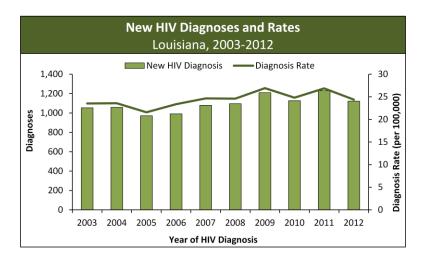
# Louisiana HIV Surveillance Summary, 2012

In the spring of each calendar year, the Louisiana STD/HIV Program (SHP) releases an annual program report with HIV and STD surveillance data and key program activities. The release of this report corresponds with the release of the *HIV Surveillance Report* from the CDC. This year, the CDC has delayed the release of its *2012 HIV Surveillance Report* and subsequently the SHP office has delayed the release of the *2012 STD/HIV Program Annual Report*. The following is a short summary of HIV surveillance data that will be replicated in the annual report to be released in the fall of 2014. A summary of Louisiana's 2012 STD surveillance data can be found in the *2012 STD Annual Report* that was released in December 2013.

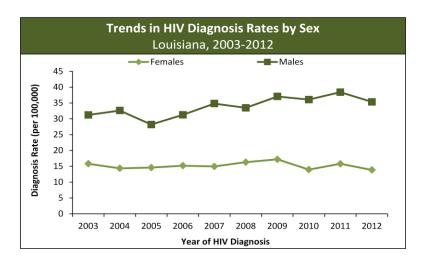
Characteristics of Persons Newly Diagnosed with HIV Louisiana, 2011-2012								
		Diagnosed with	Persons First Diagnosed with HIV in 2012					
	Number	Percent	Number	Percent				
TOTAL	1,229	100.0%	1,122	100.0%				
Sex								
Female	369	30.0%	326	29.1%				
Male	860	70.0%	796	70.9%				
Race/Ethnicity								
Black/African American	911	74.1%	835	74.4%				
Hispanic/Latino	72	5.9%	50	4.5%				
White	235	19.1%	218	19.4%				
Other/Unknown/Multi-race	11	0.9%	19	1.7%				
Age Group	Age at HI	Age at HIV Diagnosis		/ Diagnosis				
0-12	5	0.4%	10	0.9%				
13-19	92	7.5%	68	6.1%				
20-24	227	18.5%	210	18.7%				
25-34	368	29.9%	296	26.4%				
35-44	234	19.0%	227	20.2%				
45-54	216	17.6%	218	19.4%				
55-64	70	5.7%	75	6.7%				
65+	17	1.4%	18	1.6%				
Imputed Transmission Category								
Men who have sex with men (MSM)	662	53.9%	604	53.8%				
Injection Drug User (IDU)	122	9.9%	129	11.5%				
MSM/IDU	40	3.3%	41	3.7%				
High Risk Heterosexual (HRH)	399	32.5%	338	30.1%				
Perinatal/Pediatric	6	0.5%	10	0.9%				
Rural/Urban								
Rural	190	15.5%	189	16.8%				
Urban	1,039	84.5%	933	83.2%				

- In 2012, 1,122 persons were newly diagnosed with HIV, a 9% decrease from 2011.
- In 2012, 29% of all HIV diagnoses were female and 71% were male.
- Approximately 75% of all HIV diagnoses in 2012 were among blacks even though blacks make up only 32% of Louisiana's population, representing a large disparity of HIV infections.
- In 2011 and 2012, the greatest number and proportion of diagnoses were in persons age 25-34.
- From 2011 to 2012, the proportion of MSM diagnoses remained stable at 54% but the proportion of persons who were injection drug users increased from 10% in 2011 to 11.5% in 2012.
- In Louisiana, most new diagnoses (83%) were among persons residing in urban areas.

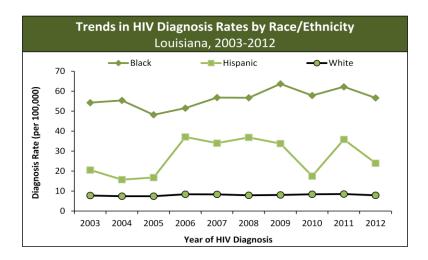
## 10-Year Trends in New HIV Diagnoses (2003-2012)



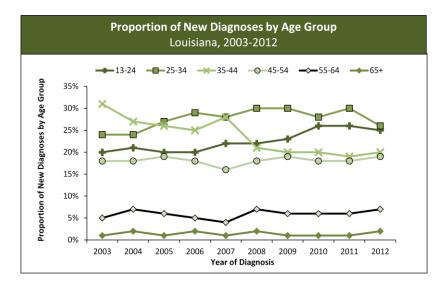
- In 2012, 1,122 individuals were newly diagnosed with HIV infection in Louisiana. The number of new HIV diagnoses has fluctuated from a low of 971 new diagnoses in 2005 to a high of 1,229 diagnoses in 2011.
- Over the past 10 years, the HIV diagnosis rate ranged from a low of 21.6 per 100,000 in 2005 to a high of 26.9 per 100,000 in both 2009 and 2011. In 2012, the HIV diagnosis rate was 24.4 per 100,000.



- The HIV diagnosis rate for females in Louisiana has remained relatively stable over the past 10 years. In 2012, the female HIV diagnosis rate was 13.9 per 100,000 females.
- The rate for men has been more variable (between 28.2 and 38.4 per 100,000 males). In 2012, the male HIV diagnosis rate was 35.4 per 100,000 males. Cumulatively, males have accounted for 68% of all new HIV diagnoses in Louisiana over the past 10 years.



- The HIV diagnosis rate among whites has remained stable over the past 10 years. The rate for blacks has been more variable and has increased from a low of 48.2 per 100,000 blacks in 2005 to a high of 63.7 per 100,000 blacks in 2009. The 2012 diagnosis rate was 56.7 per 100,000 blacks.
- In 2012, the HIV diagnosis rate for blacks was over seven times greater than the rate for whites and almost two and a half times the rate for Hispanic/Latinos. The HIV diagnosis rate for Hispanic/Latinos was more than three times greater than for whites and a total of 50 Hispanic/Latino persons were newly diagnosed in 2012.

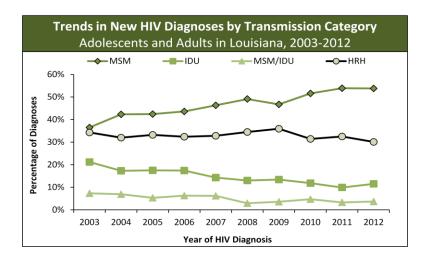


- The majority of all new diagnoses have historically occurred in persons aged 25-44; 47% of all new diagnoses in 2012 were in this age range. The number of new diagnoses in persons aged 25-34 has become the age group with the highest number of new diagnoses (26% of all new HIV diagnoses in 2012). The number of new diagnoses in persons aged 35-44 accounted for an additional 20% of all new diagnoses in 2012.
- The proportion of new diagnoses among youth, age 13-24 years, is of special interest in Louisiana and across the nation. In 2008, the proportion of new diagnoses among 13-24 year olds surpassed the proportion among 35-44 year olds to become the second largest age group for new diagnoses. In 2012, new diagnoses in youth accounted for 25% of all new diagnoses, compared to 20% of all new diagnoses in 2005 and 2006.

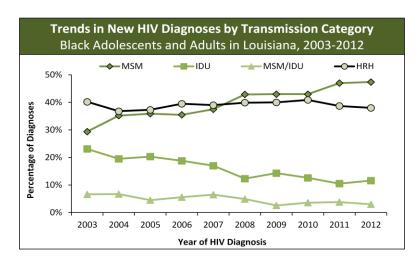
#### **HIV Diagnoses by Transmission Category**

In accordance with the transmission categories used by the CDC, SHP classifies HIV diagnoses into six transmission categories: men who have sex with men (MSM); high risk heterosexual contact (HRH); injection drug use (IDU); men who have sex with men and inject drugs (MSM/IDU); mother-to-child transmission (Pediatric); and diagnoses who received a transfusion or hemophiliac products (Transfusion/Hemophilia).

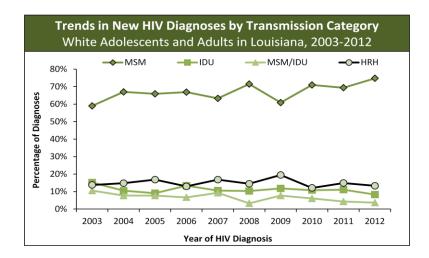
After assigning a transmission category for all diagnoses without a reported risk, through statistical imputation, trends in the percentage of diagnoses for each transmission category can be analyzed. The following graphs use imputed transmission categories unless otherwise noted.



- The percentage of adult HIV diagnoses attributed to MSM has increased from a low of 37% in 2003 to a high of 54% in 2012. The percentage of HRH diagnoses has decreased slightly, from 34% in 2003 to 30% in 2012. The percentage of diagnoses attributed to IDU and MSM/IDU has declined dramatically over the past 10 years from 21% IDU and 7% MSM/IDU in 2003 to 12% and 4% respectively in 2012.
- The primary mode of transmission for women is HRH contact.
- The primary mode of transmission for males in Louisiana continues to be MSM, with far fewer reports of IDU, MSM/IDU and HRH. In 2012, the percentage of male diagnoses who were MSM was 76%, compared to ten years ago when MSM accounted for only 53% of all newly diagnosed males.



- Historically, the primary mode of transmission for blacks was HRH contact followed closely by MSM. In 2008, the percentage of new diagnoses attributable to MSM surpassed the percentage attributable to HRH.
- In 2012, 47% of all new HIV diagnoses among blacks were MSM and 38% were HRH.

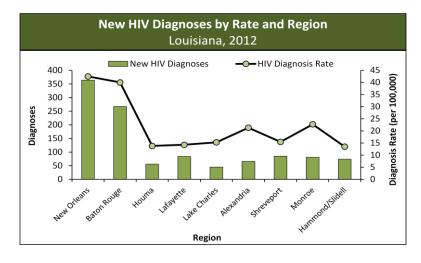


• The predominant mode of transmission among whites has historically been and continues to be MSM. In 2012, 75% of new diagnoses among whites were attributed to MSM.

## **HIV Diagnoses by Public Health Region**

New HIV Diagnoses by Region and Year Louisiana, 2008-2012										
	200	)8	200	)9	201	LO	201	1	201	2
Louisiana	1,095	%	1,209	%	1,127	%	1,229	%	1,122	%
1-New Orleans	356	33%	384	32%	343	30%	413	34%	364	32%
2-Baton Rouge	297	27%	311	26%	297	26%	295	24%	267	24%
3-Houma	42	4%	40	3%	57	5%	56	5%	56	5%
4-Lafayette	75	7%	87	7%	89	8%	93	8%	84	7%
5-Lake Charles	56	5%	51	4%	47	4%	50	4%	45	4%
6-Alexandria	49	4%	61	5%	61	5%	64	5%	66	6%
7-Shreveport	106	10%	114	9%	102	9%	120	10%	85	8%
8-Monroe	52	5%	72	6%	59	5%	69	6%	81	7%
9-Hammond/Slidell	62	6%	89	7%	72	6%	69	6%	74	7%

• New HIV diagnoses in the New Orleans and Baton Rouge regions account for about 55% of all new diagnoses each year. The Shreveport region has the third highest number of new diagnoses each year followed closely by Lafayette and Monroe. The proportion of diagnoses in each region has remained relatively stable over the past 5 years.



• In 2012, New Orleans had the highest number of new HIV diagnoses and highest HIV diagnosis rate.

## **New AIDS Diagnoses, 2012**

AIDS diagnoses are the number of individuals diagnosed with AIDS within a given time period. In 2012, an AIDS diagnosis was made when a person had a CD4 cell count <200, a CD4 percentage <14%, or developed an opportunistic infection (OI) such as Pneumocystis carinii pneumonia (PCP) or wasting syndrome.

Characteristics of Persons Newly Diagnosed with AIDS Louisiana, 2011-2012								
		Diagnosed with n 2011	Persons First Diagnosed with AIDS in 2012					
	Number	Percent	Number	Percent				
TOTAL	784	100.0%	793	100.0%				
Sex								
Female	225	28.7%	259	32.7%				
Male	559	71.3%	534	67.3%				
Race/Ethnicity								
Black/African American	595	75.9%	624	78.7%				
Hispanic/Latino	32	4.1%	30	3.8%				
White	153	19.5%	126	15.9%				
Other/Unknown/Multi-race	4	0.5%	13	1.6%				
Age Group	Age at AID	S diagnosis	Age at AID	S diagnosis				
0-12	1	0.1%	1	0.1%				
13-19	19	2.4%	24	3.0%				
20-24	63	8.0%	90	11.3%				
25-34	219	27.9%	219	27.6%				
35-44	212	27.0%	196	24.7%				
45-54	177	22.6%	189	23.8%				
55-64	75	9.6%	57	7.2%				
65+	18	2.3%	17	2.1%				
Imputed Transmission Category								
Men who have sex with men (MSM)	370	47.2%	383	48.3%				
Injection Drug User (IDU)	128	16.3%	119	15.0%				
MSM/IDU	35	4.5%	31	3.9%				
High Risk Heterosexual (HRH)	243	31.0%	255	32.2%				
Transfusion/Hemophilia/Other	0	0.0%	0	0.0%				
Perinatal/Pediatric	8	1.0%	5	0.6%				
Rural/Urban								
Rural	116	14.8%	116	14.6%				
Urban	668	85.2%	677	85.4%				

- In 2012, there were 793 new AIDS diagnoses in Louisiana, a 1% increase from 2011.
- From 2011 to 2012, the proportion of AIDS diagnoses among females increased by 4%.
- In 2012, almost 79% of all AIDS diagnoses were among blacks. The number of new AIDS diagnoses increased 18% among whites and almost 5% among blacks and decreased 6% among Hispanic/Latinos.
- In 2011 and 2012, the greatest number of new AIDS diagnoses were among persons age 25-34, followed by persons age 35-44.
- In 2011 and 2012, the greatest number and percentage of new AIDS diagnoses were among MSM, followed by high risk heterosexuals and injection drug users.

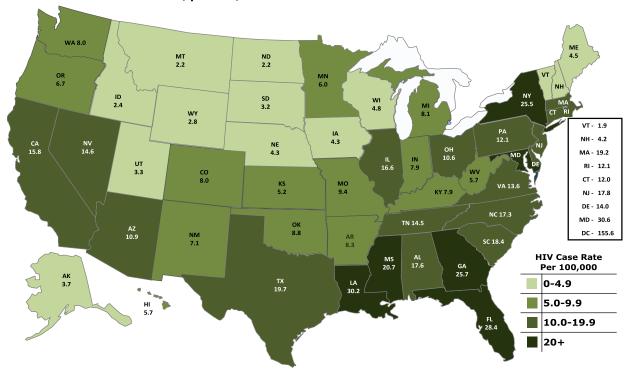
Because the CDC has not released its 2012 HIV Surveillance Report, Louisiana's HIV and AIDS national rankings remain unchanged from the 2011 standings.

CDC Comparison of 2010 and 2011 National Rankings												
	LOUISIANA				ľ	NEW ORLE	ANS MS	Ą	BATON ROUGE MSA			
	20	010	20	11	2010 2011		2010		2011			
	#	Rank	#	Rank	#	Rank	#	Rank	#	Rank	#	Rank
Estimated Stage AIDS Case Rate*	20	4 <sup>th</sup>	18.4	4th	26.2	5th	25.3	4th	33.7	1st	29.4	1st
Estimated AIDS Case Count	900	11th	842	11th	311	19th	301	20th	265	24th	238	25th
Estimated HIV Infection Case Rate*	28.5	2nd**	30.2	3rd	36.9	3rd**	43	2nd	43	2nd**	41.6	3rd
Estimated HIV Infection Case Count	1,279	10th**	1,381	11th	439	19th**	513	19th	339	27th**	336	30th

<sup>\*</sup> Rates are per 100,000

- The most recent *CDC HIV Surveillance Report* (Vol. 23), for the first time, had a national comparison of estimated HIV case rates. Louisiana ranked 3<sup>rd</sup> in the nation for estimated HIV case rates (30.2 per 100,000 population) and 11<sup>th</sup> in the estimated number of HIV diagnoses. The New Orleans MSA ranked 2<sup>nd</sup> in the nation and the Baton Rouge MSA ranked 3<sup>rd</sup> in the nation for estimated HIV case rates (43.0 and 41.6 per 100,000, respectively), among the large metropolitan areas in the nation.
- According to the same report, Louisiana ranked 4<sup>th</sup> highest in estimated state AIDS case rates (18.1 per 100,000) and 11<sup>th</sup> in the number of estimated AIDS diagnoses in 2011. In 2010, Louisiana ranked 4<sup>th</sup> highest in estimated state AIDS case rates (20.0 per 100,000) and 11<sup>th</sup> in the number of estimated AIDS diagnoses. The Baton Rouge metropolitan area ranked 1<sup>st</sup> in estimated AIDS case rates (29.4 per 100,000) and the New Orleans metropolitan area ranked 4<sup>th</sup> in estimated AIDS case rates (25.3 per 100,000) in 2011 among the large metropolitan areas in the nation.

#### 2011 National HIV Case Rates, per 100,000



<sup>\*\*</sup> Only 46 states were included in the analysis for 2010 HIV infection

## Persons Living in Louisiana with HIV Infection (Prevalence)

Prevalence is a measure describing the number of persons living with HIV infection at a certain point in time and includes people living with all stages of HIV or AIDS. Prevalence is the accumulation of diagnoses for people who are still living with the disease. Prevalence numbers and rates are important for ascertaining the burden of HIV on health care systems, allocating resources and monitoring trends over time. Reported HIV diagnosis data provide only the minimum estimate of the number of people living with HIV, since persons who have not been tested and those who test anonymously are not included. The CDC now estimates that 15.8% of persons living with HIV are unaware of their infection status.

Characteristics of Persons Living with HIV Infection and Cumulative Cases									
Louisiana, 2012									
	Persons Liv	ing with HIV	Cumulative Pe	rsons with HIV					
	Infection as o	of 12/31/2012	Infection as o	f 12/31/2012*					
	Number	Percent	Number	Percent					
TOTAL	18,240	100.0%	33,060	100.0%					
Sex									
Female	5,482	30.1%	8,638	26.1%					
Male	12,758	69.9%	24,422	73.9%					
Race/Ethnicity									
Black/African American	12,476	68.4%	21,553	65.2%					
Hispanic/Latino	694	3.8%	985	3.0%					
White	4,867	26.7%	10,186	30.8%					
Other/Unknown/Multi-race	203	1.1%	336	1.0%					
Age Group	Age ii	n 2012	Age at D	iagnosis					
0-12	76	0.4%	340	1.0%					
13-19	189	1.0%	1,626	4.9%					
20-24	924	5.1%	4,364	13.2%					
25-34	3,584	19.6%	11,508	34.8%					
35-44	4,565	25.0%	9,109	27.6%					
45-54	5,550	30.4%	4,351	13.2%					
55-64	2,706	14.8%	1,343	4.1%					
65+	646	3.5%	419	1.3%					
Imputed Transmission Category									
Men who have sex with men (MSM)	8,443	46.3%	15,082	45.6%					
Injection Drug User (IDU)	2,736	15.0%	6,373	19.3%					
MSM/IDU	1,286	7.1%	2,849	8.6%					
High Risk Heterosexual (HRH)	5,499	30.1%	7,930	24.0%					
Transfusion/Hemophilia/Other	77	0.4%	499	1.5%					
Perinatal/Pediatric	199	1.1%	327	1.0%					
Rural/Urban									
Rural	2,635	14.4%	4,072	12.3%					
Urban	15,605	85.6%	28,988	87.7%					

<sup>\*</sup>Cumulative persons reflects the total number of HIV-infected persons diagnosed in Louisiana, including those who have died.

- In 2012, males made up about 70% of all people living with HIV infection in Louisiana.
- Although blacks only made up 32% of Louisiana's population in 2012, they accounted for 68% of all people living with HIV infection.
- Over a quarter of all persons living with HIV are under the age of 35, 25% are between 35-44 years of age, and 49% are over the age of 44.
- The majority of people living with HIV infection live in urban areas.

## **Late HIV Testing in Louisiana**

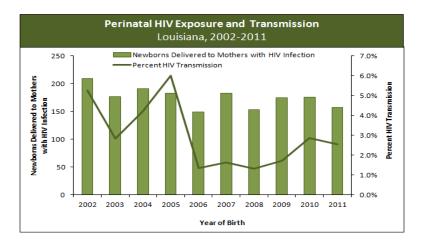
Late HIV Testing Louisiana, 2012									
	Persons Diagnosed with HIV, 2012								
	New HIV	AIDS at	Time of	AIDS W		AIDS W	/ithin 6		
	Diagnoses	Diagr	nosis†	Months of Diagnosis		Months of Diagnosis			
		Count	Percent	Count	Percent	Count	Percent		
Total	1,122	309	28%	368	33%	401	36%		
Sex									
Female	326	89	27%	106	33%	119	37%		
Male	796	220	28%	262	33%	282	35%		
Race/Ethnicity									
American Indian/Alaskan Native	2	0	0%	1	50%	1	50%		
Asian/Pacific Islander	8	2	25%	2	25%	2	25%		
Black/African American	835	220	26%	274	33%	303	36%		
Hispanic/Latino	50	16	32%	18	36%	19	38%		
White	218	69	32%	71	33%	73	33%		
Other/Unknown/Multi-race	9	2	22%	2	22%	3	33%		
Age Group									
0-12	10	0	0%	1	10%	1	10%		
13-19	68	11	16%	15	22%	18	26%		
20-24	210	31	15%	42	20%	48	23%		
25-34	296	65	22%	79	27%	89	30%		
35-44	227	80	35%	91	40%	98	43%		
45-54	218	87	40%	101	46%	106	49%		
55-64	75	24	32%	28	37%	30	40%		
65+	18	11	61%	11	61%	11	61%		
Transmission Category									
Men who have sex with men (MSM)	604	176	29%	202	33%	219	36%		
Injection Drug User (IDU)	129	45	35%	49	38%	55	43%		
MSM/IDU	41	9	22%	10	24%	11	27%		
High Risk Heterosexual (HRH)	338	79	23%	106	31%	115	34%		
Perinatal/Pediatric	10	0	0%	1	10%	1	10%		
Region									
1-New Orleans	364	93	26%	108	30%	119	33%		
2-Baton Rouge	267	67	25%	82	31%	90	34%		
3-Houma	56	13	23%	21	38%	25	45%		
4-Lafayette	84	29	35%	32	38%	36	43%		
5-Lake Charles	45	18	40%	19	42%	19	42%		
6-Alexandria	66	12	18%	15	23%	16	24%		
7-Shreveport	85	18	21%	24	28%	28	33%		
8-Monroe	81	31	38%	35	43%	36	44%		
9-Hammond/Slidell *If AIDS diagnosis was within 1 month of HIV diagn	74	28	38%	32	43%	32	43%		

<sup>\*</sup>If AIDS diagnosis was within 1 month of HIV diagnosis

- Of the 1,122 persons diagnosed with HIV in 2012, 28% had an AIDS diagnosis at the time of their initial HIV diagnosis, an additional 5% had an AIDS diagnosis within three months, and an additional 3% had an AIDS diagnosis between three and six months after diagnosis. Overall, 36% of all new HIV diagnoses in 2012 had an AIDS diagnosis within six months.
- Injection drug users were more likely to have AIDS at the time of their HIV diagnosis and within the following six months after their diagnosis, compared to persons with other risk factors.
- The proportion of late testers varies by region throughout the state. The Alexandria, New Orleans and Shreveport regions had the lowest proportion of persons with an AIDS diagnosis within six months and the Houma and Monroe regions had the highest proportion.

### Perinatal HIV Surveillance, 2002-2011

Clinical trials and observational studies have repeatedly demonstrated that combination antiretroviral (ARV) medication given to a mother reduces perinatal transmission of HIV to less than 1% (see the USPHS recommendations for prevention of perinatal transmission available at http://aidsinfo.nih.gov/). The CDC has published recommendations to include HIV testing as part of the routine screening panel for all pregnant women, as well as repeat testing during the third trimester in areas with high HIV incidence, which includes Louisiana.



The implementation of the USPHS guidelines in Louisiana and increased testing has led to a significant decline in perinatal transmission rates, from a high of nearly 16% in 1994 to 2.5% in 2011. From 2006-2009, the transmission rate was below 2%. In 2011, 153 women with HIV infection delivered 157 newborns, and four of the infants (2.5%) were infected with HIV. Perinatal exposures are followed for up to two years to confirm a definitive negative status and consequently the latest data presented are from 2011.

#### **Maternal Demographics**

#### In 2011:

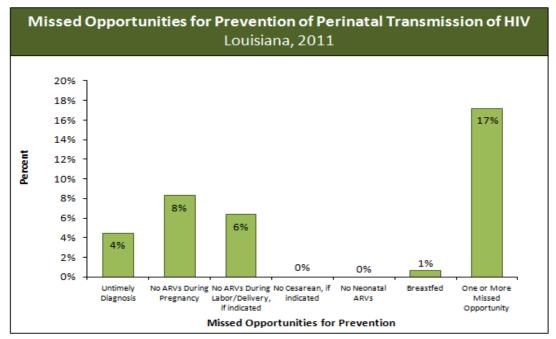
- HIV-infected mothers were predominately black (89%) and between 25-34 years old (61%).
- 84% of the mothers were infected through high risk heterosexual sex. Almost 13% of the HIV-infected mothers were likely infected through injection drug use and one mother was infected herself through perinatal transmission.
- Approximately 40% of the mothers with HIV infection lived in the Baton Rouge region, 26% lived in the New Orleans region, and an additional 11% lived in the Shreveport region.
- Almost 69% of the mothers were diagnosed with HIV before their pregnancy, 27% were diagnosed during their pregnancy, and 2.5% were diagnosed at delivery.

### **Perinatal HIV Exposure Risk and Missed Opportunities**

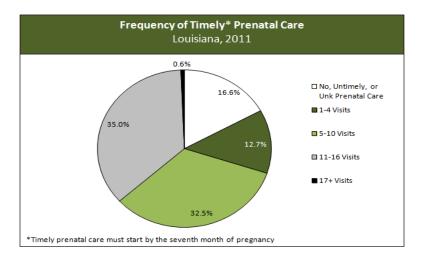
Risk of perinatal transmission of HIV depends on fetal/infant exposure to maternal virus. This exposure can be reduced if:

- a mother's infection is diagnosed early (at least 60 days before delivery).
- the mother receives ARV treatment during pregnancy.
- the mother receives ARVs during labor/delivery.
- the newborn is delivered by cesarean section (recommended if the maternal viral load is over 1,000 copies/mL).
- the newborn receives ARVs after delivery.
- the newborn/infant is not breastfed<sup>i</sup>.

Prenatal care is a crucial component for the reduction of perinatal transmission and facilitates testing and treatment for pregnant women.



• In 2011, the most prevalent missed opportunity was no ARV use during pregnancy: 8% of mothers did not receive antiretroviral therapy (ARVs) during pregnancy. ARV therapy during pregnancy depends on several factors including timing of diagnosis, prenatal care, and mother's access to ARVs. Overall, 17% of mother-infant pairs had one or more missed opportunities for prevention of perinatal transmission.



• In 2011, 17% of mothers with HIV infection did not receive timely prenatal care, and only 36% had eleven or more visits. 'Timely' prenatal care is defined as prenatal care which started by the seventh month of pregnancy to allow a period of time before delivery so maternal viral load can be reduced. Preconception care and prenatal care are essential for HIV-infected women to reduce the risk of perinatal transmission and should be started as soon as possible. Lack of prenatal care is one of the factors that most significantly impacts perinatal transmission since women who are not in prenatal care are less likely to get tested for HIV and receive antiretroviral therapy during their pregnancy.

Panel on Treatment of HIV-Infected Pregnant Women and Prevention of Perinatal Transmission. Recommendations for Use of Antiretroviral Drugs in Pregnant HIV-1-Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV Transmission in the United States. Department of Health and Human Services. Available at http://aidsinfo.nih.gov/contentfiles/lvguidelines/perinatalgl.pdf. Accessed [March 12, 2014]