
Non-Hodgkin's Lymphoma	17.7	Uterus	17.8	Uterus	2,058
Uterus	17.4	Pancreas	14.2	Non-Hodgkin's lymphoma	1,940

* All races combined. In situ cases are excluded. Case counts cover **five** years.
** Average annual age-adjusted (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 early 1990s, and this decline is attributed to both early detection and improved treatment. Family history, exposure to hormones, reproductive factors, 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 about 225 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) , the American Cancer Society (WWW.CANCER.ORG), and the Louisiana Tumor Registry (HTTP://PUBLICHEALTH.LSUHSC.EDU/TUMORREGISTRY) 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. In 2006 the Food and Drug Administration approved a vaccine to prevent human papilloma virus (HPV), which is responsible for about 70% of the cases of cervical cancer worldwide.

Colorectal cancer caused the second largest number of cancer deaths in the years 2000−2004, although both incidence and mortality rates have been declining nationwide since the late 1980s. 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 Louisiana. 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%-3% of the annual cancer incidence in the United States and for almost one third 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 at least 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. According to the CDC, the prevalence of smoking has been declining steadily in both the U.S. and Louisiana, but that for Louisiana is 10%-15% higher than for the nation as a whole.

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 blacks. 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 and more gradually 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 2000 to 2004. In the United States, oral cancer is two to three times as common among males as 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 2000 through 2004, it ranked eleventh in incidence among all cancers in the United States, but was fourth in cancer mortality. While the only established risk factor is cigarette smoking, others may include obesity, chronic pancreatitis, diabetes, and possibly stomach problems.

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 blacks 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 2004 among men and the twelfth most common among women in the United States. It is especially prevalent among older white men. Since the mid-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 (endometrial) cancer, the fourth most common cancer in women in Louisiana and the United States, accounted for approximately 4% of all cancer cases in women from 2000 through 2004. 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 Among Cancers White Males: Average Annual Incidence Rates[1] By Geographic Region 2000-2004

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	556.7	596.3*	580.9*†	578.5*†	590.0*	618.8*†	625.1*†	587.4*	620.2*†	587.4*
Prostate	161.4	161.0	138.0*†	163.7	155.9	181.0*†	182.8*†	154.4	174.9*†	147.7*†
Lung and Bronchus	81.0	107.3*	105.2*	97.4*†	101.6*	109.6*	115.4*	121.4* †	111.0*	111.7*
Colon and Rectum	60.4	69.8*	65.3*	68.4*	71.6*	72.1*	63.5	77.8*	74.9*	69.4*
Urinary Bladder (Incl. In Situ)	40.5	40.3	42.1	41.2	45.3*†	37.9	34.5*†	36.1	38.7	41.0
Non-Hodgkin's Lymphoma	24.1	24.6	25.1	25.4	27.7*	24.8	30.4*†	19.3*†	21.4	20.5†
Kidney and Renal Pelvis	18.3	22.2*	24.8*	23.1*	21.4*	21.4*	22.6*	20.2	22.0*	17.8†
Oral Cavity and Pharynx	15.7	18.9*	18.3*	18.3*	17.9	16.1†	19.3	18.6	20.3*	26.6*†
Melanoma of the Skin	27.2	18.8*	16.6*	19.5*	14.8*†	16.7*	21.4*	16.8*	23.3*†	26.0†
Leukemia	16.7	17.4	14,1*†	15.4	14.9	19.7*	18.7	20.8	21.4*†	18.9
Pancreas	12.8	14.1*	15.7*	13.0	13.8	15.0	11.8	16.5*	11.6	14.9

TABLE 2. Ten Most Common Cancers Among White Females: Average Annual Incidence Rates[1] By Geographic Region 2000-2004

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	423.9	406.4*	413.5*	393.3*†	410.6*	416.0	418.6	376.3*†	410.5*	402.3*
Breast	132.5	121.6*	128.8†	124.0*	126.2*	122.4*	120.0*	96.9*†	123.3*	110.8*†
Lung and Bronchus	54.6	60.5*	61.8*	54.2†	59.8*	64.8*	63.0*	52.6†	65.0*	61.7*
Colon and Rectum	44.0	46.1*	43.9	48.4*	43.5	44.7	50.0*	50.0*	46.8	46.5
Non-Hodgkin's Lymphoma	17.0	17.7	18.1	16.6	17.7	18.9	20.4	17.2	15.9	16.4
Uterus	24.3	17.4*	17.4*	17.0*	17.0*	17.9*	17.7*	14.5*	18.2*	20.1*
Ovary	14.3	12.8*	13.8	11.8*	13.8	11.7*	10.8*	13.9	13.1	12.6
Thyroid	13.2	12.5	11.2*	8.3*†	15.0†	18.0*†	12.3	10.4*	11.4	13.6
Kidney and Renal Pelvis	9.1	12.0*	12.1*	10.8	14.0*	13.1*	12.2*	12.3*	11.8*	9.4†
Melanoma of the Skin	17.6	11.2*	9.4*†	12.2*	10.8*	9.5*	14.9†	9.3*	11.9*	15.4†
Pancreas	9.9	10.1	9.2	10.6	8.7	14.8*†	10.2	11.4	8.1*†	7.7*†

1. Rates per 100,000, age-adjusted to the U.S. 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 Among Black Males: Average Annual Incidence Rates[1] By Geographic Region 2000-2004

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	663.7	687.0*	677.2	717.8*†	684.4	691.4	636.7	684.7	696.4*	665.4
Prostate	255.5	240.0*	215.6*†	276.7*†	224.3*	233.4*	221.2*	244.0	248.0	261.5
Lung and Bronchus	110.6	130.4*	129.2*	124.7*	134.4	145.3*	126.6	129.8	127.3*	130.2*
Colon and Rectum	72.6	77.5*	81.3*	77.3	79.7	81.2	63.1	82.1	81.5	58.8*†
Kidney and Renal Pelvis	20.4	22.3	21.0	25.8*	27.4	22.6	18.8	18.6	22.4	17.7
Stomach	17.5	21.1*	22.3*	20.6	25.6	18.9	17.5	20.8	22.9	16.7
Oral Cavity and Pharynx	18.1	20.9*	19.4	22.2	17.4	22.7	22.0	20.0	24.5*	18.1
Urinary Bladder (Incl. In Situ)	20.3	19.3	22.7	19.0	18.2	18.3	27.0	17.9	15.1*	14.9
Pancreas	16.2	18.1	16.8	17.5	20.4	19.0	15.6	24.2	17.2	19.2
Non-Hodgkin's Lymphoma	18.1	16.5	20.9†	17.0	16.3	13.8	21.2	8.5*†	14.6	8.8*†
Myeloma	14.0	16.2*	15.6	17.9	12.1	15.5	8.9†	13.3	16.9	23.5*

TABLE 4. Ten Most Common Cancers Among Black Females: Average Annual Incidence Rates[1] By Geographic Region 2000-2004

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	399.6	402.3	406.1	388.4	420.0*	411.0	398.3	384.3	386.3
Breast	118.3	123.7*	124.6	134.1*†	109.2†	130.1	122.0	103.0*†	123.0	119.1
Colon and Rectum	55.0	57.5	56.5	57.6	51.9	59.9	69.2	57.3	60.4	53.1
Lung & Bronchus	53.7	48.9*	54.4†	40.6*†	50.9	52.0	60.4	64.9†	40.0*†	42.3*
Uterus	19.6	17.8*	17.5	18.5	17.3	16.1	17.6	12.8*	18.4	22.4
Pancreas	13.9	14.4	14.5	15.6	16.3	18.7*	15.3	12.5	9.3*†	14.0
Cervix	11.4	14.2*	12.3	14.0	12.7	12.2	17.8	16.9	17.3*	17.1*
Non-Hodgkin's Lymphoma	11.9	11.3	10.5	10.9	10.5	14.6	12.7	10.1	11.1	11.8
Stomach	9.1	11.0*	10.3	12.7*	17.5*†	10.9	8.5	9.5	10.1	9.3
Kidney and Renal Pelvis	9.7	10.5	9.7	10.5	14.2	10.7	7.3	16.9*†	8.5	10.9
Ovary	10.1	10.1	9.4	10.3	9.4	10.4	9.7	12.4	10.7	8.9

1. Rates per 100,000, age-adjusted to the U.S. 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

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.

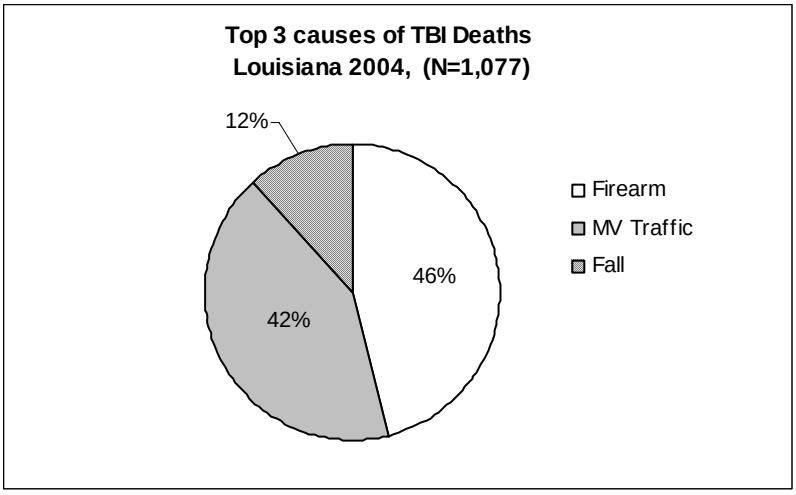
An analysis of 2004 mortality data indicates that, in Louisiana, 1,077 individuals died as a result of a TBI. Several thousand more individuals will not recognize that they have sustained a preventable injury (as in closed head trauma from sports or falls) capable of causing long-term deficits. TBIs 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.

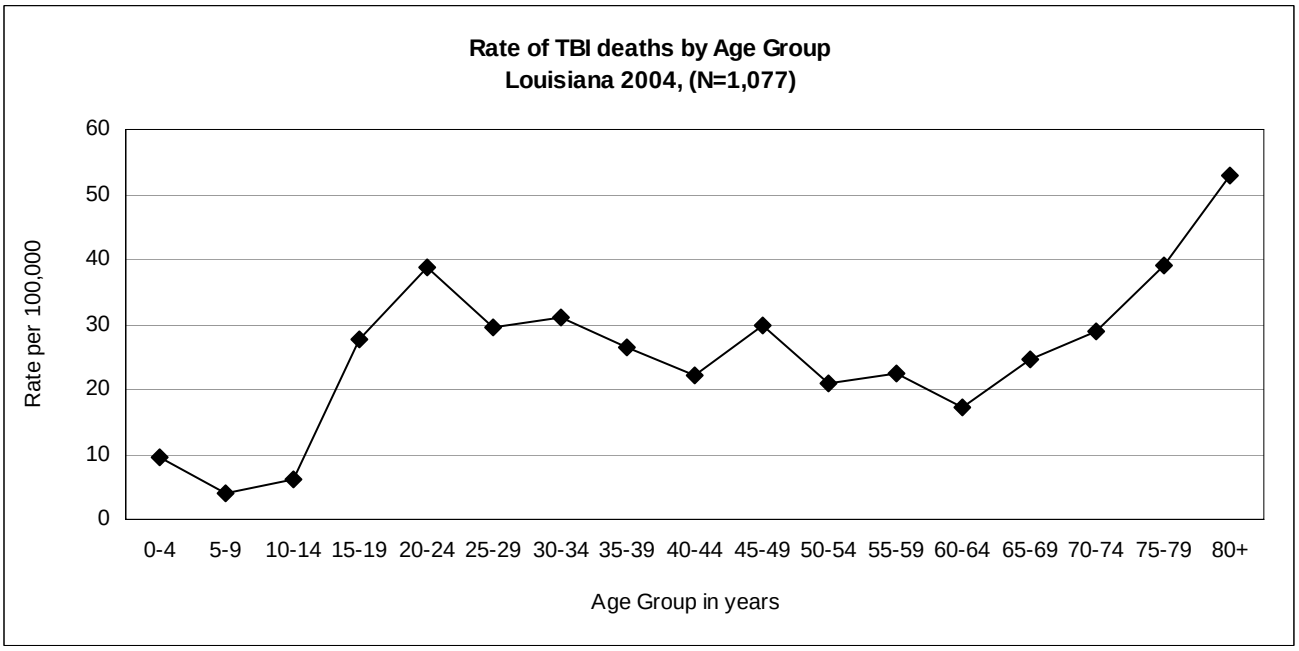
The majority of TBIs are preventable. That fact, coupled with the seriousness and prevalence of their occurrence, makes TBIs a public health concern. The Louisiana State Legislature has established the Traumatic Brain and Spinal Cord Injury Registry and has mandated the reporting of these events.

Traumatic Brain Injury Facts

In 2004, falls were the leading cause of TBI deaths, followed by motor-vehicle crashes and violence. Analyzing TBI deaths 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.

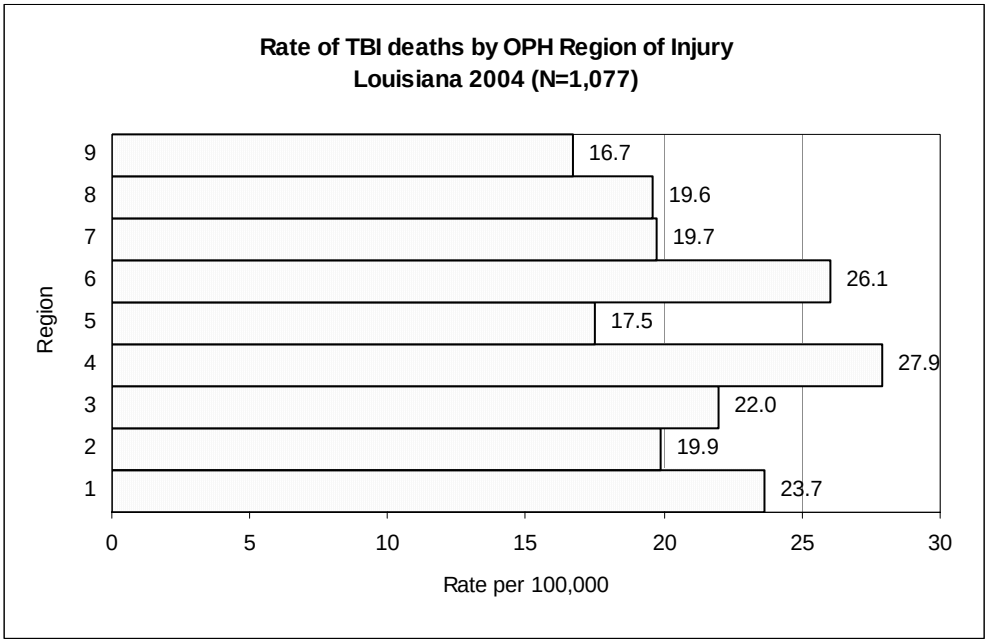


Source: Louisiana Department of Health and Hospitals, Office of Public Health
EMS/Injury Research and Prevention Program



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

The following chart shows that Office of Public Health Regions 4 and 6 had high TBI mortality rates in 2004, whereas Region 5 had the lowest TBI mortality rate.



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 Database, compiled by the OPH, Center for Health Statistics, 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-04), which records the **E**xternal **C**ause of **I**njury **c**ode (**E code**). The data are cleaned, and quality-control checks are administered, before they are analyzed at the state, OPH Region, and parish levels so that community-based injury risk factors and prevention methods may be monitored at the community level.

In 2004, there were a total of 30,129 injury-related hospitalizations. The following table shows that falls were the most common cause (36%) of a nonfatal injury discharge, followed by poisonings (14.4%) and motor-vehicle traffic crashes (12.3%).

Nonfatal Injury Hospital Discharges by Cause (All Intents), Louisiana 2004

Cause/Mechanism	Total (All Intents)	Percent (%)
Cut/Pierce	935	3.5
Drowning/submersion	30	0.1
Falls	9,637	36.0
Fire/Flame	439	1.6
Firearm	530	2.0
Machinery	141	0.5
MVT	3,295	12.3
Pedal cyclist, other	146	0.5
Pedestrian, other	28	0.1
Transport	498	1.9
Natural/environment	1,219	4.5
Overexertion	366	1.4
Poisonings	3,858	14.4
Struck by, against	1,137	4.2
Suffocation	130	0.5
Other specified and classifiable	1,733	6.5
Other specified not elsewhere classifiable	817	3.0
Unspecified	1,858	6.9
Missing	3,332	
Total	**30,129**	**100**

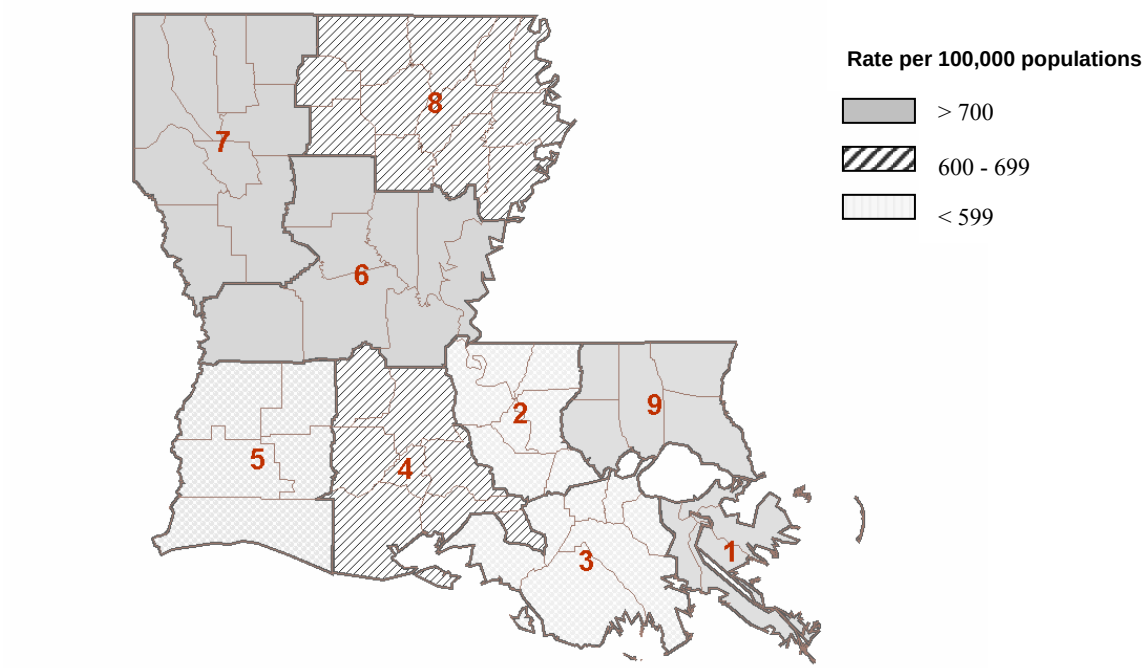
Source: IRP from LA OPH Health Statistics Program, Hospital Inpatient Discharge Data , 2004

The chart below shows that the rate of nonfatal injuries was high in OPH Region 6 (795.1/100,000) followed by Region 1 (776.4/100,000), Region 9 (748.1/100,000) and Region 7 (726.8/100,000) and was the lowest in Region 3 (455.9/100,000).

Number and Rate of Nonfatal Injury Related Hospital Discharges by OPH Regions in Louisiana, 2004		
OPH Region	**Number**	**Rate/100,000***
1	7,845	776.4
2	3,233	527.6
3	1,782	455.9
4	3,699	661.0
5	1,450	508.1
6	2,380	795.1
7	3,829	726.8
8	2,329	662.2
9	3,582	748.1
Total	**30,129**	**667.2**

Source: IRP from LA OPH Center for Health Statistics, Hospital Inpatient Discharge Data 2004
* Rate per 100,000 population calculated using 2004 US Census Population Estimates

Rate of Nonfatal Injury related Hospital Discharges by OPH Regions, Louisiana 2004



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 - 2004

	Age Groups (Years)										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Unintentional Falls 70	Unintentional Poisoning 163	Unintentional Falls 132	Unintentional MVT 119	Unintentional MVT 841	Unintentional MVT 540	Unintentional MVT 520	Unintentional Falls 777	Unintentional Falls 1,025	Unintentional Falls 6,438	Unintentional Falls 9,619
2	Unintentional Unspecified 24	Unintentional Falls 128	Unintentional MVT 90	Unintentional Falls 92	Suicide Poisoning 540	Suicide Poisoning 384	Unintentional Falls 498	Unintentional MVT 443	Unintentional MVT 276	Unintentional Unspecified 750	Unintentional MVT 3,292
3	Unintentional Poisoning 22	Unintentional Natural Environmental 112	Unintentional Natural Environmental 55	Suicide Poisoning 81	Unintentional Falls 199	Unintentional Falls 260	Suicide Poisoning 460	Suicide Poisoning 292	Unintentional Unspecified 223	Unintentional Other Specified & Classifiable 544	Suicide Poisoning 1,910
4	Unintentional Natural Environmental 19	Unintentional Fire/Burn 51	Unintentional Struck by, against 44	Unintentional Other Transport	Tied[4] 185	Unintentional Other Specified & Classifiable 161	Unintentional Other Specified & Classifiable 229	Unintentional Other Specified & Classifiable 238	Unintentional Other Specified & Classifiable 191	Unintentional MVT 397	Unintentional Other Specified & Classifiable 1,646
5	Unintentional Fire/Burn 16	Unintentional MVT 55	Unintentional Other Transport 30	Unintentional Struck by, against 54	Undetermined Poisoning 151	Unintentional Poisoning 154	Unintentional Poisoning 191	Tied[5] 222	Unintentional Poisoning 128	Unintentional Poisoning 265	Unintentional Unspecified 1,642
6	Unintentional Other Specified & Classifiable 14	Tied[1] 35	Unintentional Other Pedal Cyclist 29	Unintentional Natural Environmental 43	Homicide Firearm 144	Unintentional Natural Environmental 135	Unintentional Unspecified 184	Undetermined Poisoning 103	Unintentional Natural Environmental 116	Unintentional Natural Environmental 226	Unintentional Poisoning 1,335
7	Unintentional Suffocation 12	Unintentional Cut/Pierce 16	Unintentional Cut/Pierce 26	Unintentional Other Pedal Cyclist 30	Unintentional Struck by, against 133	Unintentional Unspecified 108	Unintentional Natural Environmental 164	Homicide Struck by, against 91	Suicide Poisoning 108	Unintentional Overexertion 126	Unintentional Natural Environmental 1,218
8	Unintentional MVT 11	Unintentional Unspecified 15	Unintentional Other Specified & Classifiable 22	Unintentional Other Specified & Classifiable 27	Unintentional Natural Environmental 126	Undetermined Poisoning 107	Undetermined Poisoning 127	Unintentional Struck by, against 84	Unintentional Struck by, against 61	Unintentional Struck by, against 118	Unintentional Struck by, against 693
9	Unintentional Other Specif Not elsewhere Classifiable <10	Unintentional Drowning 13	Undetermined Poisoning 20	Unintentional Unspecified 21	Homicide Struck by, against 116	Undetermined Struck by, against 83	Homicide Struck by, against 103	Unintentional Other Transport 72	Unintentional Other Specif Not elsewhere Classifiable 56	Unintentional Other Specif Not elsewhere Classifiable 99	Undetermined Poisoning 609
10	Undetermined Poisoning <10	Unintentional Suffocation 12	Tied[2] 10	Tied[3] 18	Unintentional Other Transport 104	Homicide Firearm 80	Unintentional Struck by, against 86	Unintentional Cut/Pierce 67	Undetermined Poisoning 48	Unintentional Fire/Burn 70	Unintentional Other Transport 498

Tied[1] - Unintentional Struck by, against /Other specified elsewhere classifiable Tied[2] - Unintentional Fire/Burn / Unspecified
Tied[3] - Unintentional Poisoning/ Fire/Burn. Tied[4] - Unintentional Poisoning /Other specified elsewhere classifiable
Tied[5]- Unintentional Natural/ Environmental/ Unspecified

Source: IRP using data from the LA OPH Center for Health Statistics Program, Hospital Inpatient Discharge Database, 2004

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. Nonfatal injury-related hospital discharge reports are available from the EMS/Injury Research and Prevention Program on the following website www.dhh.louisiana.gov/offices/?ID=221.

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.

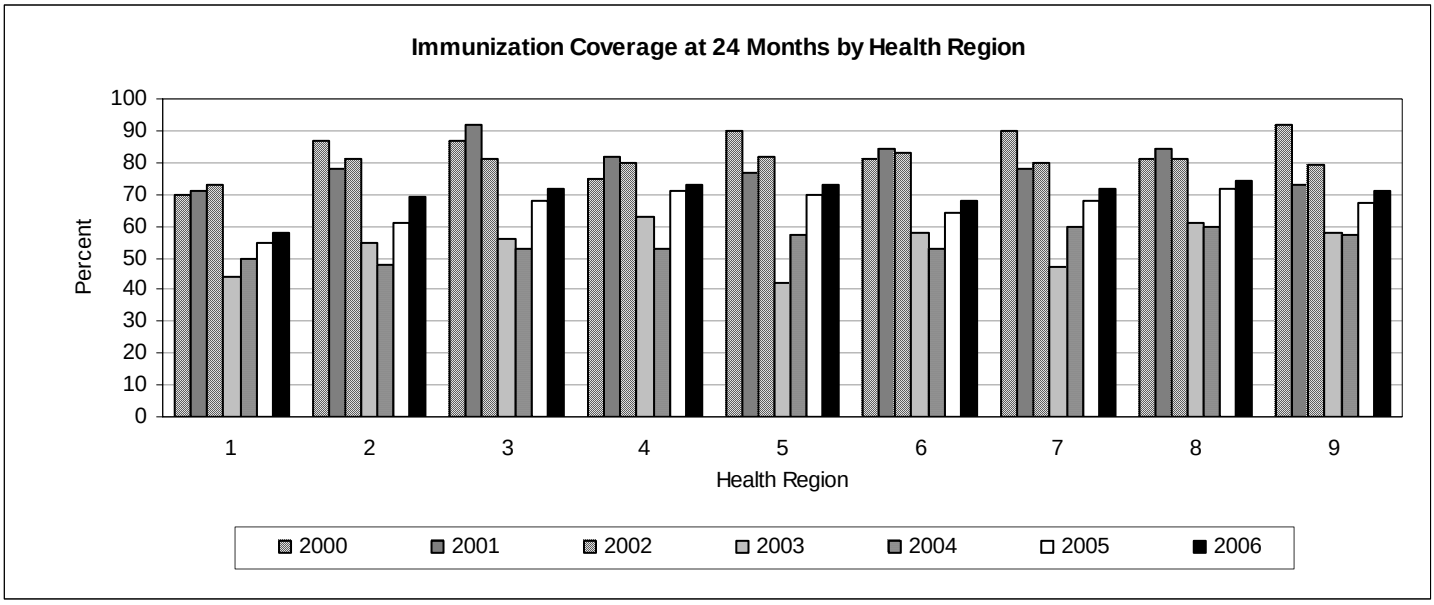
In addition to being reliable and effective, vaccines are also some of the most cost-effective medical procedures available. The vaccine-preventable diseases addressed in standard childhood immunizations are very serious illnesses and very expensive to treat. Vaccines are relatively inexpensive and very 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 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 2006, 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 table on the following pages displays the percent of immunization coverage at age 24 months among those served by parish health units.

Immunizations: Percent Up-To-Date (UTD) at Age 24 Months* Louisiana 2006	
Clinic	**% UTD 2006 Results**
Region I	
Orleans-Edna Pilsbury	N/A
Orleans-Mandeville Detiege	N/A
Orleans-Mary Buck	N/A
Orleans-Katherine Benson	N/A
Orleans-Helen Levy	N/A
Orleans-St. Bernard Gentilly	N/A
Orleans-Ida Hymel	N/A
St. Bernard	N/A
Jefferson-Marrero	58
Plaquemines	N/A
Jefferson-Metairie	66
Region II	
Ascension	69
West Baton Rouge	68
West Feliciana	83
Iberville	90
East Feliciana-Clinton	69
Pointe Coupee	71
E. Baton Rouge	66
Region III	
St. James	81
Lafourche-Galliano	88
Lafourche-Thibodaux	82
Terrebonne	68
St. Mary	79
St. John	56
Assumption	70
St. Charles	83
Region IV	
Evangeline	80
St. Landry	77
St. Martin	77
Acadia	55
Vermilion	69
Lafayette	84
Iberia	84
Region V	
Allen	70
Calcasieu-Sulphur	76
Calcasieu-Lake Charles	72
Jefferson Davis	65
Beauregard	82
Cameron	N/A
Region VI	
Catahoula	82
LaSalle	88
Rapides	61
Grant	57
Winn	85
Vernon	78
Concordia	62
Avoyelles	71

Immunizations: Percent Up-To-Date (UTD) at Age 24 Months* Louisiana 2006	
Clinic	**% UTD 2006 Results**
Region VII	
Red River	82
Claiborne	74
Webster-Springhill	78
DeSoto	80
Natchitoches	80
Bienville	85
Sabine	72
Webster-Minden	73
Bossier-Bossier City	70
Caddo	64
Region VIII	
Morehouse-Bastrop	81
Franklin-Winnsboro	75
West Carroll-Oak Grove	84
Ouachita-Monroe	65
Caldwell	89
Tensas-St. Joseph	88
Lincoln	73
Jackson-Jonesboro	79
East Carroll	94
Union	81
Richland-Rayville	78
Ouachita-West Monroe	64
Madison	89
Region IX	
St. Helena	84
Washington-Franklinton	73
Washington-Bogalusa	71
Tangipahoa	78
St. Tammany	67
Livingston	77

*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 vaccination. 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 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 2005 Results of Infectious Disease Surveillance in Louisiana

- West Nile neuro-invasive diseases totaled 118 cases in Louisiana in 2005. It is estimated that about 80,000 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 foci in the areas around Baton Rouge, St. Tammany, Shreveport.
- 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 2005 was 47 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.

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-OFFICE OF PUBLIC HEALTH STD Sexually Transmitted Disease (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.

2005 National Rankings

- Primary and secondary Syphilis rates in Louisiana ranked the 2nd highest in the nation in 2005.
- Gonorrhea rate ranked 2nd highest in the nation in 2005.
- Chlamydia rate ranked 12th in the nation in 2005.
- Louisiana ranked 6th highest in AIDS case rates among the states and 10th 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 Sexually Transmitted Disease (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, Quarterly 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.

2003 and 2004 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. Almost 60%, or an estimated 2.9 million, 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].

Epidemiology

While marijuana continues to be the most prevalent illicit drug used among U.S. high school seniors, the nonmedical use of narcotic drugs is the second most prevalent drug used among this population, according to data from the national 2006 Monitoring the Future study. Nearly one in ten twelfth grade students reported using prescription-type narcotic drugs, such as Vicodin® (9.7%) and OxyContin® (4.3%), in the past year without a doctor's order. Other drugs used by more than 5% of 12th graders include amphetamines (8.1%), over-the-counter cough or cold medicines(6.9%), tranquilizers (6.6%), sedatives (6.6%), and cocaine (5.7%). The nonmedical use of prescription pain relievers is also the second most prevalent illicitly used drug among the U.S. household population ages 12 and older.

A State Epidemiological Work Group (SEWG) on drug abuse was held in Baton Rouge, Louisiana, on September 23, 2004. The primary purpose of the meeting was to identify and assess substance abuse patterns in cities, parishes, and State.

- The leading substances of abuse in Louisiana continued to be alcohol, marijuana, and Cocaine / crack.
- Indicators of opiates/synthetics and methamphetamine abuse continued to increase in some areas, and there was growing concern that the abuse of these drugs is spreading to areas throughout the State.

ALCOHOL abuse continued to account for the highest percentages of substance abuse treatment admissions in 7 of the 10 regions in 2003-2004. However, some alcohol abuse indicators decreased in 2003. Arrests for DRIVING WHILE INTOXICATED (DWI) totaled 947 in East Baton Rouge (CAHSD) and 646 in Region III in 2003, but both totals represented decreases in DWI arrests since 2002. Another important decline in alcohol abuse indicators involved BINGE DRINKING AMONG YOUTH. Based on CAHSD survey data, there was a decrease in binge drinking among students in grades 6, 8, 10, and 12. According to survey data in Region VII, past-30 day alcohol use also decreased among students in grades 6, 8, 10, and 12.

MARIJUANA availability and abuse continued at high levels throughout the State. This drug accounted for the highest percentages of 2003-2004 substance abuse treatment admissions in Region I and Region

III. Marijuana abuse accounted for sizeable proportions of youth treatment admissions in 2003. For example, 88 percent of the youth entering treatment in East Baton Rouge Parish reported marijuana as their primary drug of abuse. Law enforcement indicators also illustrate the high levels of marijuana abuse throughout the State, with the drug accounting for 55 percent of drug-related arrests in Region VI and 36.4 percent in Region VII and the majority of drug seizures in MHSD, Region VI, and Region VII.

COCAINE/CRACK indicators remained at high levels throughout the State. The percentages of primary cocaine admissions increased in some parishes and decreased in others. In 2003, almost one-half (48 percent) of the treatment admissions in East Baton Rouge Parish were for primary cocaine abuse, up from 41 percent in FY 2002. A decline in the proportion of primary cocaine treatment admissions was reported in Region III and an increase was reported in FPHSA. In MHSD 47.6 percent of adult male arrestees tested positive for cocaine during the first three quarters of 2003, and in Region III, seizures of cocaine/crack totaled 2,130 in 2003, up from 787.2 in 2002.

PRESCRIPTION OPIATE abuse indicators continued to increase throughout Louisiana. The most commonly reported prescription opiates abused were hydrocodone, oxycodone, and illicit methadone. Although the proportions of 2003 treatment admissions reporting prescription drug abuse were relatively low, admissions for abuse of these substances increased in MHSD, Regions III and V, and FPHSA, and deaths involving mentions of narcotic analgesics were up sharply in MHSD compared with 1997. In some clinics in FPHSA, other opiates and synthetics have become the third most popular substance of choice.

AMPHETAMINE AND METHAMPHETAMINE abuse indicators continued to increase in areas throughout the State. In MHSD, methamphetamine ED mentions in 2002 represented a significant increase over such mentions in 2000. The Calcasieu Parish Sheriff's Office in Region V described methamphetamine as the "hottest drug" in the area. The manufacture and distribution of methamphetamine continued to be of growing concern.

The Louisiana CARING COMMUNITIES YOUTH SURVEY (Louisiana CCYS) has been administered to Louisiana's youth in grades 6, 8, 10, and 12 five times - Fall 1998, Spring 2001, Fall 2002, Fall 2004, and Fall 2006. The Louisiana CCYS was administered in Fall 2006 to students in grades 6, 8, 10, and 12, and was designed to measure the need for prevention services among youth in grades 6, 8, 10, and 12 in the areas of substance abuse, delinquency, antisocial behavior, and violence. The questions on the survey ask youth about the factors that place them at risk for substance use and other problem behaviors along with the factors that offer them protection from problem behaviors. The survey also inquires about the use of alcohol, tobacco and other drugs (ATODs) and participation in various antisocial behaviors. Enrollment figures from the *2004-2005 Annual Financial and Statistical Report* released August 2006 show that for the 2004-2005 school year, there were a total of 242,770 students in grades 6, 8, 10, and 12 who were

eligible to participate in the survey. A total of 116,780 students in grades 6, 8, 10, and 12 participated in the 2006 Louisiana CCYS. The results for the 2006 Louisiana Caring Communities Youth Survey are not yet posted on the DHH Website (They will be at some point, but are not on the website now). They can however be accessed on University of Louisiana Lafayette (ULL) website address: http://ccd.louisiana.edu/

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. The Office 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.

STATEWIDE HIV PREVENTION COMMUNITY PLANNING GROUP (SCPG): The SCPG was designed to meet the guidelines of community planning and is comprised of the following: one OPH co-chair, one community co-chair, ten representatives from each region/district who generally represent at-risk

communities or various areas of expertise (e.g., minority populations, MSM, IVDU, etc.), additional community representatives (e.g., the clergy), and representatives from the Department of Corrections, the Department of Education, the STD program, the Office of Addictive Disorders and the Office for Mental Health.

OAD participates in the Statewide HIV Community Planning Group (SCPG) and two subcommittees, Nominations and Special Needs, at the regional level. 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. Groups targeted for intervention are racial and ethnic minority groups, sexually active females, men who have sex with men (MSMs), youth, and substance abusers. Currently, interventions utilized are street outreach, counseling and testing, and condom availability. There is pending legislation regulating condom distribution.

A comprehensive statewide HIV prevention program has been developed by statewide and regional community planning groups. This comprehensive plan is used in the development of the cooperative agreement between the Office of Public Health (OPH) and CDC regarding the distribution of prevention resources by OPH. The comprehensive plan also provides guidance to other governmental agencies and community-based organizations in planning and implementing HIV prevention activities.

SFY 2002-SFY 2006Program Statistics

Intravenous Drug Users (IDUs)

For state fiscal year (SFY) 2006 the Louisiana Addictive Disorders Data system (LADDS) reported 2,502 Intravenous clients' admissions and 3,094 for SFY 2005. OAD's Management Information System (MIS) program reports that there were 3,148 IDU (9% of total admissions) to the OAD continuum of care for (SFY) 2004 (9% of total admissions); 3,211 admissions for SFY 2003 (11% of total admissions); and 2,826 for SFY 2002 (9% of total admissions).

HIV/AIDS

An Executive Summary from the Louisiana HIV/AIDS 2002 Annual Report[3] indicates that, at the end of 2002, 14,647 persons in Louisiana were known to be living with HIV/AIDS, of which 6,945 (47%) have been diagnosed with AIDS. The report highlights that there are persons living with HIV in every parish in Louisiana, and this number continues to increase each year. According to the report, the higher life expectancy rate is due to more effective drug therapies.

According to the Office of Public Health (OPH) information published in the most recent CDC HIV/AIDS Surveillance Report (Vol. 14), Louisiana ranked 5th highest in state AIDS case rates and 10th in the number of AIDS cases reported in 2002. Also in 2002, new cases of HIV/AIDS were detected in 62 of

Louisiana's 64 parishes. 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. The metropolitan Baton Rouge area ranked 7th and the metropolitan New Orleans area ranked 19th in AIDS case rates in 2001 among the large cities in the nation (CDC HIV/AIDS Surveillance Report, Vol. 13, No. 2).

The following statistics represent the regions currently under OAD jurisdiction (Regions 3 through 9). In SFY 1999, Louisiana had an incidence rate of 18 HIV cases per 100,000 population. The most recent incidence rate figure available from OPH is for the year 2002 *Louisiana HIV/AIDS Cases and Case Rates by Parish*, which shows an increase in the detected rate of cases per 100,000 from 18 in 1999 to 27 in SFY 2002. As a result, the state continues to be eligible for block grant expenditures for HIV services (minimum of 5% of the total award). The most recent data prior to October 1, 2005 by 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. DHH-OPH's summary of statistics for calendar year (CY) 2003 showed that 4,533 tests were conducted at OAD sites; of these, 42 yielded a positive result (less than 1%). During CY 2003, OAD conducted 6,127 Pretest counseling sessions, 2,886 Post Test counseling sessions, and 4,795 services.

In CY 2006, according to OAD set-aside report 1,823 clients were tested for HIV and 25 (l%) tested positive. The apparent decline in numbers tested is due to the impact of Hurricanes Katrina and Rita. During CY 2005, 3,210 HIV tests were conducted at OAD sites; of these, 32 (<1%) tested positive. Historically, in CY 2004 and CY 2003, there were 4,533 clients tested of whom 42 (<1%) tested positive; in CY 2002 5,371 HIV tests were conducted, with 65 (> 1%) testing positive. according to OAD Set Aside Reports

Tuberculosis

During SFY 2006 OAD tested 4,567 clients of whom 208 tested (4%) positive. During SFY 2005, there were 8,084 tests administered and 307 (3%) yielded positive results. In SFY 2004 OAD tested 12,327 clients for TB which yielded 546 (4%) positive results. OAD tested 8,406 clients for TB which yielded 461 (5%) positive results in SFY 2003 according to OAD Set-Aside quarterly reports.

F. Statewide Child Death Review Panel

Data from the State and local Child Death Review Panel (CDRP) investigations allow the injury epidemiologists to perform analyses of unexpected, unintentional deaths of children under age 15 years. These data can drive decision-making for preventive intervention strategies, resource planning, legislation, and special trainings on injury prevention at the state and local levels. Also, these data analyses are reported in the CDRP Annual Report to the legislature.

Reports

Each year, the Panel submits a mandated Annual Report to the Legislature, which reports the findings from state and local Child Death Review Panels and data analyses performed by injury epidemiologists. The report serves as an educational tool for state and local leaders and policymakers as well as the general public on the circumstances surrounding unexpected, unintentional child deaths in an effort to decrease the number of all child deaths in the future.

A report on the outcome of this surveillance project is available from the EMS/Injury Research and Prevention Program (www.oph.dhh.louisiana.gov/offices/?ID=233).

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.[1] 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 (www.oph.dhh.louisiana.gov/offices/?ID=233).

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 than 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.

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

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 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 2004 report on nonfatal injury-related hospital discharges is available from the EMS/Injury Research and Prevention Program on the following website (www.oph.dhh.louisiana.gov/offices/?ID=233).

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 was to provide Louisiana Adolescents with the opportunity to grow and prosper in a healthy, nurturing, and safe environment. AHI reached 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.

As the needs of Family Planning Program changed, there was a shift in Adolescent Services. Family Planning Adolescent Health Services now consists of:

Tulane University's Adolescent Drop-In Clinic

The Adolescent Drop-In Clinic has been contracted to provide clinical, informational, educational, social and referral services relating to family planning to clients who desire such services. The clinic will provide services during traditional and non-traditional hours with emphasis on patients 24 years of age and under who are homeless or at risk for homelessness and/or substance abuse. The only clinic of it's kind in the Greater New Orleans area, The Adolescent Clinic served 804 adolescents in 1152 visits in 2006, a monthly average of 67 clients and 96 visits.

St. Thomas Community Health Clinic

The St. Thomas Community Health Clinic has recently been contracted to provide family planning services in the parish of Orleans. These services include Adolescent Health Services. The St. Thomas Clinic provides family planning services including contraceptive methods, pregnancy testing, laboratory testing, examinations, pap smears, STD/HIV testing, counseling and referral.

Take Charge Family Planning Program Waiver

Family Planning was approved for a Medicaid Waiver in June 2006. The waiver covers reproductive women who are 19 to 44 years old. Outreach and Marketing activities are targeting a segment of the Adolescent population as they age out of traditional services. Nineteen to twenty-one years old receive the following services under this waiver:

- Yearly Physical Exam
- Up to 4 visits a calendar year
- Pap Smears
- Contraceptive Counseling
- Laboratory Tests (blood and urine)
- STD screening (treatment not covered)
- Birth Control Medications & Supplies
- (Pills, patches, injections, IUDs, diaphragms)

The Family Planning Program has an approved list of outreach informational and educational material for the Adolescent population. The distribution of information and educational materials is used to inform, teach and encourage Adolescents. Topics covered include self-esteem, anger, respect, communication, personal values, sexual behavior and choices, preventing teen pregnancy and more. Titles (some in Spanish) in our library include:

Anger – What Young People Should Know
Abstinence – Saying No
Why Follow the Crowd
Depression – Help for Young People

Values and Young People	Talking to Adolescents
Young People and Building Respect	About Dating Violence
Boys and Self Esteem	Girls and Self Esteem
How to Talk to Your Parents	Making Abstinence Work
Choosing Abstinence Makes Sense	Emotional Effects of Sex
Making Responsible Choices	About Sex and Alcohol
Are You Ready for Parenthood	Teen Pregnancy

Outreach

Teen Pregnancy outreach and prevention activities served over 20,000 Adolescents in 2006. The Health Education and Outreach Coordinator's position in the Family Planning Program Central Office will direct the Adolescent Health Services activities. This position is responsible for the outreach, information, and education programming for Adolescents.

Outreach contractors with the Family Planning Program include the Adolescent population in their efforts. The two contractors, Women with a Vision (Region 1) and Metro Health (Region 2) have reached 2,217 Adolescents in 2006.

Adolescent Outreach Activities by Contractor	
	<19 Yrs
Metro Health	723
Women with A Vision	1494
Total Adolescents	2217

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")

- Pesticide Exposure
- Occupational Health
- Mercury in Fish
- Health Professional Outreach
- Indoor Air Quality

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

- Environmental Public Health Emergency Preparedness and Response
- Geographical Information System (GIS) Program
- Hazardous Substances Emergency Events Surveillance Project

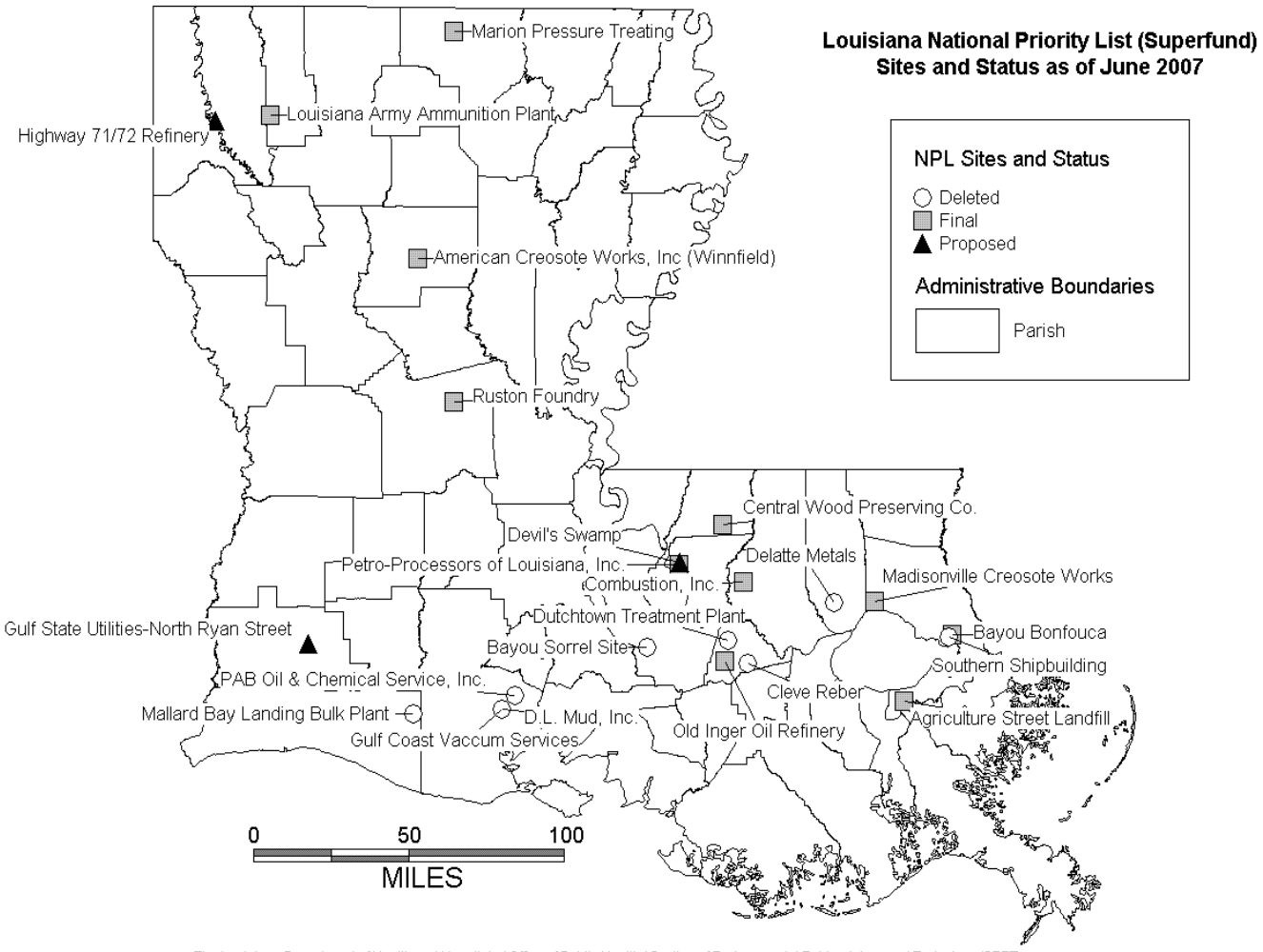
Other projects as described below are representative of those coordinated by SEET.

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 July 2007, there were 148 confirmed inactive and abandoned hazardous waste sites in Louisiana, and 433 similar potential sites, according to the Louisiana Department of Environmental Quality (LDEQ). Currently, SEET is evaluating the public health impact of several 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 EPA and 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 has evaluated the impact of the 2005 hurricanes on 15 current and deleted National Priority List (NPL) sites throughout Louisiana: Agriculture Street Landfill, Bayou Bonfouca, Bayou Sorrel, Cleve Reber, Combustion, Inc., D.L.Mud, Inc., Dutchtown Treatment Plant, Gulf Coast Vacuum Services, Delatte Metals, Old Inger Refinery, Mallard Bay Landing, Madisonville Creosote Works, PAB Oil and Chemical Services, Inc., Petro-Processors, and Southern Shipbuilding Corporation. SEET assessed post-hurricane sample data for each site to assess the impact of the hurricanes. At a majority of the sites, the hurricanes had no effect on site-related contaminants. Additionally, SEET analyzed pre-and post- hurricane soil and blood lead levels from St. Bernard and Orleans parishes to determine the potential for adverse health effects resulting from contaminants in sediments deposited by floodwaters.

Calcasieu Parish, Mossville

Mossville is a small, unincorporated community in Calcasieu Parish, near Lake Charles. Mossville residents have health and quality of life concerns related to industrial activity in the area. In 1998, the Agency for Toxic Substances & Disease Registry (ATSDR) conducted an exposure investigation of blood dioxin levels in 28 Mossville residents and elevated dioxin levels were detected in some of the residents. In response to public concerns about dioxins and other chemical pollutants in the Mossville/Lake Charles area, SEET conducted a review of cancer incidence rates (*Cancer in Calcasieu Parish, Louisiana 1988-1997).* This review compared cancer incidence of Calcasieu Parish and the State of Louisiana. Age-adjusted rates of all cancers combined and cancers of 22 specific anatomic sites were examined for the following demographic groups: black females, white females, black males, and white males. As part of SEET's ongoing environmental health investigation in Mossville, Louisiana, staff are currently examining cancer incidence data for Calcasieu Parish from 1988-2004. This review is comparing the cancer incidence of Calcasieu Parish and the State of Louisiana. Cancer incidence rates are being assessed for 24 distinct anatomic cancer sites and all cancers combined for black females, black males, white females, and white males. The final health consultation, *Assessment of Cancer Incidence from the Louisiana Tumor Registry from 1988-2004, Calcasieu Parish, Louisiana,* will be completed in 2007.

Devil's Swamp Lake

The Devil's Swamp Lake site, which is located in Baton Rouge, East Baton Rouge Parish, Louisiana, 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 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 the Agency for Toxic Substances and Disease Registry (ATSDR), SEET completed a Health Consultation on the site in 2006, which recommended a continuation of the existing fish advisory and health education for the local community.

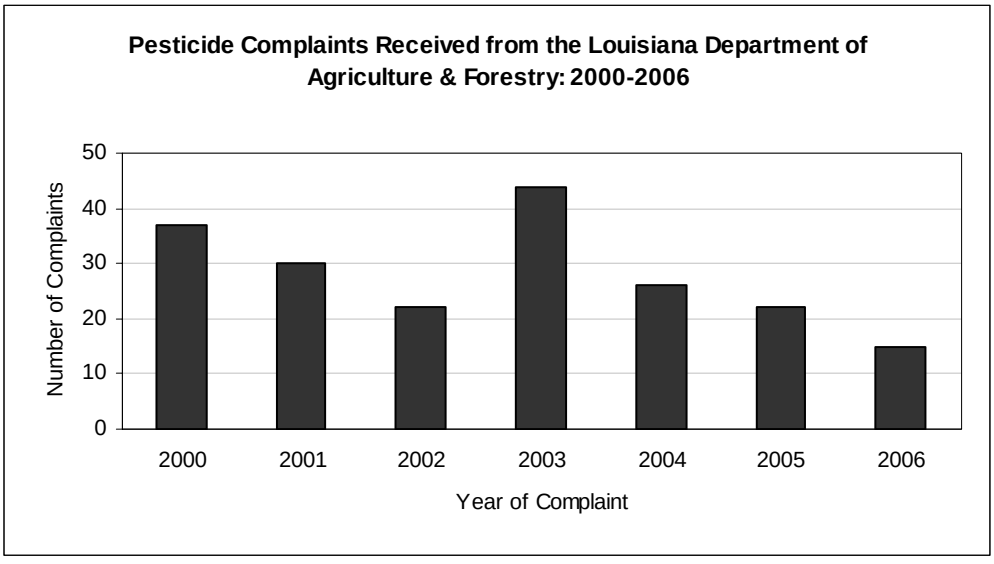
Marion Pressure Treating Company

From 1964 to 1989, the now-defunct Pressure Treating site north of Monroe, 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 and presented its finding in a Health Consultation on the site in early 2006. Neither site-related soil nor sediment poses a human health risk to residents who live near the Marion Pressure Treating site.

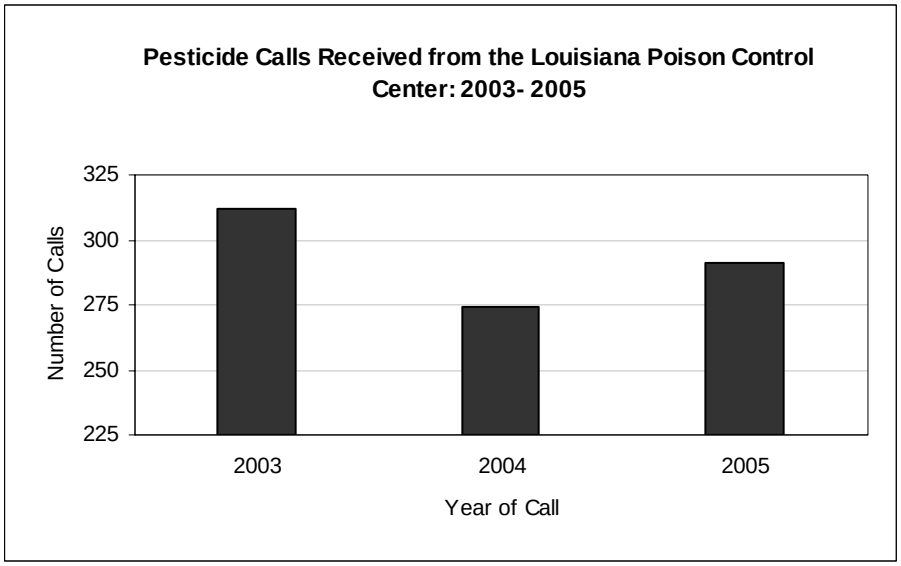
Pesticide Surveillance Program

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

The Pesticide Surveillance Program is a statewide 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 cases are obtained from three major sources: the Louisiana Department of Agriculture and Forestry (LDAF), the Louisiana Poison Control Center (LAPCC), and via laboratory reporting of pesticide biomonitoring data. 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. SEET provides information on the health effects that can result from exposure to the complainant.



Since October 2002, SEET has been receiving all pesticide-related calls made to 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 a minimum of 2 reported health effects are included in the database; cases with unclear exposure histories or less than 2 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. For surveillance purposes, 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.

In June 2006, SEET amended the Louisiana Sanitary Code's list of reportable diseases and conditions to include pesticide (and heavy metals) poisoning. Additional changes included adding Poison Centers and Laboratory Directors to the list of health care providers required to report and clearly defining the reporting requirements of clinical laboratories operating within or outside the state. These important changes have enabled the OPH to require labs to report any laboratory result for pesticides. Since the rule change, SEET has worked to notify laboratories of the changes and to establish electronic reporting of lab results.

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

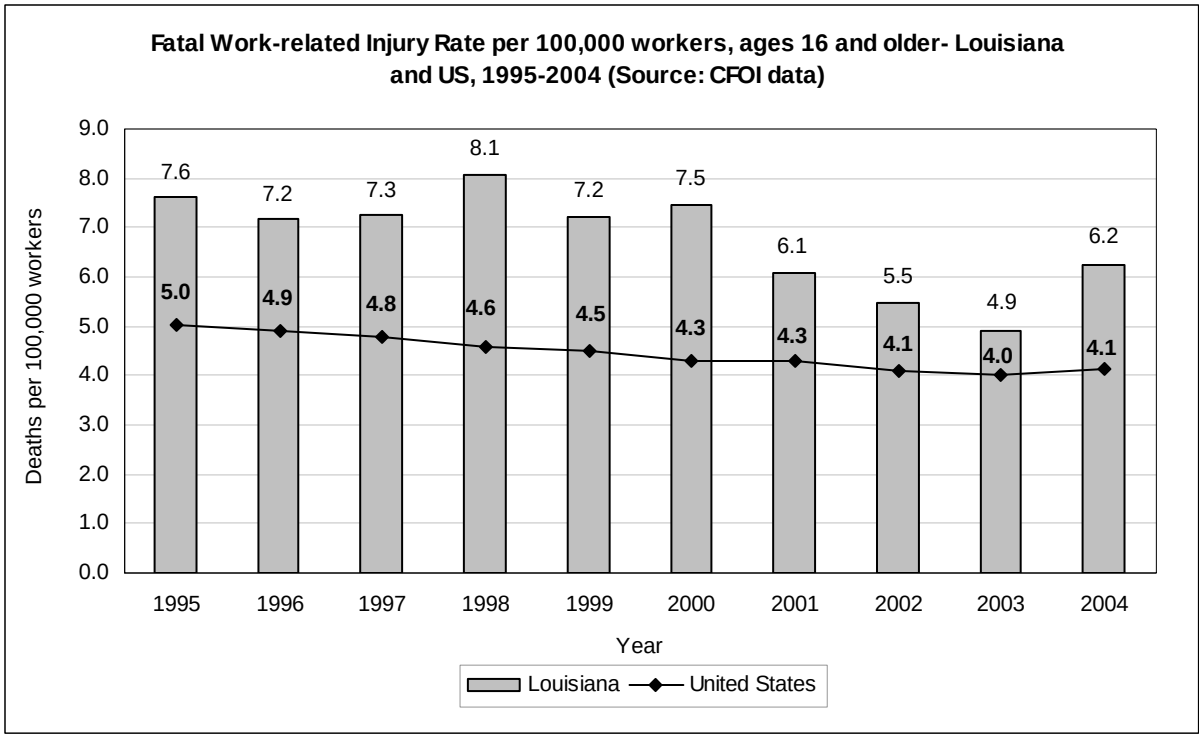
http://www.dhh.louisiana.gov/offices/page.asp?id=205&detail=6737

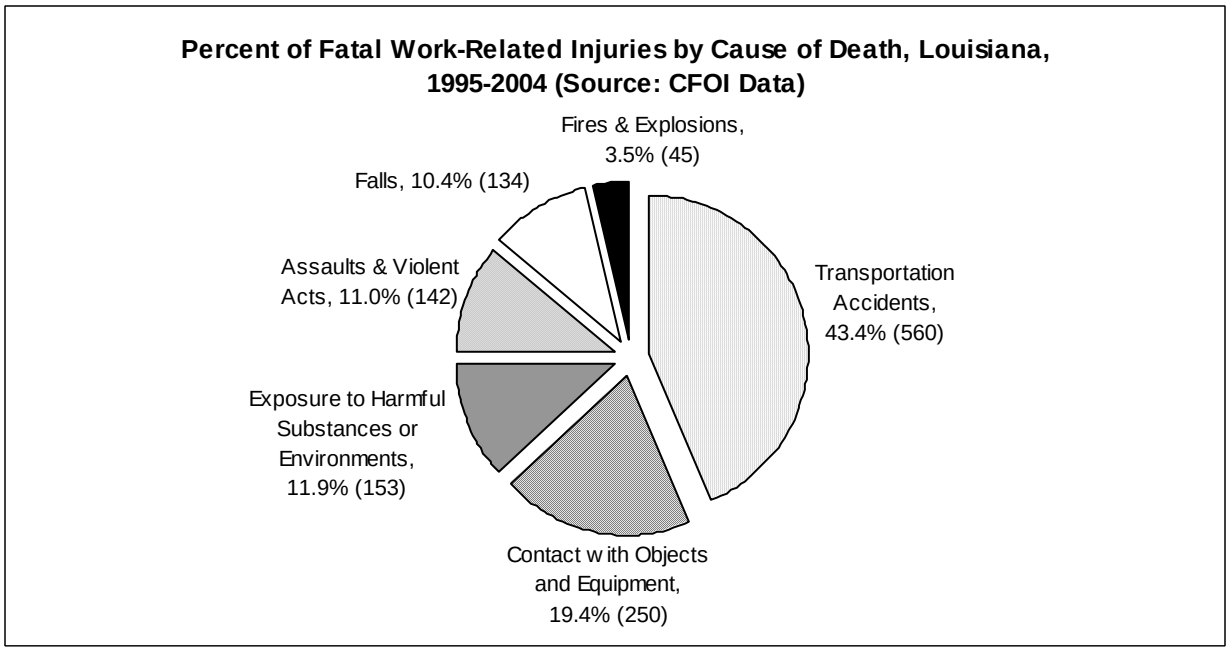
In August of 2005, SEET was awarded a 3-year grant from CDC's National Institute for Occupational Health and Safety (NIOSH) to develop a statewide Occupational Health Surveillance Program. The grant's purpose is to strengthen the state's capacity to conduct population-based surveillance of specified 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.

OPH's Occupational Health Program webpage contains links to reports involving occupational health surveillance data. Included are the following reports:

- Additions to disease reporting requirements: pesticide-related illness and injury and heavy metals (arsenic, cadmium, lead & mercury)
- Don't Mix with Bleach: Harmful Exposures to Mixtures of Bleach/Ammonia-Based Products and Bleach/Acid-Based Products: Louisiana, September 2005 – February 2006.
- Carbon monoxide exposure in office building sickens employees – Louisiana, 2007
- Worker Health Alert – Bronchiolitis obliterans among food manufacturing workers
- Death at work: fatal occupational injuries Louisiana 1995-2004.

Fatal occupational injury data were obtained by the Census of Fatal Occupational Injuries (CFOI), a Federal/State cooperative program charged with annually collecting detailed information on all work-related injuries, and evaluated by SEET. CFOI data indicate Louisiana's workforce has a greater risk of work-related injuries than the U.S. workforce. Transportation accidents, particularly highway accidents, account for a significant proportion of deaths, followed by contact with objects and equipment. These fatalities typically involve incidents where a worker is struck by an object (including a falling object) or caught in equipment or machinery.





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 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. In 2006, SEET was notified about or responded to approximately 4 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. 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 LEHET Program culminated on April 30, 2007. A 3 Year Report, which included a detailed report of program activities, accomplishments and barriers, was submitted to the CDC and to stakeholders at their request. It also contained a comprehensive 3 Year program evaluation, program fact sheets and other publications. LEHET was a collaborative effort of SEET and LDEQ to develop environmental public health tracking in Louisiana. The LEHET was funded through a three-year cooperative agreement with the CDC's Environmental Public Health Tracking Program. This program fulfilled the mandate of Louisiana Act 666 to investigate ways to develop an Environmental Health Surveillance System. The purpose of this program was 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 used.

Wood Preservation and Treatment Demonstration Project and Private Well Water Testing Initiative:

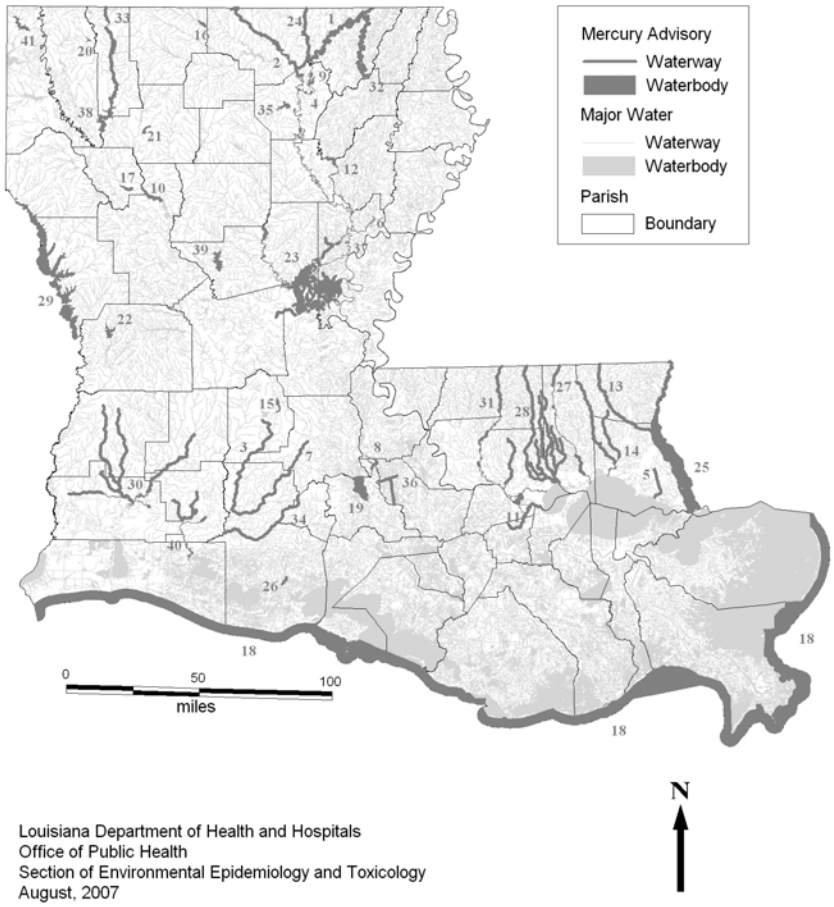
Data collection for the LEHET, Wood Preservation and Treatment Demonstration Project suggested that many private well owners are not aware that their drinking water may contain contaminants. As a result, the LEHET and its stakeholders proposed to educate private well owners. In addition to providing this information to new registrants, this information was also provided to the Louisiana State University, Agricultural Extension Services, Water Education Program, and the Louisiana Department of Environmental Quality's Wellhead Protection Program to disseminate to farmers and other individuals who reside in rural communities and may use private water as a primary drinking water source. SEET and the OPH, Safe Drinking Water Program are collaborating with the Louisiana Department of Transportation and Development (DOTD) to develop a Memorandum of Understanding (MOU) to establish the Private Water Well Initiative. SEET will provide new well registrants with information on maintenance and well testing when their wells are registered with DOTD.

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 in sport fish reach levels that could potentially harm the public. 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.

Louisiana Mercury Fish Consumption Advisories



Louisiana Department of Health and Hospitals
Office of Public Health
Section of Environmental Epidemiology and Toxicology
August, 2007

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

Population-based Blood Mercury Services

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.

In June 2006, SEET amended the Louisiana Sanitary Code's list of reportable diseases and conditions to include heavy metals poisoning. Laboratory results for mercury, arsenic, lead and cadmium are required under Louisiana state law to be reported to OPH by all laboratories and other healthcare providers. SEET has designed a database to track laboratory tests, regardless of results, for occupational and non-occupational exposures.

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. SEET often provides health and exposure information and makes referrals. In some cases, these inquiries developed into comprehensive health investigations involving interagency workgroups. In addition, SEET receives 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*.

2005 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:

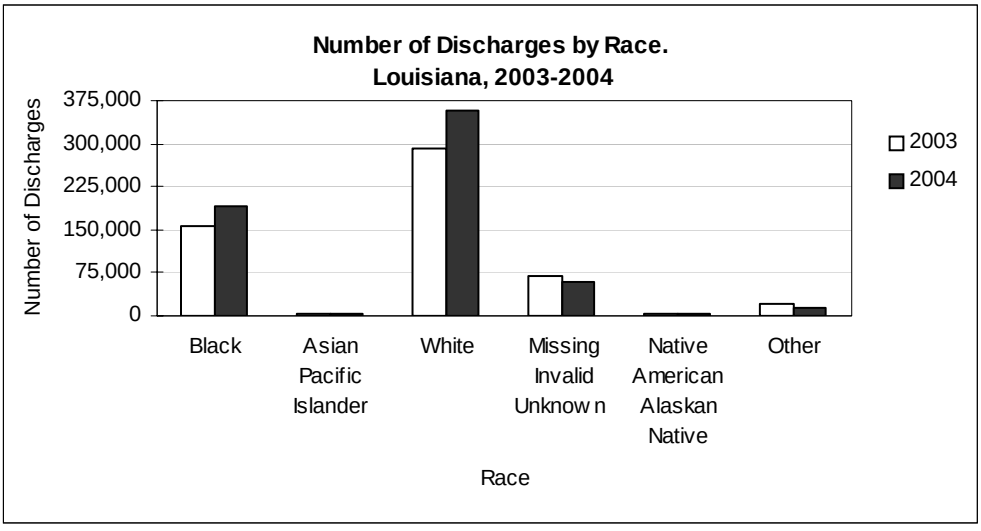
- the patterns and trends in the availability, utilization, and costs of health care services and
- the underlying patterns of disease that necessitate these services: Through LAHIDD, the STATE HEALTH CARE DATA CLEARINGHOUSE provides information needed to make these determinations. It is different from 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.

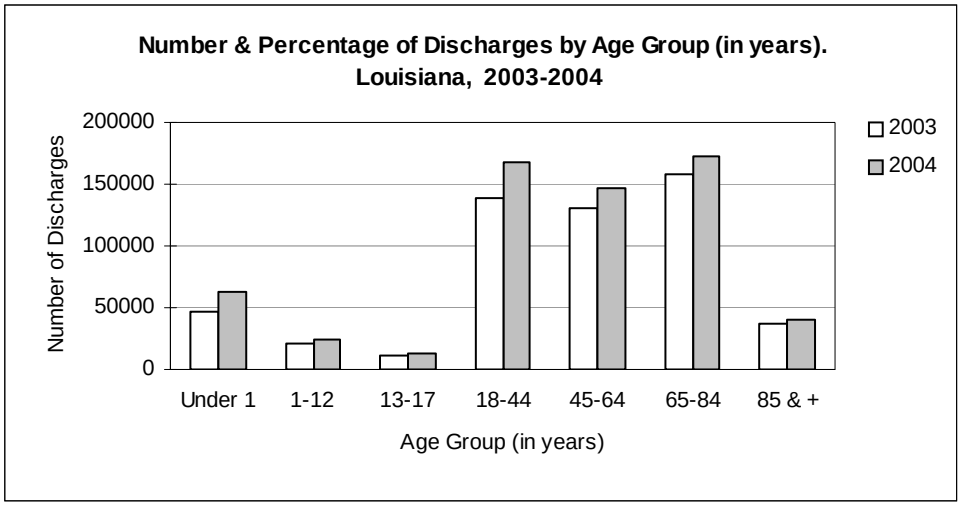
The detailed information available in LAHIDD enables the state to identify specific geographic areas and populations in need of improved access to healthcare and health education. While maintaining LAHIDD confidentiality restrictions, identification of healthcare needs can be accomplished by tracking:

- 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 (in 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 2006, 7,024 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 14,800 women came to the health units for pregnancy tests only. The total number of maternity related visits was 78,687. 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, 315 women received prenatal and postpartum care in 2,536 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 2006, 83,537 infants, children, and adolescents were seen in a total of 143,390 visits. Over 1,471 children received 1,689 comprehensive screenings, and 11,057 children received 18,312 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:

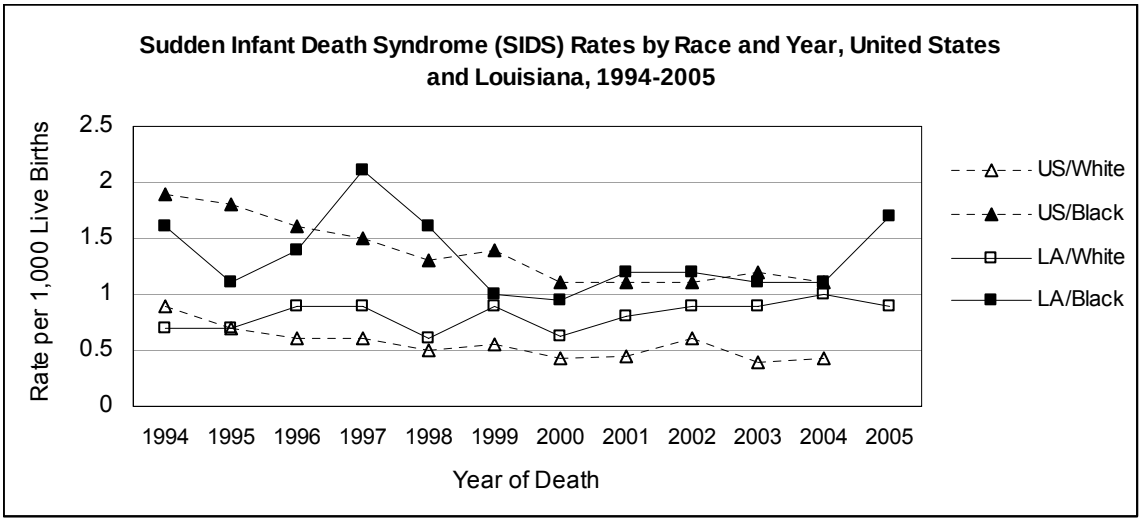
- Developed new media to educate the community on SIDS risk reduction.
- Provided professional education in-service training to birthing hospital staff, childcare providers, nurses, and other healthcare providers.
- Provided SIDS education through faith-based organizations.
- Distributed educational materials on SIDS risk-reduction to hospitals, physicians, childcare providers, and community groups statewide.
- Conducted a qualitative research study through one-on-one interviews with both consumers and health care providers to determine awareness of safe sleep practices for infants and to identify potential barriers related to these practices in order to identify more effective ways of reducing SIDS deaths in Louisiana.

- Collaborated with the MCH Infant Mortality Reduction Initiative and MCH Injury Prevention Coordinators in regional risk reduction activities such as educational and crib giveaway programs.
- Provided technical assistance for the development of policy and/or regulatory standards related to safe sleep environment in licensed childcare.

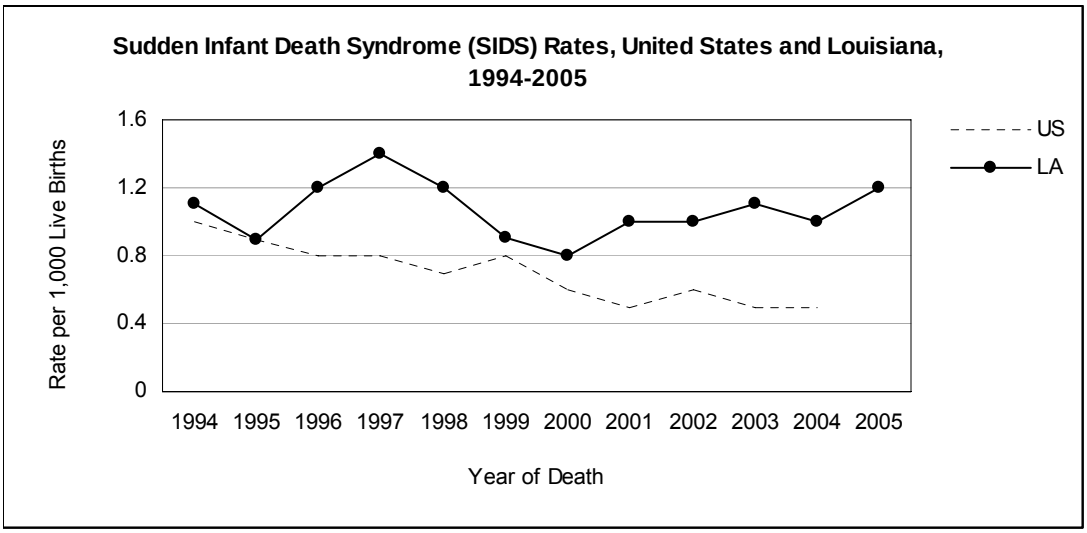
In addition to public and professional education and grief counseling, standard data are collected on each case with the hope of identifying preventable circumstances that are associated with unexpected deaths in infancy. Cases are assessed for SIDS risk factors, ethnic-racial trends, and geography-specific 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.

In 2005, SIDS was the second leading cause of unexpected death to children under age 1. In this year, there were 71 deaths from SIDS in the state, equivalent to a death rate of 1.2 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.

For many years, there has been a disparity between SIDS rates by race, both at the national level and in Louisiana. Blacks were more likely to die from SIDS than whites. In 2005, 39 black infants died in Louisiana from SIDS, for a rate of 1.7 deaths per 1,000 live black births compared to 32 deaths among white infants for a rate of 0.9 deaths per 1,000 live white births. The racial disparity between blacks and whites in Louisiana has decreased from 2.3 in 1997 to 1.8 in 2005. Since 1999, there has been a 25% reduction in the Louisiana SIDS rate for black infants.



* US SIDS RATES FOR 2005 NOT AVAILABLE FOR COMPARISON
*SOURCE: National Center for Vital Statistics and
Louisiana Office of Public Health-State Center for Health Statistics



* US SIDS RATES FOR 2005 NOT AVAILABLE FOR COMPARISON
*SOURCE: National Center for Vital Statistics and
Louisiana Office of Public Health-State Center for Health Statistics

LOUISIANA PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (LAPRAMS)

Overview

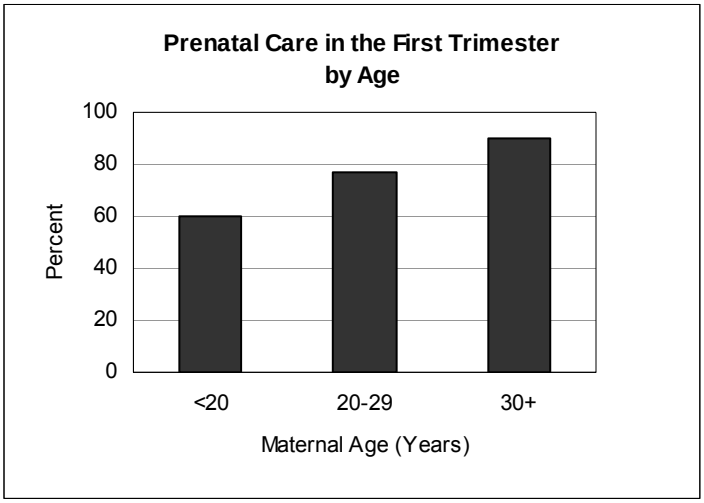
The Louisiana Pregnancy Risk Assessment Monitoring System (LaPRAMS) is an ongoing, population-based surveillance system designed to identify and monitor selected maternal behaviors that occur before and during pregnancy and during a child's early infancy. It is a joint effort between the OFFICE OF PUBLIC 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 MATERNAL AND CHILD HEALTH program, 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, 22,773 women have received the LaPRAMS questionnaire. In 2004 alone, 2,384 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.

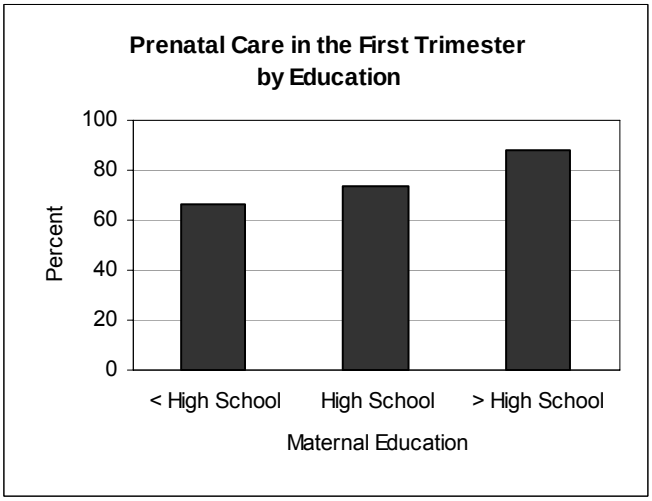
Results

The following are selected findings based on LaPRAMS 2004 data.

- ***Early initiation of prenatal care*:** Seventy-nine 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.

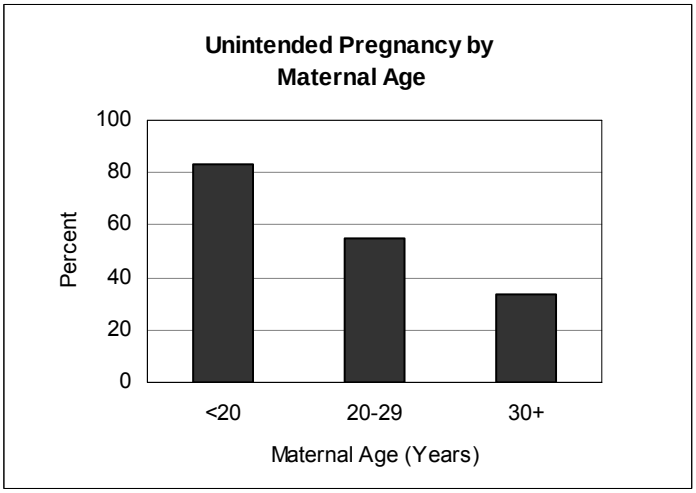


Source: DHH-OPH, LaPRAMS 2004

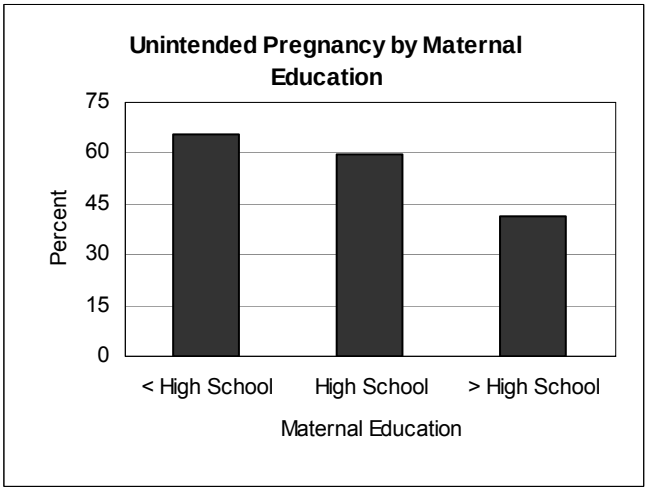


Source: DHH-OPH, LaPRAMS 2004

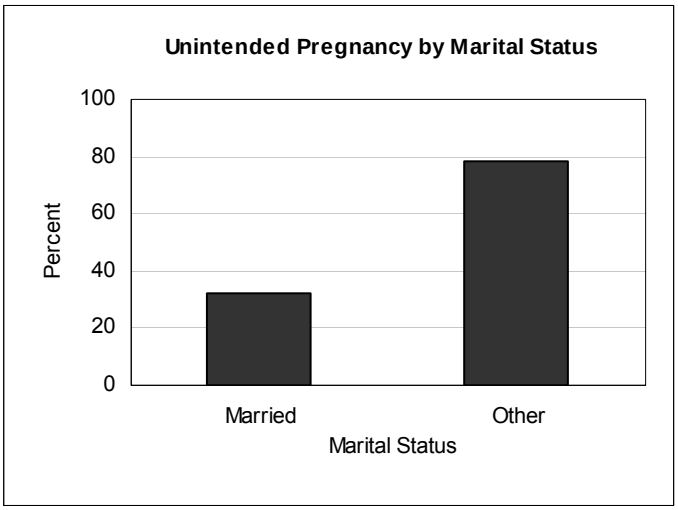
- ***Unintended pregnancies*:** Fifty-two percent of women reported that their pregnancies were mistimed or unwanted. Unintended refers to the timing of the pregnancy, i.e., whether the woman desired the pregnancy to be at some time in the future or not at all. The *Healthy Louisiana 2010* target for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



Source: DHH-OPH, LaPRAMS 2004



Source: DHH-OPH, LaPRAMS 2004

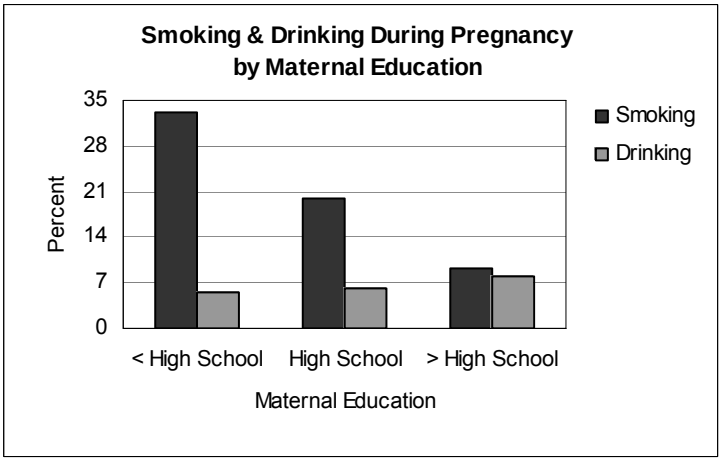


Source: DHH-OPH, LaPRAMS 2004

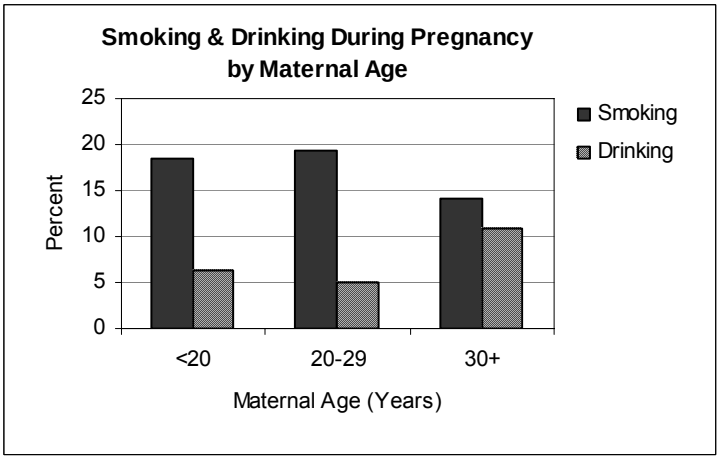
Fourty-four percent of women surveyed were using birth control when they became pregnant; the remaining 56% were not. Reasons for not using birth control include not minding pregnancy, thinking that they were infertile, and/or husband or partner not wanting to use birth control.

- ***Cigarette smoking before, during, and after pregnancy*:** Twenty-eight percent of women reported that they smoked during the three months before pregnancy. The percentage decreased during pregnancy to 18% but increased to 23% at 3-6 months after delivery. The *Healthy Louisiana 2010* target for women, in general, is 15%, and 1% for pregnant women specifically.

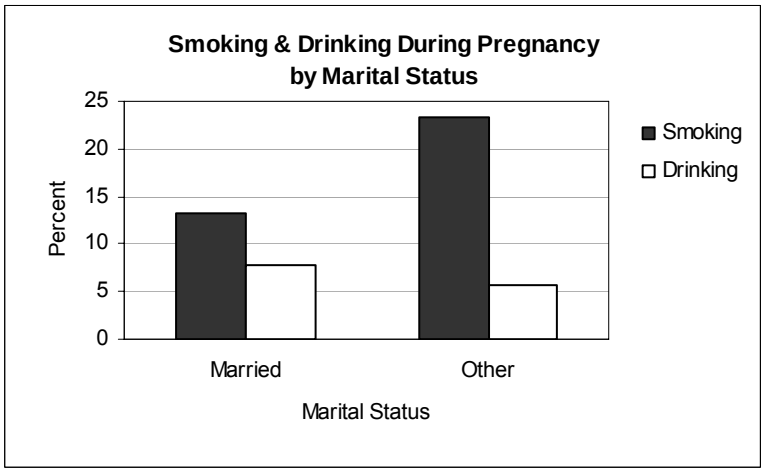
- ***Alcohol consumption before and during pregnancy*:** Fifty-four percent of women reported that they drank alcohol during the three months before pregnancy, and 7% reported that they drank alcohol during the last trimester of their pregnancy. The *Healthy Louisiana 2010* target for pregnant women is 6%.



Source: DHH-OPH, LaPRAMS 2004

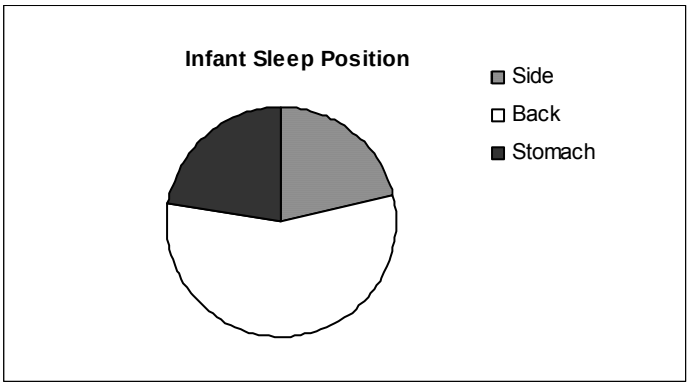


Source: DHH-OPH, LaPRAMS 2004



Source: DHH-OPH, LaPRAMS 2004

Infant sleep position: Among women surveyed, 56% placed the baby on its back, 21.5% placed the baby on its side and 22.6% placed the baby on its stomach. Research shows that placing a baby on the back to sleep reduces the risk of Sudden Infant Death Syndrome (SIDS).



Source: DHH-OPH, LaPRAMS 2004

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

- ***Breastfeeding*:** Fifteen percent of women breastfed their infants for six months. However, 56% 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. Four percent of mothers less than 20 years of age breastfed their infants for 6 months. Seven percent of mothers with less than a high school education breastfed for 6 months. Six 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.

PARTNERS FOR HEALTHY BABIES

For state fiscal year 2006, 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 linking displaced women to services and resources post-hurricanes via a multi-state media campaign. Additional focus was given to providing education that links oral health with birth outcomes. During the same fiscal year, the Partners for Healthy Babies toll-free helpline received approximately 11,150 calls and made referrals to medical and social services statewide.

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 biweekly 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 2007, the Office of Public Health NFP nurses have provided nearly 97,090 visits to 4,720 families.

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. To date, more than 585 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 NFP program. The training is offered on a semi-annual basis for new MCH staff, as well as for nurses and staff who work in the NFP Program. Through the Early Childhood Coordinated Systems (ECCS-Bright Start) initiative, MCH has broadened the availability of this and other trainings in infant mental health to include early childhood mental health and early intervention providers throughout Louisiana.

The MCH Program also provides training in Keys to Caregiving, a parenting education program developed at the University of Washington School of Nursing. 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 staff who work directly with infants and their caregivers. Keys to Caregiving is part of the required NFP 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.

Oral Health Assessment

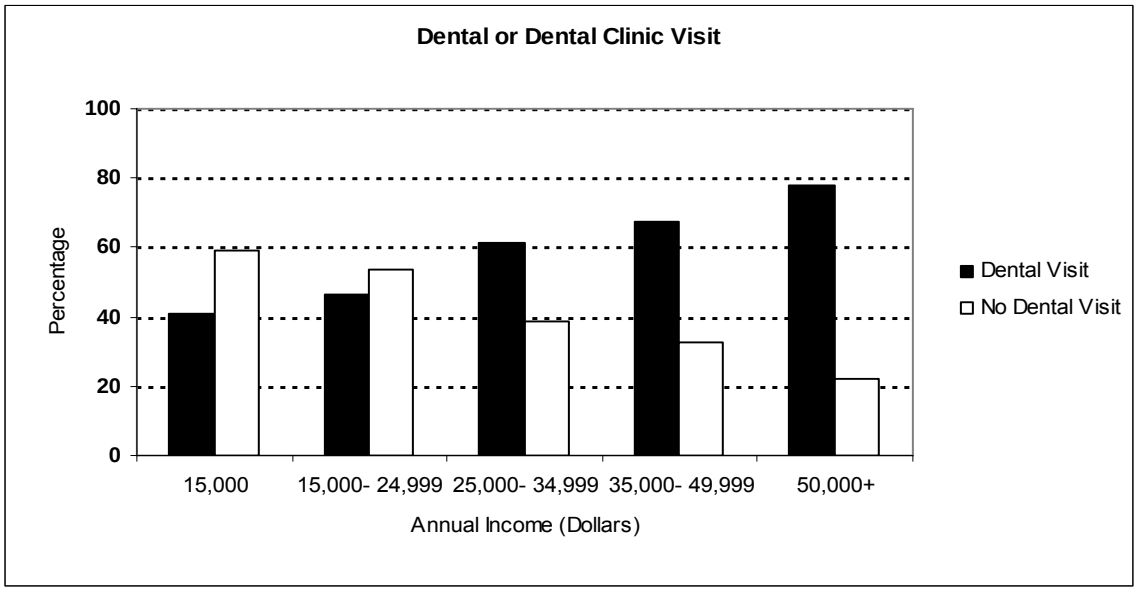
The Oral Health Program aims to improve the oral health status of the residents of Louisiana. Poor oral health in children can have far-reaching consequences, including pain and suffering from infections, absence from school, malnutrition, and diminished sense of self-esteem. Dental decay is the most 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. In 2007, the Oral Health Program will conduct an Oral Health Screening Survey to assess the prevalence of dental decay and dental sealants in 3rd grade children.

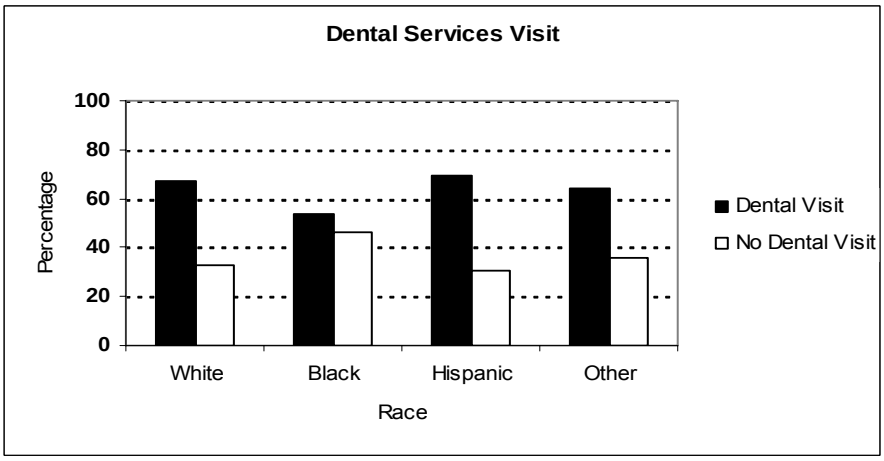
Medicaid claims data show that, as the enrolled total number of Medicaid Louisiana Children's Health Insurance Program (LACHIP) eligible children in Louisiana has increased; more children are receiving at least one dental visit per year. Between 2003 and 2004, the proportion of Medicaid eligible children who received at least one dental visit increased by almost 3%. However, a similar **decrease in dental visits** occurred between 2005 (30.8%) and 2006 (27.6%). These statistics reveal that less than one-third of the 777,000 Medicaid-eligible children are receiving dental visits. Decreases in dental visits may be attributed to a diminished oral health workforce in hurricane affected areas.

Behavior Risk Factor Surveillance System: 2006 Dental Data

- 63.5% of the population surveyed reported visiting a dentist
- 59% of Louisiana residents with an annual income of less than $15,000 per year did not visit a dentist or dental clinic
- 22.2% 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
- 28.3% of the population aged 65 years and above have had all their natural teeth extracted



Source: Behavior Risk Surveillance System 2006



Source: Behavior Risk Surveillance System 2006

Community Water Fluoridation

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. Pre-Katrina, 46% of the population of Louisiana received community-fluoridated water. Post-Katrina the number of water systems fluoridating decreased, resulting in a decrease in the approximate number of Louisiana residents having access to optimally fluoridated water to 31.4%. Much of this decrease is attributed to slow recovery efforts in Orleans Parish and other parishes where water systems were affected by hurricanes Katrina and Rita.

The Oral Health Program works with local government to secure an ordinance for fluoridation and provides funding and technical support in the implementation of fluoridation efforts. The Fluoridation Program is working to implement community water fluoridation in the cities of Crowley for the current fiscal year and Walker in the 2008 fiscal year. With the addition of these cities, and the re-instatement of fluoridation in some of the hurricane-affected water systems, it is estimated that by the end of 2008, 39% of Louisiana residents will have access to community water fluoridation. While this is certainly a gain, it is well below the *Healthy People 2010* objective of 75% of the population receiving optimally fluoridated water.

The Louisiana Dental Association presented a house study resolution to the Health and Welfare Committee of the Legislature in the 2007 Regular Session. This measure allowed Oral Health Program staff to educate legislators on the benefits of community water fluoridation.

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-time greater risk of delivering a pre-term low birth weight infant than pregnant women without periodontal disease.

The Oral Health Program, in cooperation with the Louisiana Department of Health and Hospitals Tobacco Control Program and The Louisiana Chapter of Tobacco-Free Living, participated in launching Fax to Quit Louisiana in the dental professional community through a continuing education course. This program provides an opportunity for dental providers to assist patients in accessing the Quit-Line through a referral system. The training for this program also provides information and practical experience with pharmacological agents used to alleviate tobacco cravings. 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.

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, 1992-2006	
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%
2006	71%

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 2006, 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 2006. 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 2006, 96% of newborns had hearing screening prior to hospital discharge, despite the delays in restoring the electronic birth certificate and the newborn hearing screening database. Of the children identified with hearing loss, 65% of those received their diagnosis by three months of age. This finding represents a significant improvement over the average age of identification prior to the SSP, which was 2.5 years of age. 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.

According to the national State and Local Area Integrated Telephone Survey (SLAITS), Louisiana ranks 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.

CSHS provides services to CSHCN with conditions such as congenital heart defects, cystic fibrosis, cleft lip and palate, spina bifida, craniofacial malformations, cerebral palsy, and other neurological disorders. These conditions often require complex medical care including numerous surgeries, hospitalization, and expensive drug therapies. CSHS strives to provide cost effective treatment to classes of pediatric patients that often have limited or no access to medical care. The program provides direct medical services to children with disabilities and chronic medical conditions by making pediatric subspecialists available in medically underserved areas. That care 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 2006, CSHS provided 16,513 clinic visits in Office of Public Health facilities and served 10,237 children.

Children's Special Health Services is one of the leaders in encouraging and facilitating the Medical Home Concept in Louisiana. The CSHS Program is also at the forefront of implementing Transition Services for teens with special health-care needs, seeking to assure educational, vocational, and medical coverage for this population as they become adults. CSHS actively contributes to the training of Tulane and Louisiana State University (LSU) Medical School residents in Medical Home, CSHCN, and Transition issues. Agencies and organizations Children's Special Health Services partners with include the Louisiana Chapter of the American Academy of Pediatrics, the Louisiana State University Health Sciences Center, the Tulane University School of Medicine, Children's Hospital, Families Helping Families, Louisiana Area Health Education Centers, and numerous community agencies and groups concerned with children with special needs.

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 mission of the LOUISIANA BIRTH DEFECTS MONITORING NETWORK (LBDMN) is the prevention of birth defects and birth-defect related disabilities in Louisiana's children. Program objectives are:

- to perform ongoing collection of data on birth defects in children under age three years;
- to provide information to the families of children identified as having birth defects on available social, educational, and medical services in their area;
- to analyze collected data to determine the frequency and distribution of birth defects; and
- to be active partners in birth defects education and prevention efforts in Louisiana.

LBDMN is a relatively new OPH program that is currently experiencing rapid growth and expansion. In January 2005, the program began active data collection. Birth defects tracking continued throughout 2006 in DHH Regions 1, 2, 5 and 7, in spite of delays and staff turnover resulting from hurricanes Katrina and Rita. In addition, new birthing facilities were accessed in 2006, and LBDMN achieved a coverage level of approximately 40% of yearly births.

E. NEWBORN HEEL STICK SCREENING AND FOLLOW-UP

DHH-OPH's Genetic Diseases Program, in collaboration with the State 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). Newborn screening for phenylketonuria (PKU) began in 1964, with screening for other diseases being added through the following years. The current official panel includes the following diseases:

Disorders of Amino Acid Metabolism

Phenylketonuria (PKU)	Maple Syrup Urine Disease (MSUD)
Homocystinuria (HCY)	Citrullinemia (CIT)
Argininosuccinic Aciduria (ASA)	Tyrosinemia type I (TYR I)

Disorders of Fatty Acid Metabolism

Medium Chain Acyl-CoA dehydorgenase Deficiency (MCAD)	Trifunctional protein deficiency (TFP)
Very Long-Chain Acyl-CoA Dehydrogenase Deficiency (VLCAD)	Carnitine Uptake Defect (CUD)
Long Chain-3-Hydroxy Acyl-CoA Dehydrogenase Deficiency (LCHAD)	

Disorders of Organic Acid Metabolism

Isovaleric Acidemia (IVA)	Methylmalonic Acidemia (MUT),(CBL A, B)
Glutaric Acidemia Type 1 (GA1)	Proprionic Aciduria (PROP)
3-Hydroxy -3-Methylglutaryl–CoA Lyase (HMG)	Multiple Carboxylase Deficiency (MCD)
β-Ketothiolase Deficiency (BKT)	3-Methylcrotonyl CoA Carboxylase Deficiency (3MCC)

Other Metabolic Disorders

Biotinidase Deficiency (BIOT)	Galactosemia (GALT)

Endocrine Disorders

Congenital Hypothyroidism (CH)	Congenital Adrenal Hyperplasia (CAH)

Hemoglobinopathies (Sickle Cell Diseases)

SS Disease (Sickle Cell Anemia) (Hb SS)	SC Disease (Hb SC)
S/Beta Thalassemia (Hb S/βThalassemia)	Other Sickling Diseases

Pulmonary Disorders

Cystic Fibrosis (CF)	

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 support.
- 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% 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 of 17 additional metabolic disorders, congenital adrenal hyperplasia and cystic fibrosis. The table shows the number of infants detected with a genetic disorder by disease and by race for each calendar year from 2004 through 2006.

NEWBORN SCREENING DETECTION STATEWIDE FROM 2004 TO 2006

DISEASES	2004		2005		2006	
	White	Non-white	White	Non-white	White	Non-white
ENDOCRINE DISORDERS						
CONGENITAL HYPOTHYROIDISM[1]	22	25	17	18	11	4
CONGENITAL ADRENAL HYPERPLASIA[2]					0	0
HEMOGLOBINOPATHIES						
SICKLE CELL DISEASE (SS, SC, S/β-Thalassemia)	1	97	0	78	0	80
METABOLIC DISORDERS (2006 Suspects = 425)						
PHENYLKETONURIA (PKU)	1	0	5	0	5	0
BIOTINIDASE DEFICIENCY	1	0	3	1	4	3
GALACTOSEMIA	1	1	1	0	5	0
CITRULLINEMIA[3]			1	0	1	0
Medium Chain Acyl-CoA Dehydrogenase Deficiency[3]			5	0	6	0
GLUTARIC ACIDEMIA TYPE 1[2]					2	0
TOTAL BIRTHS	**37066**	**27623**	**34383***	**25058***	**36434***	**25924***

[1] Definition for congenital hypothyroidism: patient requiring thyroid replacement medication for adequate thyroid functioning
[2] Testing initiated on 08/01/2006
[3] Testing initiated on 11/01/2004
* Provisional 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.

Pursuant to Act 893 of 2004, No. 893, which gave DHH authority to designate high-risk parishes for lead poisoning through rulemaking, the Lead Program rules (LAC 48: V. 7005-7009) were amended on July 20, 2005 to designate Orleans, Tensas, Morehouse, and West Carroll as high-risk parishes. Through 2007, these four parishes will remain designated as high risk parishes. Each spring, surveillance data are evaluated to determine the parishes to be designated as high risk.

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.

Since Katrina, the Lead Program has focused on displaced children (6 months to 6 years) who meet the criteria for blood-lead screening and spending time in homes in designated high-risk areas such as Orleans Parish, homes built before 1978 that are undergoing repairs and renovations, or high-risk environments anytime during the hurricane evacuation.

Screening and Prevalence

Lead poisoning is a preventable disease that affects 4.4% of children in the United States between 6 months and 6 years of age. Data from 2006 show that 57,276 children in Louisiana (16%) were screened at parish health units and by private providers. Of the children screened, 2% had blood lead levels that were 10 µg/dl or greater. A majority of children aged 6 months to 6 years of age have not been reached through screening.

Summary of the Number of Children with Elevated Blood Lead Levels by Parishes - 2006

Parish	Total Tested	micrograms /deciliter (µg/dl)			
		10-14.9	15-19.9	≥ 20	≥10
Acadia	240	6	1	3	10
Allen	238	1	0	0	1
Ascension	312	0	2	1	3
Assumption	169	5	0	0	5
Avoyelles	463	2	0	0	2
Beauregard	312	0	0	1	1
Bienville	57	1	1	0	2
Bossier	584	9	3	2	14
Caddo	1141	19	6	1	26
Calcasieu	2191	9	5	2	16
Caldwell	120	3	2	0	5
Cameron	55	1	0	0	1
Catahoula	121	2	0	0	2
Claiborne	79	2	0	0	2
Concordia	252	3	0	1	4
De Soto	95	0	0	0	0
East Baton Rouge	2808	45	10	11	66
East Carroll	115	6	2	1	9
East Feliciana	196	5	0	0	5
Evangeline	505	7	4	0	11
Franklin	524	8	3	2	13
Grant	190	2	1	2	5
Iberia	424	1	2	0	3
Iberville	117	1	2	3	6
Jackson	106	0	0	2	2
Jefferson Davis	383	7	1	1	9

Summary of the Number of Children with Elevated Blood Lead Levels by Parishes - 2006					
Parish	Total Tested	micrograms /deciliter (μg/dl)			
		10-14.9	15-19.9	≥ 20	≥10
Jefferson	2928	19	7	6	32
La Salle	141	3	2	0	5
Lafayette	1008	8	3	1	12
Lafourche	788	3	2	1	6
Lincoln	214	5	0	0	5
Livingston	652	5	1	1	7
Madison	197	5	0	0	5
Morehouse	407	12	4	0	16
Natchitoches	609	1	0	0	1
Orleans	2359	77	23	4	104
Ouachita	1133	22	4	4	30
Plaquemines	139	2	1	0	3
Pointe Coupee	51	0	0	0	0
Rapides	1620	27	10	14	51
Red River	101	1	1	0	2
Richland	352	11	1	0	12
Sabine	175	4	0	0	4
St. Bernard	84	0	0	0	0
St. Charles	357	1	3	0	4
St. Helena	150	3	0	0	3
St. James	254	5	2	0	7
St. John the Baptist	438	1	1	3	5
St. Landry	768	7	1	3	11
St. Martin	253	2	1	0	3
St. Mary	709	10	2	3	15
St. Tammany	1189	2	3	2	7
Tangipahoa	893	5	5	1	11
Tensas	107	4	0	0	4
Terrebonne	538	7	1	1	9
Union	235	4	0	0	4
Vermilion	349	1	0	0	1
Vernon	271	5	2	0	7
Washington	367	11	3	0	14
Webster	306	16	1	1	18
West Baton Rouge	79	0	0	1	1
West Carroll	198	1	1	1	3
West Feliciana	122	3	1	0	4
Missing	24938	334	73	72	479
Total	57276	772	204	152	1128

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

Screening is an important component 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.

Future Plans

Over the next year, LACLPPP will focus on expanding the scope of screening and increasing screening rates of at-risk children screened using the following three-pronged approach:

- Work with medical providers to ensure their awareness of, and compliance with, the mandated screening legislation; screening of at-risk children; and appropriate treatment, case management, and follow-up of affected children
- Work with the state's Medicaid Program to ensure screening and follow-up of at-risk children who receive Medicaid-funded services
- Work with the state's WIC Program to ensure screening and follow-up of at-risk children who receive WIC services.

LACLPPP also intends to spend the next year focusing on primary prevention and strengthening environmental activities by:

- Ensuring implementation of the statewide screening plan, which includes mandated screening in high risk areas as specified by LAC 48 V. 7005;
- Implementing primary prevention activities for families at high risk for lead poisoning, particularly those who live in housing built prior to 1978;
- Collaborating with program partners to promote lead poisoning preventive measures and to increase 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, Emergency Medical Services (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 2005-2006, 47 OPH-funded SBHCs were operational in 21 parishes, serving 76 public schools and providing access to 43,000 students. Six SBHCs in Orleans and Cameron parishes closed as a result of the destruction from hurricanes Katrina and Rita. In the 2005-2006 school year,

26,253 students received services, comprising a total of 116,205 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 people who request services to determine the person's eligibility for system entry. Eligibility is based on the definition of developmental disability contained in Louisiana R.S. 28:451.1-455.2. The DD Services System includes public and private residential services and other supports and services for people with developmental disabilities; it is administered through ten community services regional offices and human services authorities/districts and seven supports and services 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 a person to achieve 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/human services authorities/districts and the supports and services centers.

OCDD community regional offices and human services authorities/districts offer a broad range of services including individual and family supports (i.e., personal care assistance, cash subsidy, respite, crisis intervention, and supported living services). Services are provided by private provider agencies through contractual agreements or through individualized agreements with individuals and families who obtain their own service providers. 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, dental and medical services not covered by other sources, equipment and supplies, communication services, crisis intervention, specialized nutrition, and family education.

- 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 (HCBS) are offered through the New Opportunities Waiver (NOW), the Children's Choice Waiver, and the Supports Waiver. These waivers offer a variety of services and supports to allow individuals to reside in community settings other than ICFs/DD. A fourth developmental disability waiver (Residential Options Waiver) is in the application process; this waiver will enable Money Follows the Person strategies for people served in ICFs/DD and nursing facilities to move to a comprehensive HCBS waiver option.

- The Earlysteps Program is Louisiana's early intervention system for children with disabilities and developmental delays ages birth to three years and their families. Services provided include: 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, psychology services, family training, nutritional services, and transportation.

Seven Supports and Services Centers (formerly named Developmental Centers) in Louisiana are licensed as Intermediate Care Facilities for persons with Developmental Disabilities (ICF/DD); they provide residential services along with an array of community-based supports and services. The names of the centers were changed during the 2007 Legislative Session to better reflect the array of supports and services offered by the centers: North Lake (Hammond); Greater New Orleans (Belle Chasse); Northwest (Bossier City); Bayou Region (Thibodaux); Pinecrest (Pineville); Northeast (Ruston); and Acadiana Region (Iota). Additionally, these centers operate two associated residential/employment centers (Leesville Residential and Employment Services; Columbia Community Residential and Employment Services) and 27 community homes.

Transition Services are provided to people who currently live in a publicly-operated supports and services center and who choose to move to a community living setting. Services provided include, but are not limited to, development of an Individual Support Plan to identify supports and services necessary for a person to move into a community living setting of his/her choice, and provision of ongoing monitoring and oversight of community supports and strategies.

Five Resource Centers 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.

Community Support Teams (CSTs) are located in various regions throughout the state; they are managed through local supports and services centers and accessed through OCDD Regional Offices and human services authorities/districts. CSTs 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. CSTs, 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, CST 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 in the Office of Public Health is comprised of several programs, including: the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); the Commodity Supplemental Food Program (CSFP); the Fruits and Veggies, More Matters Program; and nutrition consultative services currently provided to the Genetics Program, Maternal and Child Health Program, Children's Special Health Services, 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. The statewide participation in the WIC Program during state fiscal year 2007 was approximately 126,513 women, infants, and children.

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 received $100.8 million during federal fiscal year 2006 (which ended on September 30, 2006). Of that total, $75.6 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 660 approved WIC vendors across the state, thus impacting the state's economy.

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 to 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 during federal fiscal year 2006 was at approximately 63,221 individuals per month, of whom 93% are senior citizens. 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 in most parishes of the state.

The DHH-OPH Nutrition Services Program has been designated as the licensee for the national Fruits and Veggies More Matters 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.

Consultative services are provided statewide to Louisiana's population participating in the Maternal and Child Health Program, the Genetics Program, and the Children's Special Health Services 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. The legislatively mandated, unfunded Louisiana Obesity Council has reorganized and developed a strategic plan to address the obesity epidemic in Louisiana with emphasis on preventing childhood obesity.

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 (HAP) component of the program is driven by the CDC mandated community planning process. This process operated under a statewide planning group and 9 regional collaborative groups. The Statewide Group set the priority target populations and menu of interventions. OPH/HAP staff co-chaired each of these groups and supported, facilitated, and coordinated this statewide activity. The Statewide Group meets quarterly and the regional collaboratives meet on a quarterly basis as well. A 5-year HIV/STD Comprehensive Prevention Plan was developed and submitted with the OHP/HAP Cooperative Agreement to CDC. A new plan will be developed in 2008.

During 2006, OPH/HAP provided support, contract monitoring, technical assistance, capacity building, and training to 25 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 2006: a total of 46,521 persons were tested for HIV, 876 educational sessions were conducted, 58,536 outreach encounters were conducted, 945 calls were made to the statewide infoline, and 184,000 brochures were distributed to 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, family-practice physicians, 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 Substance Abuse

M. 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[1]. According to the Johns Hopkins University's Innovators Award website (http://innovatorsawards.org/facts) as of updated June 27, 2007, update the following are facts about substance abuse: "One in four US deaths can be attributed to alcohol, tobacco, or illicit drug use. Tobacco users run the biggest risk of harm, since the majority of those deaths—430,700 annually—are associated with smoking. Excessive alcohol use is responsible for 100,000 deaths annually. Sixteen thousand deaths annually are due to illicit drug use, but this estimate is likely to be conservative as substance abuse is indirectly associated with deaths from diseases such as HIV/AIDS, hepatitis, tuberculosis, homicides, and other violent crimes and incidental injuries." The research also addresses: "The economic burden of substance abuse to the US economy is estimated at a staggering $414 billion annually. Alcohol abuse alone costs nearly $166 billion each year. Illicit drug users make over 527,000 costly emergency room visits each year for drug related problems. One dollar out of every $14 of the nation's health care bill is spent to treat those suffering from smoking-related illnesses. Health care costs for employees with alcohol abuse problems cost nearly twice as much as those of other employees."

Other consequences enumerated indicated that drug offenders account for more than one-third of the growth in the state prison population and more than 80% of the increase in the number of federal prison inmates since 1985, and more than 75% of domestic violence victims report that their assailant had been drinking or using illicit drugs at the time of the incident. Substance abuse tends to be more common among certain occupations and industries; for instance heavy alcohol and illicit drug use is highest among construction and food service workers, while auto mechanics, laborers, and light-truck drivers are among several populations that are more susceptible to alcohol abuse. Children from families with substance-abusing parents are more likely to have problems with delinquency, poor school performance, and emotional difficulties than their peers from homes without substance abuse. Children whose parents smoke are more likely to develop ear infections and asthma and to miss one-third more school days than their peers who live in smoke-free homes[2].

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. According to CESAR FAX, the prevalence of cigarette use among U.S. public high school seniors has reached the lowest point ever recorded, according to the most recent data from the national Monitoring the Future survey. Slightly more than one-fifth (21.6%) of 12th graders reported smoking cigarettes in the past 30 days, down from peaks of 36.5% in 1997 and 38.8% in 1976. At the same time, the percentage of students who perceived a "great risk "of harm from smoking one pack or more of cigarettes per day reached an all-time high of 77.6% in 2006. Previous research has found that increases in perceived risk of using a drug are related to decreases in the use of the drug.[3]

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[4].

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[5]. 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 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.[6] 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. Louisiana treats 10% of adults identified as in need of treatment compared to the national average of 16.1%. According to a study conducted by the National Center on Addiction and Substance Abuse at Columbia University[7] the national average per capita expenditure for substance abuse treatment services is $11.09, and in Louisiana it is $3.32. This difference partly reflects the relative absence of private and Medicaid funding.

A cumulative report from the LOUISIANA DEPARTMENT OF SOCIAL SERVICES (DSS) indicates that, as of state fiscal year (SFY) 2006-2007, 2,219 assessments have been completed under the Family Independence Temporary Assistance Program (FITAP) Drug Testing Program. Office for Addictive Disorders (OAD) referral tracking records from SFY 2006-2007 show 174 recipients (8%) have been referred by DSS, with 60 (34%) 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.

OAD is the state authority for substance abuse; its services are delivered through a regionalized Community Services District/Regions structure. There are currently six regions under direct supervision of OAD. On July 1, 1997, the Department of Health and Hospitals (DHH) entered into an agreement with the Capital Area Human Services District (CAHSD) to manage programs and afford local communities the opportunity and authority to manage services and resources for the Region II Area. Effective July 1, 2004, two new districts, the Metropolitan Human Services District (MHSD), formerly Region 1, and the Florida Parishes Human Service Authority (FPHSA), formerly Region 9, were created. An additional entity, the Jefferson Parish Human Services Authority (JPHSA), formerly Region 10, operates and reports independently of OAD. Future plans within the scope of this document include the creation of two new districts: South Central Louisiana Human Services Authority (currently Region 3) and the Northeast Delta Human Service Authority (currently Region 8). As a single state agency within DHH, OAD retains its responsibility, as a recipient of Federal Block Grant funds, to ensure that all regions and districts receiving Block Grant funds comply with all grant-related requirements.

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 4.7%, which is among the best in the nation.

Research on RISK AND PROTECTIVE FACTORS has important implications for prevention efforts. Louisiana has been using the Risk and Protective Framework to guide prevention efforts aimed at reducing youth problem behaviors. Risk factors are characteristics of school, community, and family environments, as well as characteristics of students and their peer groups that are known to predict increased likelihood of drug use, delinquency, school dropout, teen pregnancy, and violent behavior

among youth. Protective factors exert a positive influence or buffer against the negative influence of risk, thus reducing the likelihood that adolescents will engage in problem behaviors. Louisiana students have similar levels of risk compared to students in other states. The highest risk factors in Louisiana communities for twelfth graders are Laws and Norms that Favor Drug Use (51.3%), Community Disorganization (44.6%), Low Neighborhood Attachment (44.3%), and Perceived Availability of Drugs (43.6%). The lowest risk factors in Louisiana communities are Perceived Availability of Handguns (35.9%) and Transitions and Mobility (33.7%). Complete details of this study can be found at http://www.dhh.state.la.us/offices/publications .

THE LOUISIANA STATE INCENTIVE GRANT, which changed its project title from the Louisiana New Connections Incentive Project to Louisiana's Partners in Prevention (LaPIP), was committed to the advancement of the state's prevention system through strong interagency collaboration, development of a common vision and a comprehensive statewide plan. The comprehensive statewide plan promoted and advocated systemic changes that would potentially produce and establish rewarding interagency collaboration while optimizing resources. The LaPiP Grant came to an end in September 30, 2006.

In September 2004, Louisiana was awarded $11.75 million to implement the STRATEGIC PREVENTION FRAMEWORK STATE INCENTIVE GRANT (SPF-SIG) - "The Governor's Initiative to Build a Healthy Louisiana", is a data-driven, outcome-based planning process intended to achieve sustainable reductions in the abuse of alcohol, tobacco, and other drugs among targeted populations through evidence based prevention. The purpose of the SPF is to develop a system that coordinates planning, funding, and evaluation for substance abuse prevention at all levels for the past 18 months; state partners have been involved in SPF's Strategic Planning Process. At the state Level, this process led to the development of a Statewide Strategic Plan for Prevention outlining five goals related to the following topic areas: Data, Capacity, Alcohol, Tobacco, and Illicit Drugs. In addition, 12 parishes were identified to receive funding to develop coalitions to address alcohol-related problems in their respective parish with the target population of 12-29 year olds; these parishes have agreed to participate in this important initiative. It is important to note that all regions/districts/authorities will be provided this training along with on-going technical assistance in the Strategic Prevention Framework to develop regional/district plans that address the goals of the State Strategic Plan.

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 (SBHCs) in the state. An interdepartmental agreement for 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

N. 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.

O. 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 Community Injury Prevention Program reviews research and existing injury prevention curricula and then tailors information to fit the specific needs of agencies. In addition, the curriculum includes fact sheets regarding data specific to injuries, prevention tips, and laws in Louisiana.

The EMS/Injury Research and Prevention Program collaborates with the Maternal and Child Health (MCH) Program's nine Regional Coordinators who coordinate their local Child Death Review Panel efforts and who provide education and resources for community activities which address deaths from unintentional injuries of children under age 15 years (including SIDS) and promote injury prevention. The Injury Prevention Program also collaborates with MCH and Louisiana Safe Kids, Inc. in their promotion of injury

prevention policies and practices, public education campaigns, and injury prevention activities regarding: wearing seat belts and bicycle helmets; pedestrian, home, playground, water, sports, fire, and firearm safety; fall prevention; and poison prevention.

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) 599-1080.

Programs Targeting Pre-hospital Emergency Medical Services

P. 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 approximately 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 (**AEDs**) 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

Q. 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.

R. 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

S. 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.

T. 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

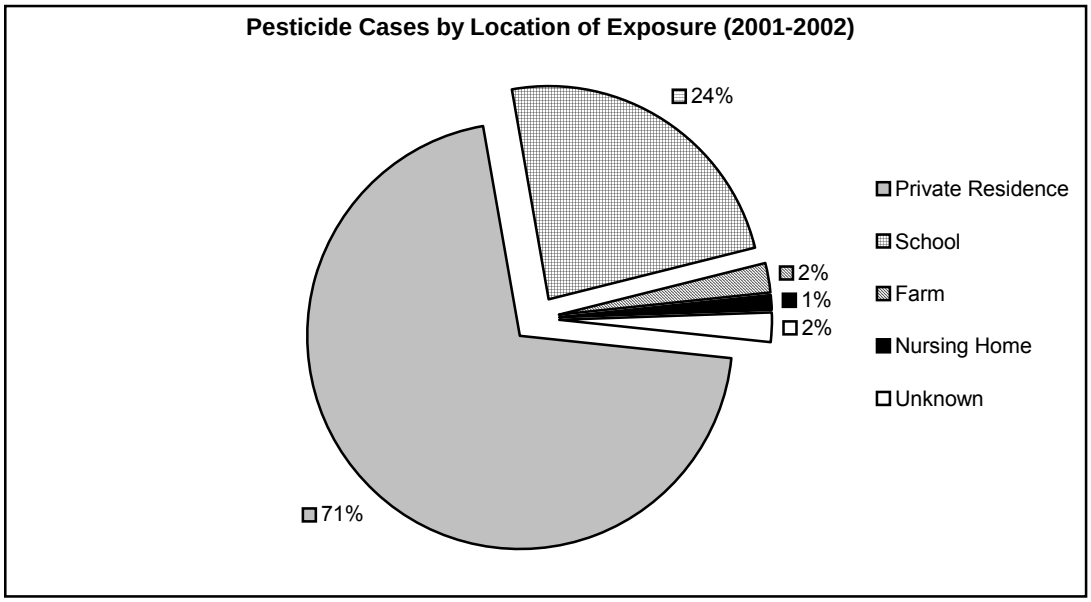
SEET works with the Louisiana Department of Environmental Quality (LDEQ) and the Louisiana Department of Wildlife and Fisheries (LDWF) to assess the extent of mercury contamination in fish. Methylmercury, a compound present in fish tissue, can cause birth defects and neurological problems when present 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.

U. ENVIRONMENTAL HEALTH EDUCATION

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 (EPA) 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.

Occupational Health

In response to the National Institute for Occupational Safety and Health's (NIOSH) Health Alert - *Preventing Lung Disease in Workers Who Use or Make Flavorings* – and the information provided by the California Department of Health on diacetyl and bronchiolitis obliterans, outreach to potentially affected business and healthcare providers was conducted. SEET partnered with the Occupational Safety and Health Administration (OSHA)-Baton Rouge Office to develop a joint OSHA – OPH letter and fact sheet discussing health problems associated with diacetyl. The letters and fact sheets were sent to 164 food manufacturing and/or preparation businesses identified by standard industrial classification (SIC) codes. To inform medical care providers, an article was published in the Louisiana Morbidity Report that provided details on diacetyl and the symptomology and diagnosis of work-related bronchiolitis obliterans.

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 Outreach

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

SEET conducts Health Professional Education as part of its educational activities. Outreach is targeted toward physicians and other health professionals located near hazardous waste 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 members of the medical community concerning the recognition and management of pesticide, heavy metal, other occupational and non-occupational chemical exposures. SEET 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 Agency for Toxic Substances and Disease Registry (ATSDR) case studies to over 4,000 Louisiana physicians in 20 parishes.

Indoor Air Quality

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 is mailed to them.

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". Many Louisiana residents are still in the process of repairing their homes.

SEET is also seeking to implement the EPA: Indoor Air Quality Tools for Schools program in area schools as a pilot intervention to help reduce asthma triggers and improve indoor air quality in school settings.

V. 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, LDEQ, and the National Response Center of the U.S. Coast Guard. SEET also receives notifications of Poison Control Center cases that involve exposure to chemicals and maintains a database with the details of each exposure. 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 12,000 event notifications. There were no notifications that required a SEET on-scene response.

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 2006, SEET continued development of 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 ATSDR to participate in the Hazardous Substances Emergency Events Surveillance (HSEES) system. Currently, 13 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, LDEQ, 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 2005, SEET screened over 9,200 events; of those, a total of 1,468 were entered initially to the HSEES

database system and 867 (59.1%) events met the criteria for inclusion in the Louisiana HSEES database. Over 7,700 events were screened in 2006, with a total of 1,193 entered into the HSEES database; 660 (55.3%) 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. Up to 49th after two years ranked 50th, 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)

	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.

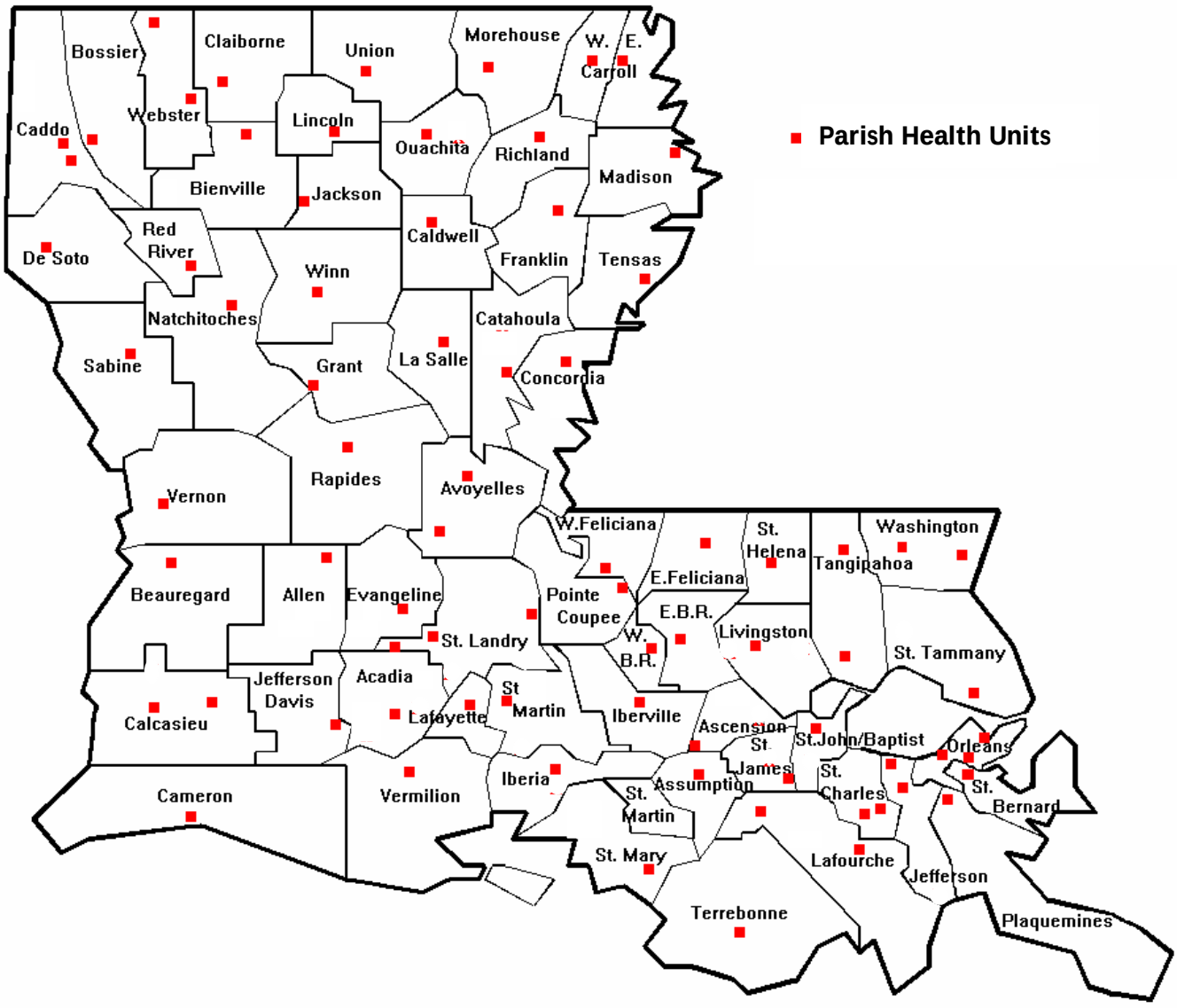
State Charity Hospitals

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

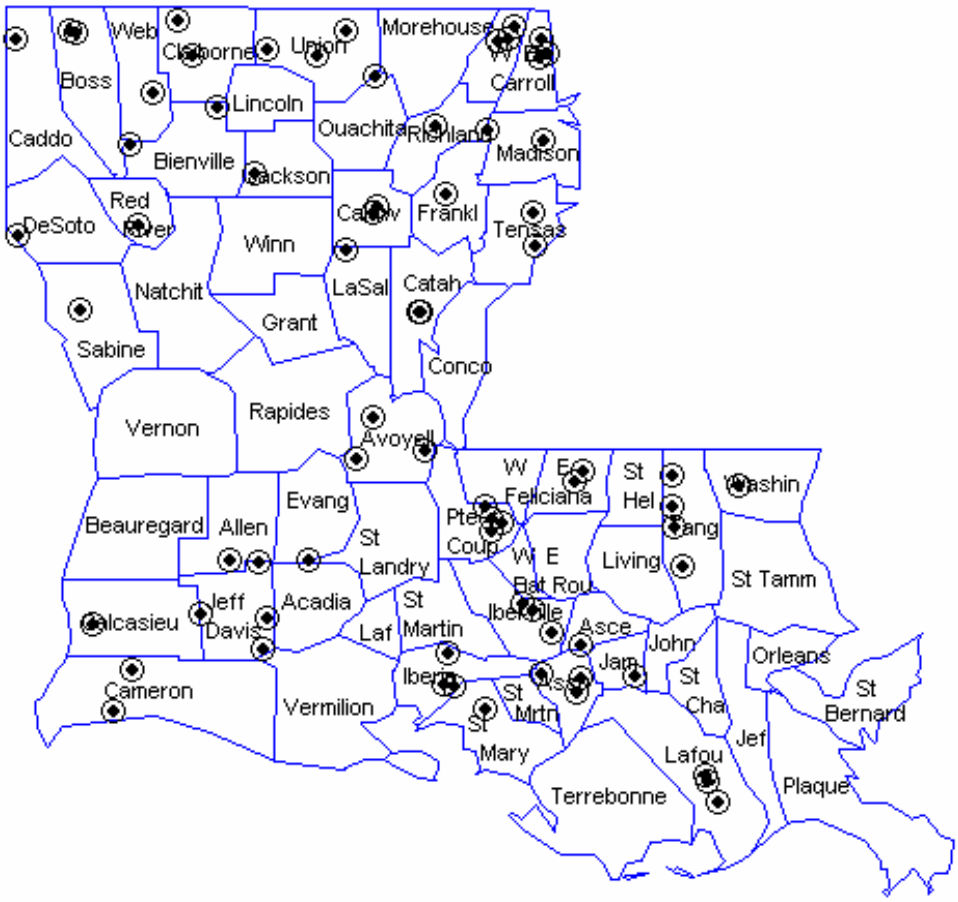
Louisiana has 77 parish health units (PHUs). DHH-OPH currently operates parish health units (see map below) that provide services in the following areas: immunization, family planning, prenatal care, newborn screening for genetic disorders, well-baby care, nutrition therapy, individual nutrition education 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

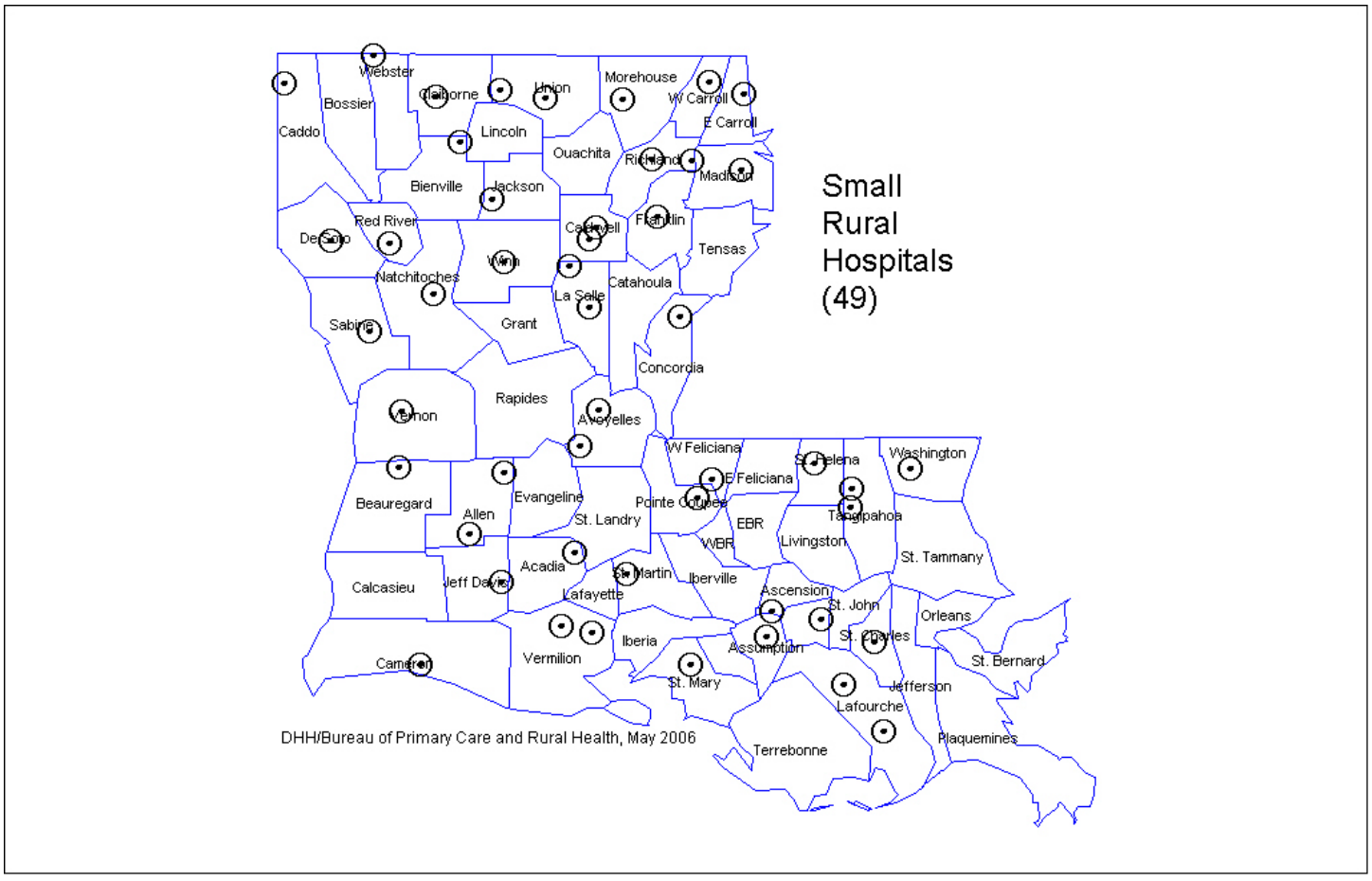
i) is located, as measured by the 2000 census, in a municipality with a population of less than 11,000; and

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

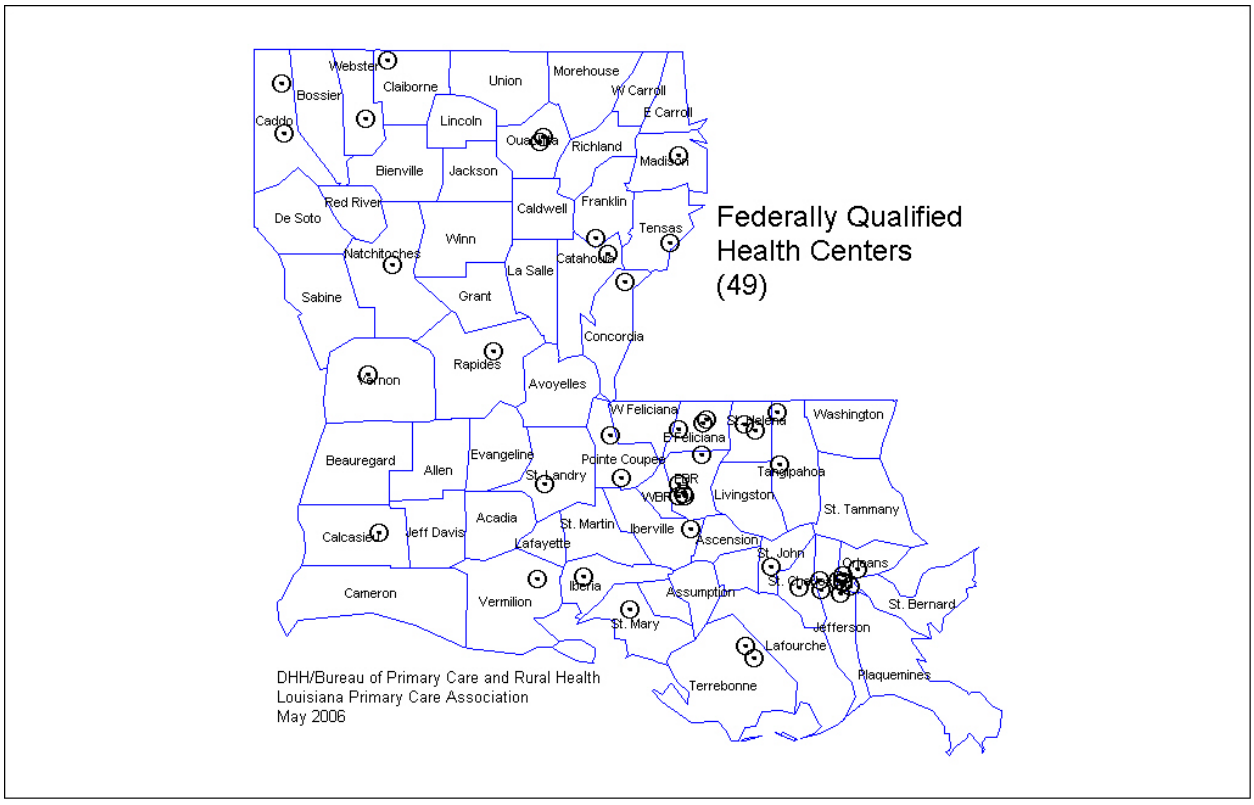
i) is located in a municipality with a population of less than 3,100; and

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.

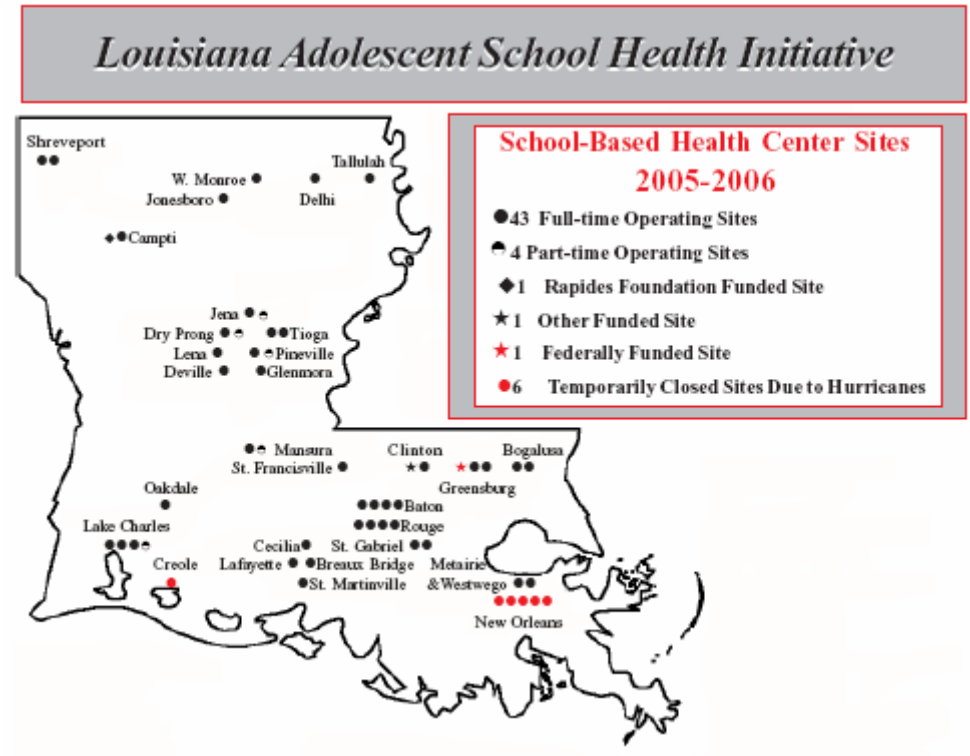
As of August 2006, CommunityCARE has a total of 771 enrolled providers employing a total of 1,465 physicians statewide. PCPs are paid a per member/per month management fee of $3.00 plus fee for service. In addition, the PCP fee for service reimbursement, for certain evaluation and management codes, is 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

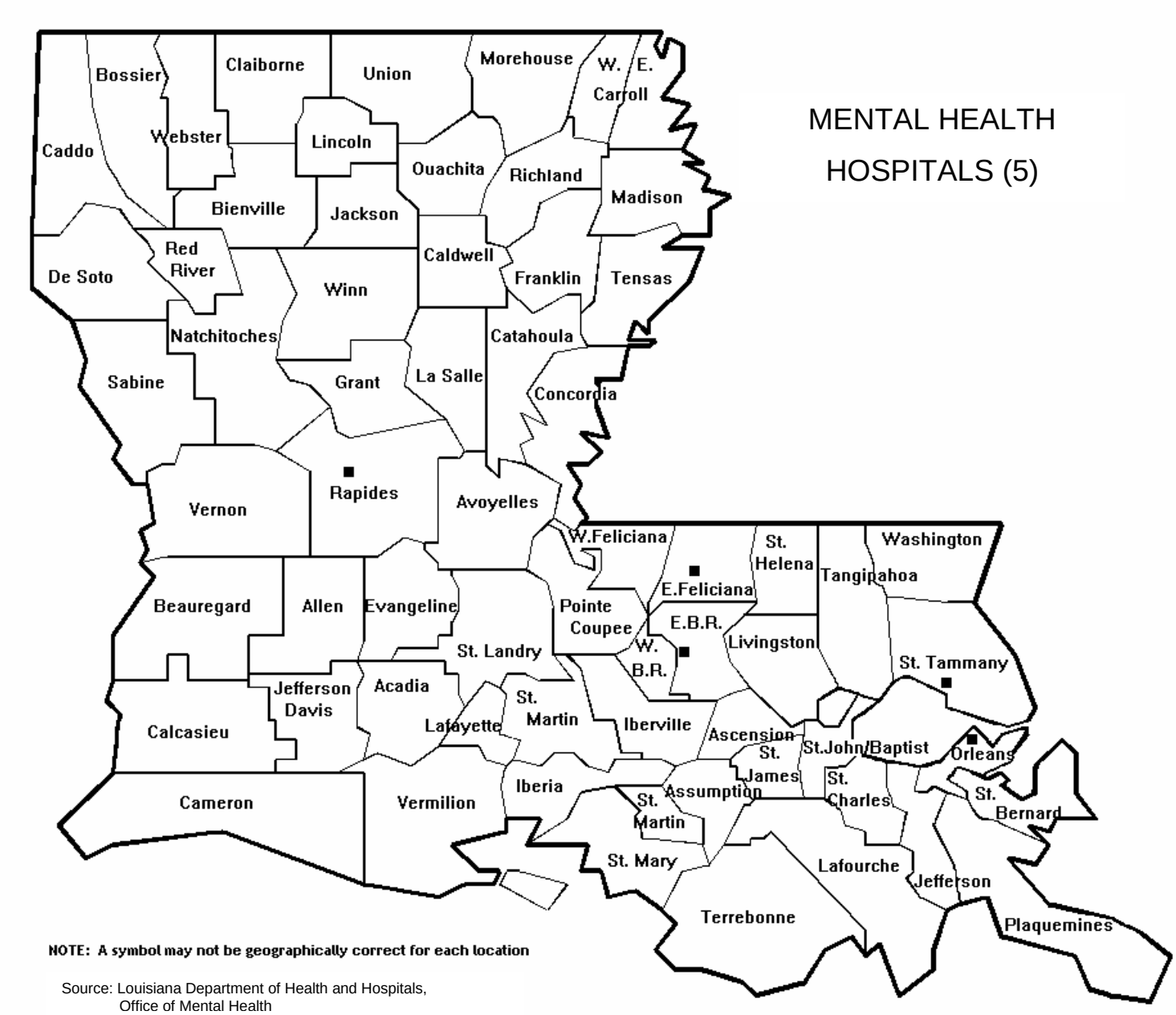
There are seven state-operated developmental centers licensed as Intermediate Care Facilities for persons with Mental Retardation (ICFs/MR) which provide active treatment services and a range of residential services including 24-hour care in large and small settings such as institutions and community 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

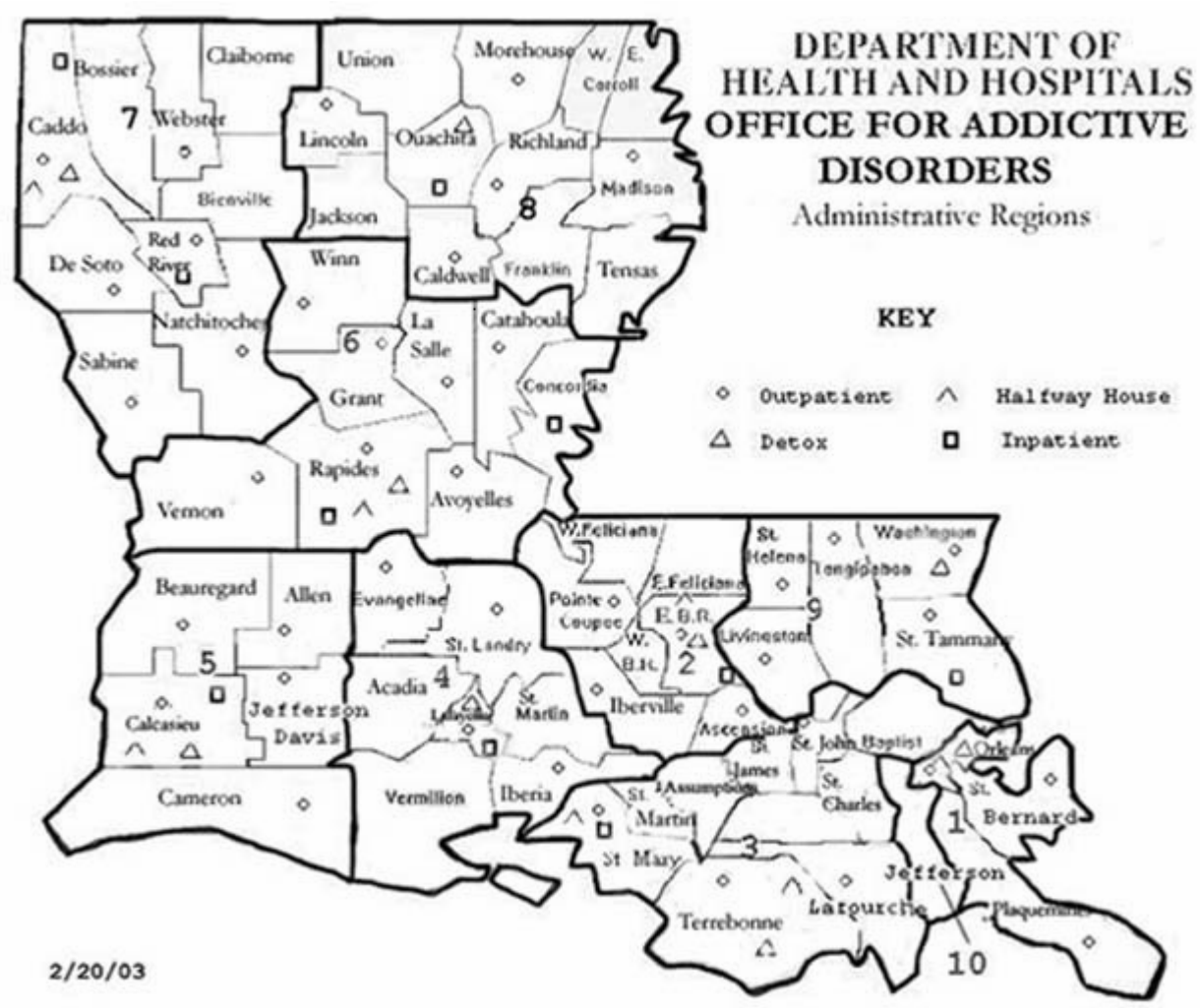
THE DHH Office of Mental Health (OMH), either directly or through partnerships with private and university resources, provides an array of community-based and hospital-based services, the range of which is consistent with national models for public mental-health care for individuals with serious mental 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.



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.

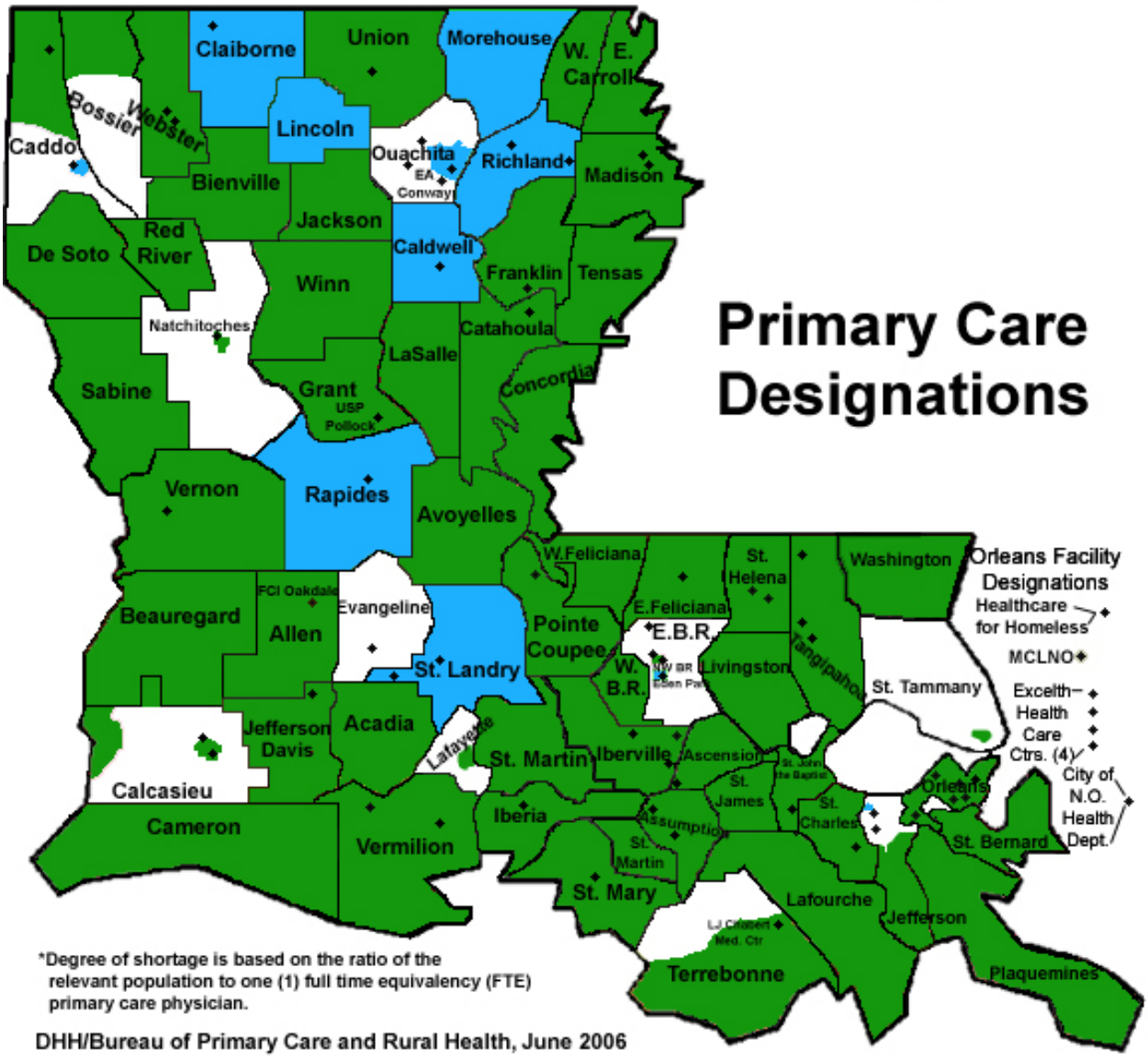
HPSA designations are used to create incentives to improve the distribution and the number of primary care providers in the most critical shortage areas. The designation methodology was developed to determine exactly where shortages exist in order to define those areas eligible for participation in the 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

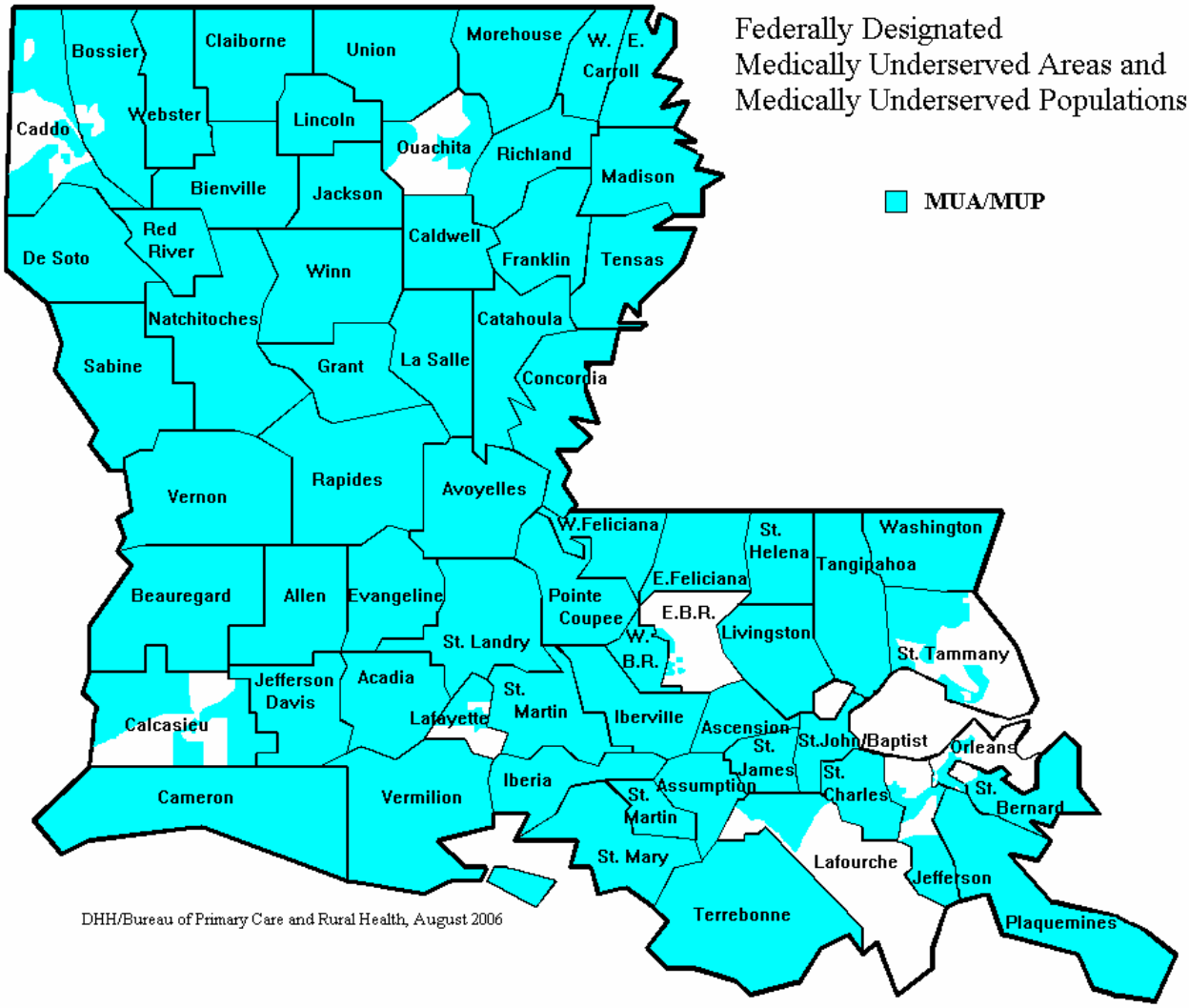


*Degree of shortage is based on the ratio of the relevant population to one (1) full time equivalency (FTE) primary care physician.

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.
- Continue to 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, and parental education) to infants and children in low-income families who do not have access to such services due to geographic barriers or due to the lack of providers.

- Support outreach efforts of the Covering Kids and Families Initiative, to enroll eligible children into 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 ensure that all children have access to comprehensive primary and specialty medical health, mental health, oral health, and social and education services.
- Establish and maintain comprehensive systems of services for young children and their families through which their needs are addressed.
- Distribute the *Happy and Healthy Kids* Newsletters, a series of 26 newsletters for Louisiana parents and caregivers of children from birth through 5 years of age, which incorporate current information about infant psycho-social and emotional development and building children's self-esteem.
- Provide educational events, technical assistance, and public awareness campaigns on issues related to improving the health and safety of infants and children, such as SIDS Risk Reduction, Safe Sleep Environments, Safe Havens, and Unintentional Injury Prevention.
- Develop educational statewide initiatives and collaborative partnerships to promote prevention strategies for unintentional injuries, which are the leading cause of death in children over the age of one year.
- Support the State and Local Child Death Review Panels' (CDRPs') investigative reviews of all unexpected deaths in children under 15 years of age (including Sudden Infant Death Syndrome); development of prevention intervention strategies for such deaths; and collaboration with the Injury Research and Prevention Program's epidemiologists for analyses of Child Death Review data to include in the CDRP Annual Report to the Legislature. Examples of prevention interventions include drafting of legislation, policy development, and the education of state and local leaders and the general public.
- Support efforts of the MCH Injury Prevention Coordinators to coordinate the local Child Death Review Panel activities in their respective regions and to promote prevention of unintentional childhood injuries, the leading cause of death in children 1 year and older in Louisiana.
- Support the efforts of Safe Kids Louisiana, Inc., a non-profit statewide coalition dedicated to the reduction of accidental injuries in children from birth to age 14 years by promoting injury prevention policies, legislation, and strategies, and educating policymakers, state and community leaders, and the general public on the leading causes of accidental injuries through sponsored activities which promote car, pedestrian, bicycle, playground, water, fire, sports, firearm, and home safety as well as poison prevention and safe sleep environments. Safety education includes such activities as bicycle rodeos and hands-on inspections by trained, nationally certified Child Safety Seat Technicians, for proper use and installation of child safety restraints in cars (car seats, booster seats, and seat belts) at car seat fitting stations and check-up events. Contact Safe Kids Louisiana, Inc at (225) 342-7707 for available injury prevention education materials or for information on how to start a chapter.

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 Home 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.

Child Care

- Utilize child care health consultants to promote safe sleep environments for infants in all out-of-home child care facilities.
- Provide expertise and leadership in the development and enhancement of childcare standards.
- Serve as a resource in the state on health and safety issues in child care facilities.
- Participate in Louisiana's BrightStart Work Groups, a group of multi-disciplinary community partners to improve quality of childcare facilities.
- Utilize child care health consultants to provide trainings on health and safety to childcare providers to improve scores on the Early Childhood Environmental Rating Scales in order to improve quality care.

Teenage Birth Rates

- Provide reproductive health care services to teens statewide.
- Provide reproductive health care services in an adolescent specific clinic in Region 1.
- Through a Statewide Health Education & Outreach Coordinator, develop and strengthen community based organizations working with adolescents.
- Through a Statewide Health Education & Outreach Coordinator, coordinate and facilitate the issuance of educational material to adolescents.
- Increase the number of men and women under age 19 who access Family Planning services.
- Conduct statewide training programs and provide technical assistance on attracting adolescents to clinics.
- Ensure there is training on the intake of adolescents in clinics.
- Conduct statewide training on family involvement.
- Increase parental involvement in adolescent reproductive heath care.
- Utilize the Mystery Caller Quality Assurance Study to assess the needs of adolescents and service availability.
- Utilize the Mystery Caller Quality Assurance Study to determine if adolescent scheduling in family planning clinics is a priority.
- Ensure access to information on safe sex practices and contraceptives.
- Ensure youth involvement and leadership in program design, implementation, and evaluation.

- Infuse adolescent voices into planning and policy-making efforts through the Family Planning Advisory Board.
- Distribute information and educational materials used to inform, teach, and encourage teens in the prevention of teen pregnancy.
- Provide technical assistance and give presentations on adolescent health to community based organizations, institutions, and other agencies.

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 screening and educational activities in sexually transmitted disease clinics and HIV/AIDS program sites 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 inpatient 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 STDs and HIV testing and counseling, group educational sessions, and outreach to persons at high risk for STDs and HIV/AIDS
- Provide 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 STDs 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 efforts to promote syphilis elimination in high morbidity areas.
- 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. Alcohol, Drug, and Other Addictions

Treatment and Prevention

- Maintain the sale of tobacco products to minors at a 10% or lower non-compliance rate through the Synar Program.
- Continue to work closely with the Governor's Office and other state partners to implement the Center for Substance Abuse Prevention's Strategic Prevention Framework State Incentive Grant, the Governor's Initiative to Build a Healthy Louisiana in an effort to develop a system that coordinates planning, funding, and evaluation for substance abuse prevention at all levels.
- 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.
- 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.

E. UNINTENTIONAL INJURIES

- Continue pursuing an aggressive "don't drink and drive" campaign and promoting the use of seat restraints in motor vehicles.
- Support policies and promote social norms about safer firearm storage.
- Support polices recommended by Child Death Review Panels.
- 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.
- Promote safety rules for all-terrain-vehicle (ATV) use.
- Teach children to avoid matches and cigarette lighters, and keep these materials in a child-secure place.
- Support the practice of home fire drills.
- 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.
- Continue promoting a safe sleep environment for infants.

F. INTENTIONAL INJURIES

- Practice and support social norms that repudiate violence against women and children.
- Support policies and resources to protect and rehabilitate children who witness or experience violence.
- Work to promote resources to identify and prevent child abuse.
- Continue an aggressive campaign against leaving children alone in cars.
- Promote policies to provide services for adolescents and adults abused as children.

Child Death

- Support policies 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.

G. MENTAL HEALTH

- Ensure 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 positive impact on the quality of life to 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/?ID=252
Women, Infants, & Children (WIC) Nutrition Program	http://www.dhh.louisiana.gov/offices/?ID=269

This public document was published at an estimated cost of $ 2,933.49. Three hundred copies of this document were printed for the Louisiana Department of Health and Hospitals by Louisiana State University Medical Center, Auxiliary Enterprises, Duplicating & Graphics, 1900 Perdido Street, New Orleans, LA 70112. This document was printed in accordance with standards for printing by State Agencies established pursuant to R.S.43:31.