2000 LOUISIANA HEALTH REPORT CARD

As mandated by R.S. 40:1300.71

M.J. "Mike" Foster
Governor

David W. Hood
Secretary, Department of Health and Hospitals

Submitted to the Governor and the Louisiana Legislature
April 24, 2000

2000 Louisiana Health Report Card

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STATE OF LOUISIANA
DEPARTMENT OF HEALTH AND HOSPITALS

M. J. "Mike" Foster, Jr.
GOVERNOR

David W. Hood
SECRETARY

March 2000

Dear Governor Foster and Members of the Louisiana Legislature:

On behalf of the Department of Health and Hospitals (DHH), it is my great pleasure to present the fifth annual Louisiana Health Report Card in accordance with R.S. 40:1300.71. This legislation, as mandated in the 1995 Regular Legislative Session, has permitted DHH the opportunity to compile information on the health status of Louisiana. The Report Card provides morbidity- and mortality-related statistics, information on current assessment and prevention initiatives, and recommendations to improve the health status of the state's citizens through enhanced programming and increased access to care.

The DHH mission is to protect and promote health and to ensure access to treatment, preventive, and rehabilitative services for all citizens of the State of Louisiana. DHH is dedicated to fulfilling its mission by providing quality services in the most efficient manner possible, assisting in the development and furnishing of services by other entities, and looking ahead to constantly raise our standards. The information contained in this report reinforces the importance of the DHH mission and reaffirms the Department's commitment to target resources and manpower in those areas where they are most needed.

We submit this report to you and gladly welcome feedback, in our ongoing effort to improve its usefulness. We also welcome discussion on ways in which we can work together to improve the health status of Louisiana.

Sincerely,

David W. Hood
Secretary

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Executive Summary

Monitoring the health status of a population is an essential step in evaluating the effectiveness of various health programs and in developing programmatic policy for the future. Monitoring the health status of a population relative to certain health status 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 shall annually prepare a health report card relative to health and health-related issues. This annual health report card shall be submitted at least sixty days prior to each regular session.

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

- Health findings of major diseases
- Teenage pregnancy and birth rates
- Rates of low birth weight 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 each health status indicator 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 on the web for downloading through the individual program websites.

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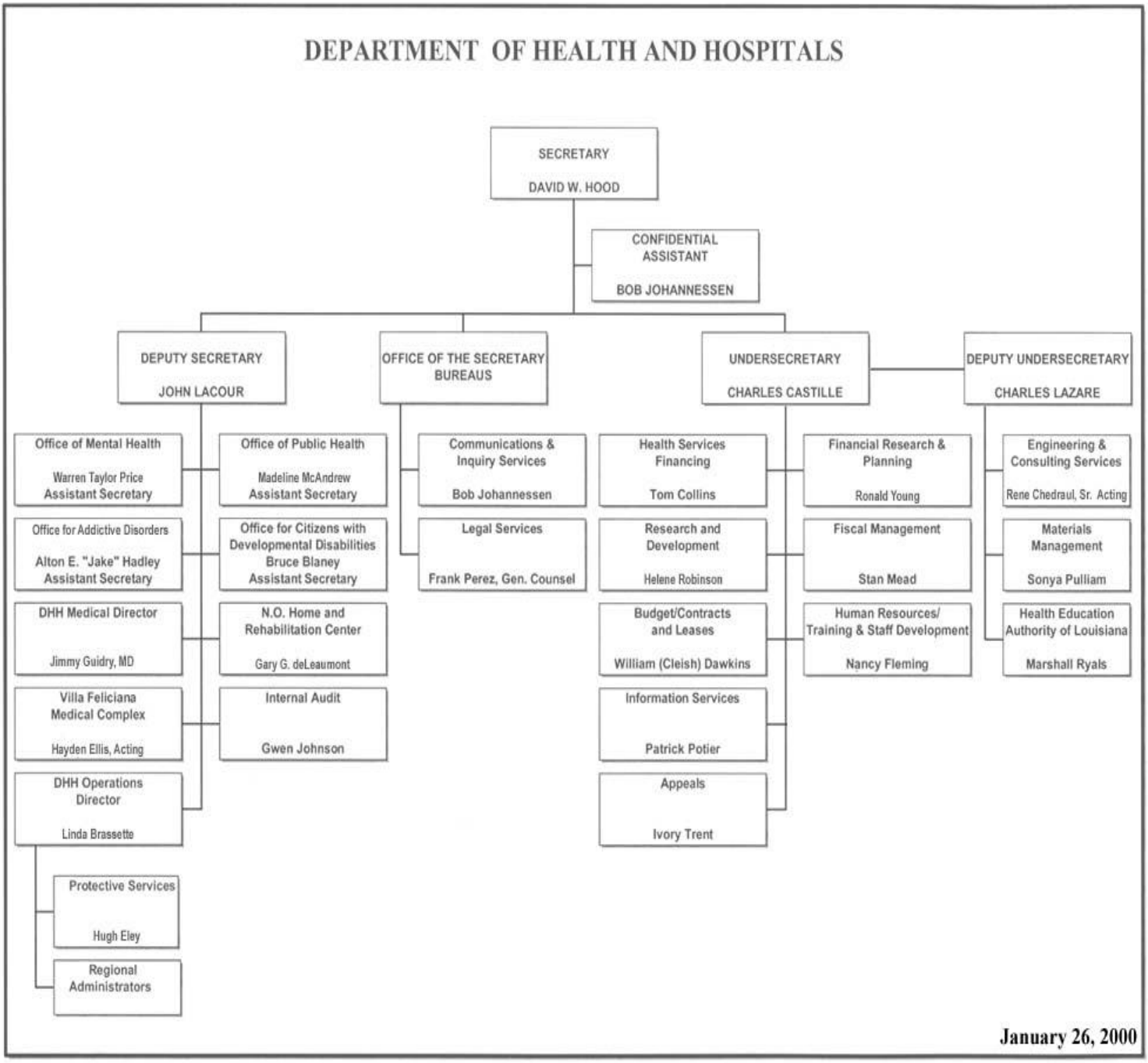
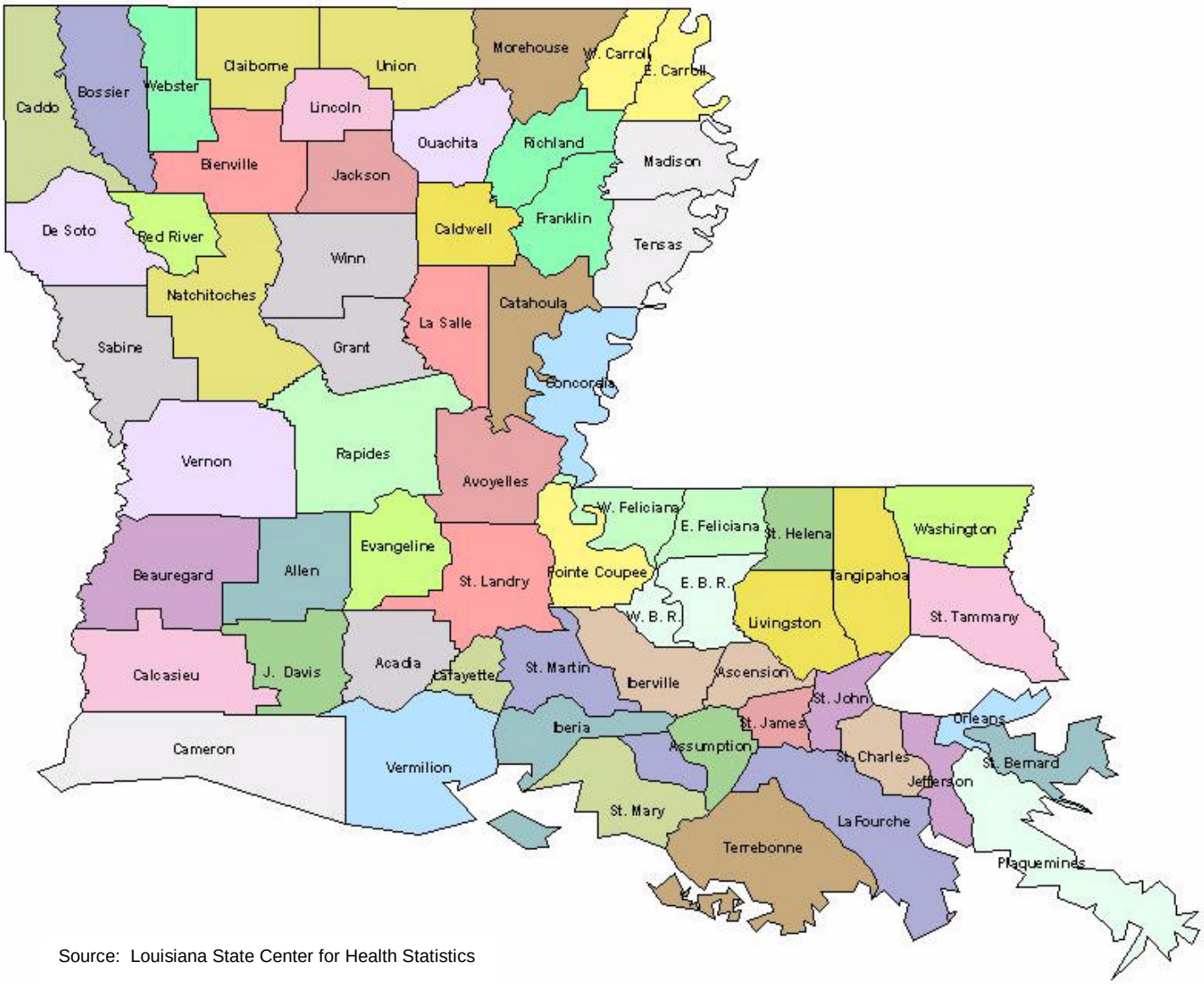


Source: www.dhh.state.la.us/orgchart.htm



Source: Louisiana State Center for Health Statistics

I. POPULATION AND VITAL STATISTICS

A. POPULATION

The United States Census Bureau calculates population estimates for the years that fall between their ten-year census counts. According to these estimates, the population of Louisiana as of July 1, 1998 was 4,368,967. The most recent Census Bureau estimates for Louisiana's basic demographic subgroups (i.e. race, sex, and age groups) are for the state's 1998 population. Parish-level population estimates by sex, race, and age groups can be found at www.dhh.state.la.us/OPH/statctr/default.htm. The state's subgroup estimates are given in the following table.

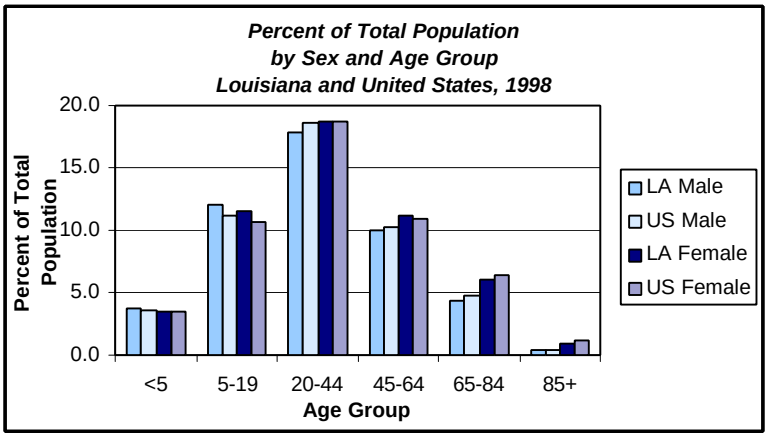
Louisiana Population Estimates, 1998								
		Age Group						
Sex	Race	<5	5-19	20-44	45-64	65-84	85+	Total
Male	White	93,022	307,411	525,539	325,833	144,263	11,357	1,407,425
	Black	62,904	204,639	236,828	106,545	41,282	4,213	656,411
	Other	3,565	10,304	14,719	6,482	1,664	186	36,920
Female	White	88,855	293,913	529,022	341,295	197,008	29,762	1,479,855
	Black	61,700	203,174	274,772	139,359	61,794	9,993	750,792
	Other	3,303	9,805	14,914	7,312	2,007	223	37,564
Both	Total	313,349	1,029,246	1,595,794	926,826	448,018	55,734	4,368,967

Source: United States Census Bureau, 1998 Population Estimates

When these figures are compared with the Census Bureau estimates of the national population in 1998, Louisiana and the United States have very similar population distributions by sex and age group.

Percent of Total Population by Sex and Age Group Louisiana and United States, 1998								
		Age Group						
Location	Sex	<5	5-19	20-44	45-64	65-84	85+	All Ages
LA	Male	3.7	12.0	17.8	10.0	4.3	0.4	48.1
	Female	3.5	11.6	18.7	11.2	6.0	0.9	51.9
	Both	7.2	23.6	36.5	21.2	10.3	1.3	100.0
US	Male	3.6	11.1	18.6	10.2	4.8	0.4	48.9
	Female	3.4	10.6	18.7	10.9	6.4	1.1	51.1
	Both	7.0	21.7	37.4	21.2	11.2	1.5	100.0

Source: United States Census Bureau, 1998 Population Estimates

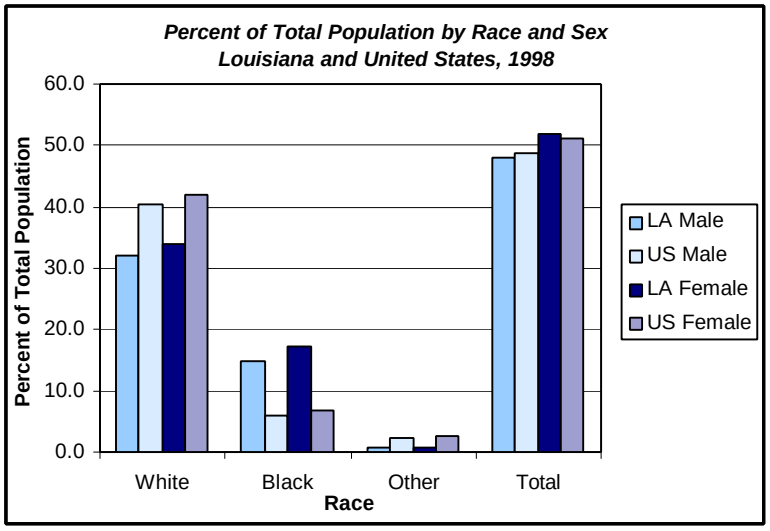


Source: United States Census Bureau, 1998 Population Estimates

Estimates of the population distribution by race, however, show the percentage of blacks in Louisiana is more than twice the national average, with 32.2% in Louisiana versus 12.7% nationally. Individual parishes in Louisiana range from 5% to 67% black.

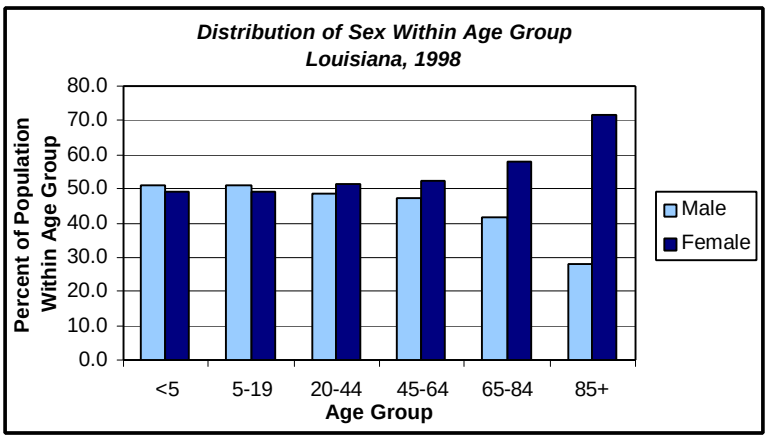
Percent of Total Population by Race and Sex Louisiana and United States, 1998					
		Race			
Location	Sex	White	Black	Other	Total
LA	Male	32.2	15.0	0.8	48.1
	Female	33.9	17.2	0.9	51.9
	Both	66.1	32.2	1.7	100.0
US	Male	40.5	6.0	2.3	48.9
	Female	42.0	6.7	2.5	51.1
	Both	82.5	12.7	4.8	100.0

Source: United States Census Bureau, 1998 Population Estimates



Source: United States Census Bureau, 1998 Population Estimates

As in the rest of the nation, advancing age brings an increase in the proportion of women to men. Louisiana's 1998 population estimates for the 45 to 64 years age group are 47% male and 53% female. The percentages change to 28% male and 72% female in the 85+ age group.

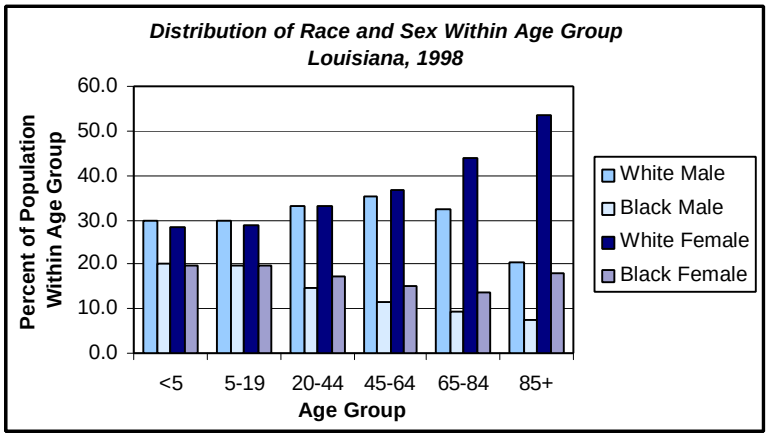


Source: United States Census Bureau, 1998 Population Estimates

Within individual age groups, the race/sex proportions change with advancing age. Prior to age 20, both white males and white females comprise approximately 29% of the population of each age group and black men and women approximately 20%. By age 85+, 53% of the population are white women, 20% are white men, 18% are black women, and 8% are black men.

Percent of Race and Sex Within Age Group Louisiana, 1998							
		Age Group					
Sex	Race	<5	5-19	20-44	45-64	65-84	85+
Male	White	29.7	29.9	32.9	35.2	32.2	20.4
	Black	20.1	19.9	14.8	11.5	9.2	7.6
	Other	1.1	1.0	0.9	0.7	0.4	0.3
	Total	50.9	50.8	48.7	47.4	41.8	28.3
Female	White	28.4	28.6	33.2	36.8	44.0	53.4
	Black	19.7	19.7	17.2	15.0	13.8	17.9
	Other	1.1	1.0	0.9	0.8	0.4	0.4
	Total	49.1	49.2	51.3	52.6	58.2	71.7

Source: United States Census Bureau, 1998 Population Estimates



Source: United States Census Bureau, 1998 Population Estimates

The United States Census Bureau has calculated parish-level population estimates for 1998. The changes in Louisiana's parish populations that occurred between the 1990 census and the 1998 estimates are given in the table below.

1998 Population Figures for Louisiana Parishes				
Parish	4/1/90 Census	7/1/98 Estimate	% Change 1990-98	7/1/98 % of State
Louisiana	4,221,826	4,368,967	3.5	100.0
Acadia	55,882	57,721	3.3	1.3
Allen	21,226	23,888	12.5	0.5
Ascension	58,214	71,628	23.0	1.6
Assumption	22,753	23,015	1.2	0.5
Avoyelles	39,159	40,846	4.3	0.9
Beauregard	30,083	31,976	6.3	0.7
Bienville	16,201	15,814	-2.4	0.4
Bossier	86,088	93,463	8.6	2.1
Caddo	248,253	242,471	-2.3	5.5
Calcasieu	168,134	180,330	7.3	4.1

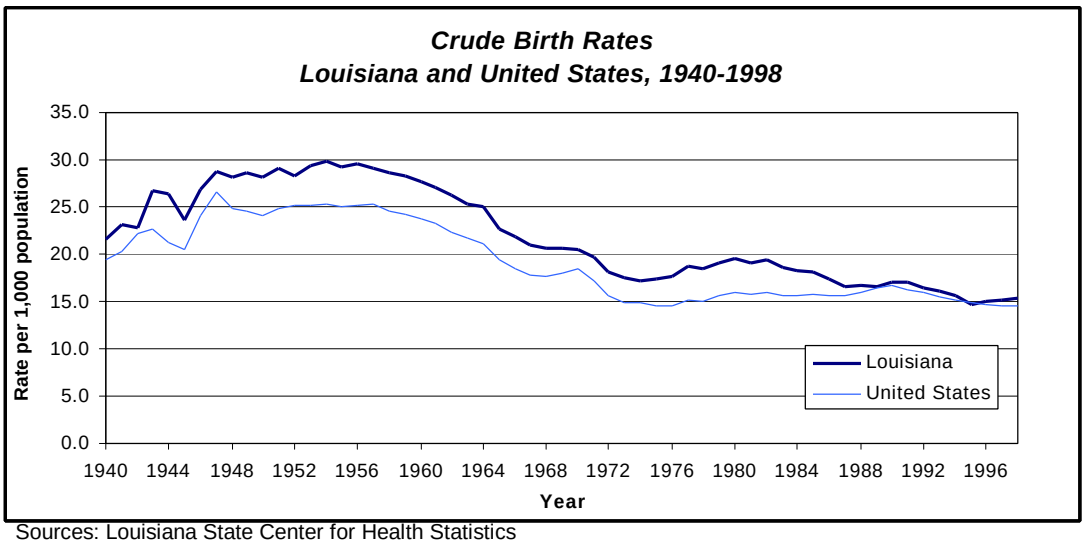
1998 Population Figures for Louisiana Parishes				
Parish	4/1/90 Census	7/1/98 Estimate	% Change 1990-98	7/1/98 % of State
Caldwell	9,806	10,364	5.7	0.2
Cameron	9,260	9,063	-2.1	0.2
Catahoula	11,065	11,064	-0.0	0.3
Claiborne	17,405	16,919	-2.8	0.4
Concordia	20,828	20,749	-0.4	0.5
DeSoto	25,699	24,921	-3.0	0.6
E. Baton Rouge	380,105	394,714	3.8	9.0
E. Carroll	9,709	8,905	-8.3	0.2
E. Feliciana	19,211	20,847	8.5	0.5
Evangeline	33,274	34,097	2.5	0.8
Franklin	22,387	22,163	-1.0	0.5
Grant	17,526	18,990	8.4	0.4
Iberia	68,297	73,154	7.1	1.7
Iberville	31,049	31,173	0.4	0.7
Jackson	15,924	15,566	-2.2	0.4
Jefferson	448,306	450,933	0.6	10.3
Jefferson Davis	30,722	31,607	2.9	0.7
Lafayette	164,762	186,631	13.3	4.3
Lafourche	85,860	89,324	4.0	2.0
LaSalle	13,662	13,661	0.0	0.3
Lincoln	41,745	41,560	-0.4	1.0
Livingston	70,523	88,104	24.9	2.0
Madison	12,463	12,808	2.8	0.3
Morehouse	31,938	31,477	-1.4	0.7
Natchitoches	37,199	37,018	-0.5	0.8
Orleans	496,938	465,538	-6.3	10.7
Ouachita	142,191	146,979	3.4	3.4
Plaquemines	25,575	26,293	2.8	0.6
Pointe Coupee	22,540	23,565	4.5	0.5
Rapides	131,556	126,763	-3.6	2.9
Red River	9,518	9,599	0.9	0.2
Richland	20,629	21,022	1.9	0.5
Sabine	22,646	23,824	5.2	0.5
St. Bernard	66,631	66,074	-0.8	1.5
St. Charles	42,437	48,278	13.8	1.1
St. Helena	9,874	9,580	-3.0	0.2
St. James	20,879	21,132	1.2	0.5
St. John	39,996	42,261	5.7	1.0
St. Landry	80,312	83,816	4.4	1.9
St. Martin	44,097	47,550	7.8	1.1
St. Mary	58,086	57,174	-1.6	1.3
St. Tammany	144,500	188,936	30.8	4.3
Tangipahoa	85,709	96,983	13.2	2.2
Tensas	7,103	6,631	-6.6	0.2
Terrebonne	96,982	104,534	7.8	2.4
Union	20,796	21,989	5.7	0.5
Vermilion	50,055	52,090	4.1	1.2
Vernon	61,961	51,570	-16.8	1.2
W. Baton Rouge	19,419	20,683	6.5	0.5
W. Carroll	12,093	12,213	1.0	0.3
W. Feliciana	12,915	13,446	4.1	0.3
Washington	43,185	43,059	-0.3	1.0
Webster	41,989	42,707	1.7	1.0
Winn	16,496	17,714	7.4	0.4

Source: United States Census Bureau, 1998 Population Estimates

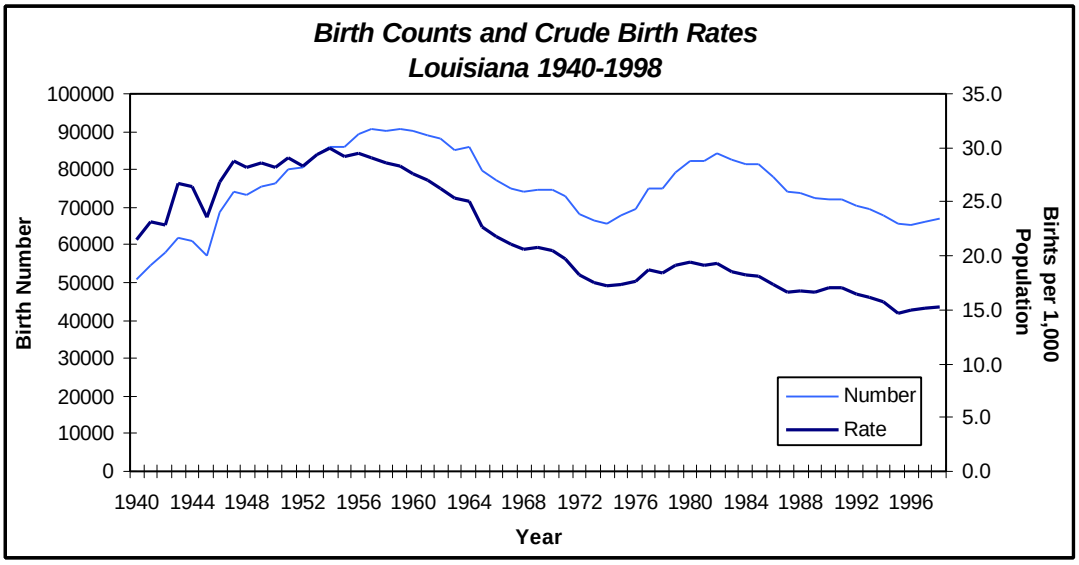
B. BIRTHS

Live Birth Counts and Birth Rates

In 1998, there were 66,773 births to Louisiana residents. This marked a slight increase from the number of Louisiana births in 1997 (up 1.3%), while at the national level there was a slight decrease (down 1.6%) in the number of births between 1997 and 1998. Louisiana's 1998 crude birth rate was 15.3 live births per 1,000 population. Because the crude birth rate relates the number of live births to the total population in an area, without regard to the age or sex distribution of the population, it is useful as a measure of the contribution of births to the growth of the population of the area.[1] Louisiana's 1998 crude birth rate was similar to the 1997 Louisiana rate (15.2) and slightly higher than the 1998 national rate (14.6 per 1,000 population).



Sources: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1998 data)



Source: Louisiana State Center for Health Statistics

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

In the table below, crude birth rates are furnished to provide an idea of Louisiana's standing among the neighboring states. (Note: Although Louisiana's final 1998 rate is available and is reported in this document, National Center for Health Statistics preliminary 1998 data for all states have been used in the table below to permit comparison with surrounding states.) Louisiana continues to rank in the top third of the country in terms of birth rate. Louisiana's 1998 ranking of 11th is the same as its 1997 ranking. Among neighboring states, Louisiana's birth rate ranks in the middle.

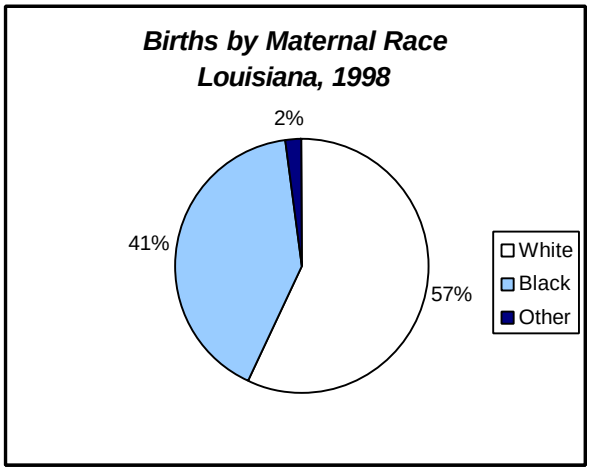
Crude Birth Rates
Louisiana, Neighboring States, and United States, 1998

State	Birth Rate*	National Ranking
Alabama	14.3	20
Arkansas	14.5	18
Louisiana	15.3	11
Mississippi	15.6	10
Texas	17.3	2
United States	14.6	-

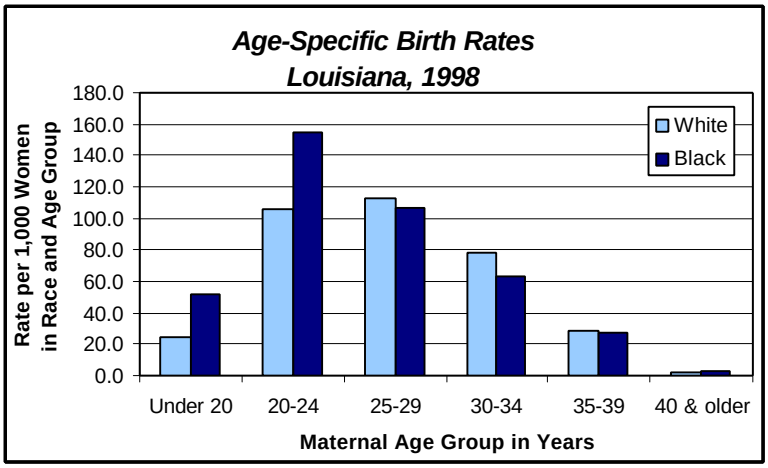
*Rate per 1,000 population

Source: National Center for Health Statistics

Although blacks represent only 32% of the population of Louisiana, 41% of the state's live births in 1998 were to black mothers. The birth rate for whites is 13.1 per 1,000 population while that of blacks is 19.5. Much of the disparity seems to occur in women under the age of 25. Although birth rates for both racial groups peak in the twenties, the birth rate for blacks is much higher for mothers less than 25 years old than for whites of comparable age. After the age of 25, birth rates become more similar.



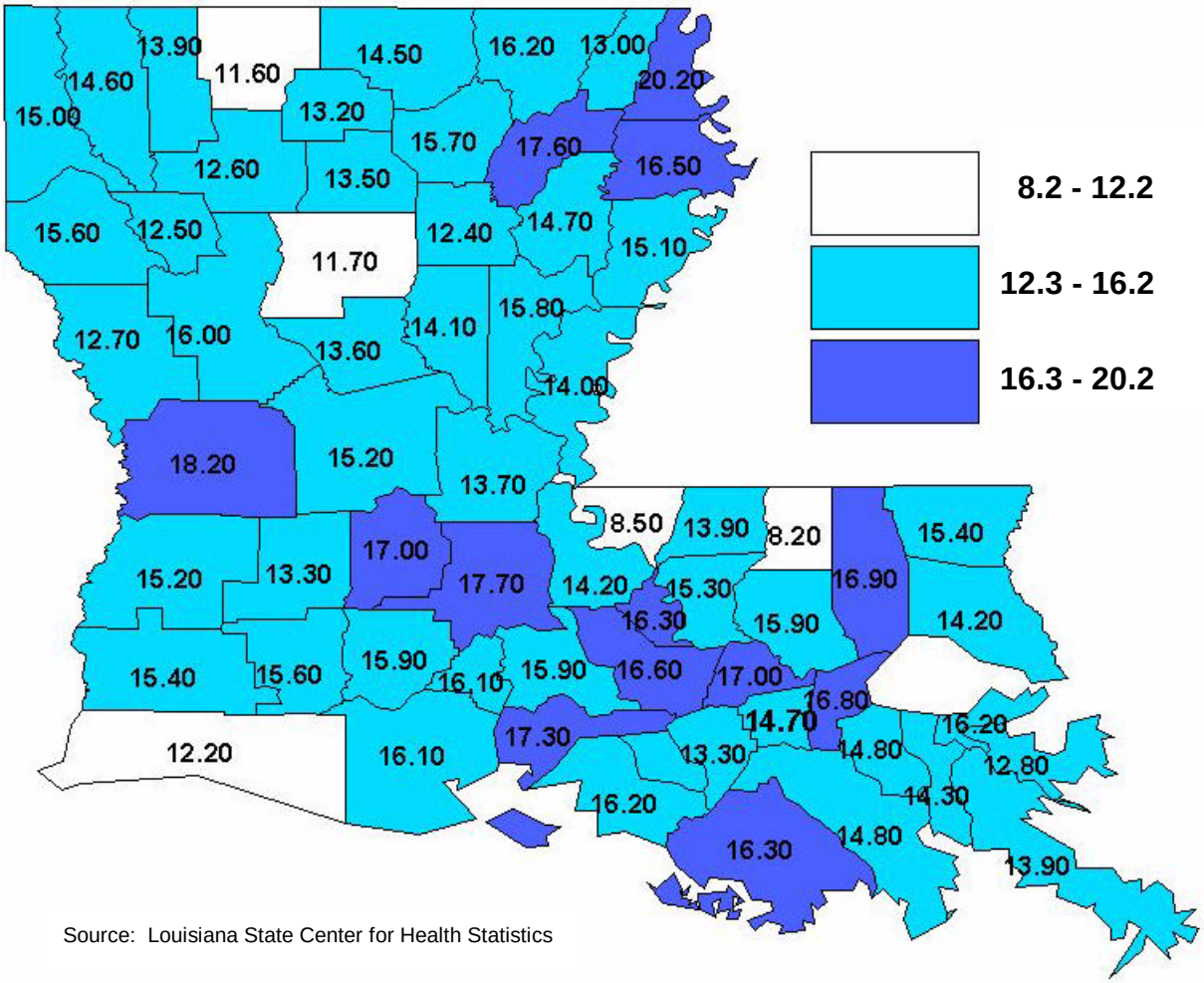
Source: Louisiana State Center for Health Statistics



Source: Louisiana State Center for Health Statistics

There is also disparity among parishes in terms of birth rate. In 1998 East Carroll parish had the highest rate at 20.2 births per 1,000 population. This was more than twice the rate of St. Helena (8.2), the parish with the lowest birth rate.

Birth Rate
Per 1,000 Population
Louisiana, 1998



Source: Louisiana State Center for Health Statistics

Live Births by Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 1998

Parish	Total by Occurrence	Total by Residence	Rate*	Race	Residence: Age in Years: Less than 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk
Louisiana	67100	66773	15.3	All	305	11989	20415	16952	11307	4933	839	27	6
	38492	37910		White	57	4811	10339	11105	7794	3268	516	18	2
	27156	27424		Black	247	7013	9774	5389	3189	1510	291	8	3
	1452	1439		Other	1	165	302	458	324	155	32	1	1
Acadia	476	926	15.9	All	3	187	302	217	149	61	7	-	-
	301	681		White	-	108	217	181	119	51	5	-	-
	175	244		Black	3	79	85	36	29	10	2	-	-
	-	1		Other	-	-	-	-	1	-	-	-	-
Allen	2	322	13.3	All	1	57	103	84	53	19	4	1	-
	1	244		White	1	42	81	63	39	14	3	1	-
	1	69		Black	-	13	20	18	13	4	1	-	-
	-	9		Other	-	2	2	3	1	1	-	-	-
Ascension	2	1218	17.0	All	2	168	311	391	258	77	11	-	-
	1	900		White	-	81	208	323	222	58	8	-	-
	1	307		Black	2	86	100	67	31	18	3	-	-
	-	11		Other	-	1	3	1	5	1	-	-	-
Assumption	1	305	13.3	All	1	62	88	74	52	25	3	-	-
	-	175		White	-	26	49	52	33	13	2	-	-
	1	129		Black	1	35	39	22	19	12	1	-	-
	-	1		Other	-	1	-	-	-	-	-	-	-
Avoyelles	4	573	13.7	All	4	104	179	172	72	33	9	-	-
	1	354		White	2	55	106	118	47	19	7	-	-
	3	216		Black	2	47	73	53	25	14	2	-	-
	-	3		Other	-	2	-	1	-	-	-	-	-
Beauregard	607	475	15.2	All	2	89	170	120	58	32	4	-	-
	481	408		White	1	75	143	109	50	26	4	-	-
	116	59		Black	1	14	23	11	7	3	-	-	-
	10	8		Other	-	-	4	-	1	3	-	-	-
Bienville	1	197	12.6	All	-	46	66	49	24	11	1	-	-
	-	100		White	-	13	42	28	11	6	-	-	-
	1	97		Black	-	33	24	21	13	5	1	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Bossier	615	1376	14.6	All	7	232	392	375	255	93	22	-	-
	519	987		White	2	139	261	289	201	77	18	-	-
	79	359		Black	5	88	124	75	47	16	4	-	-
	17	30		Other	-	5	7	11	7	-	-	-	-
Caddo	5917	3614	15.0	All	18	709	1151	910	536	251	35	1	3
	3035	1601		White	1	195	430	494	307	151	22	1	-
	2805	1969		Black	17	510	709	402	220	96	12	-	3
	77	44		Other	-	4	12	14	9	4	1	-	-
Calcasieu	3298	2797	15.4	All	9	498	925	736	427	169	32	1	-
	2388	1943		White	1	280	618	569	335	121	18	1	-
	885	833		Black	8	215	304	157	90	45	14	-	-
	25	21		Other	-	3	3	10	2	3	-	-	-

Live Births by Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 1998

Parish	Total by Occurrence	Total by Residence	Rate*	Race	Residence: Age in Years: Less than 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk
Caldwell	-	132	12.4	All	-	33	42	41	12	3	1	-	-
	-	102		White	-	21	31	36	12	2	-	-	-
	-	30		Black	-	12	11	5	-	1	1	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Cameron	-	110	12.2	All	-	29	31	21	17	10	2	-	-
	-	103		White	-	25	30	20	17	9	2	-	-
	-	7		Black	-	4	1	1	-	1	-	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Catahoula	-	169	15.8	All	2	46	69	33	9	8	1	-	1
	-	112		White	-	24	46	27	8	6	-	-	1
	-	57		Black	2	22	23	6	1	2	1	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Claiborne	116	199	11.6	All	1	39	76	43	29	9	2	-	-
	33	78		White	-	14	27	22	12	2	1	-	-
	82	120		Black	1	25	49	21	16	7	1	-	-
	1	1		Other	-	-	-	-	1	-	-	-	-
Concordia	257	298	14.0	All	5	77	112	64	30	8	2	-	-
	91	124		White	-	18	39	43	18	6	-	-	-
	165	173		Black	5	59	72	21	12	2	2	-	-
	1	1		Other	-	-	1	-	-	-	-	-	-
DeSoto	3	385	15.6	All	1	71	133	92	53	27	8	-	-
	-	187		White	-	28	59	55	23	17	5	-	-
	3	197		Black	1	43	74	36	30	10	3	-	-
	-	1		Other	-	-	-	1	-	-	-	-	-
E. Baton Rouge	9899	6058	15.3	All	25	934	1578	1627	1220	569	102	2	1
	5757	2829		White	1	223	498	901	786	363	55	1	1
	3960	3067		Black	24	702	1054	667	393	185	42	-	-
	182	162		Other	-	9	26	59	41	21	5	1	-
East Carroll	4	177	20.2	All	5	52	53	36	20	7	4	-	-
	-	40		White	-	5	13	11	9	-	2	-	-
	4	137		Black	5	47	40	25	11	7	2	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
E. Feliciana	-	290	13.9	All	2	64	97	62	39	23	3	-	-
	-	133		White	-	20	43	29	25	14	2	-	-
	-	156		Black	2	44	53	33	14	9	1	-	-
	-	1		Other	-	-	1	-	-	-	-	-	-
Evangeline	818	585	17.0	All	4	115	197	149	84	32	4	-	-
	480	382		White	-	65	132	110	55	17	3	-	-
	326	203		Black	4	50	65	39	29	15	1	-	-
	12	-		Other	-	-	-	-	-	-	-	-	-
Franklin	11	323	14.7	All	4	64	117	84	41	10	3	-	-
	6	184		White	-	29	59	58	31	5	2	-	-
	5	139		Black	4	35	58	26	10	5	1	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-

Live Births by Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 1998													
			Residence										
					Age in Years								
Parish	Total by Occurrence	Total by Residence	Rate*	Race	Less than 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk
Grant	-	256	13.6	All	1	52	84	69	41	9	-	-	-
	-	217		White	1	42	68	61	38	7	-	-	-
	-	37		Black	-	9	16	7	3	2	-	-	-
	-	2		Other	-	1	-	1	-	-	-	-	-
Iberia	1134	1265	17.3	All	6	290	381	294	201	82	11	-	-
	615	722		White	1	127	193	201	144	48	8	-	-
	493	515		Black	5	159	177	84	55	32	3	-	-
	26	28		Other	-	4	11	9	2	2	-	-	-
Iberville	471	509	16.6	All	2	98	152	133	77	39	7	1	-
	67	215		White	-	28	59	70	37	20	1	-	-
	403	293		Black	2	70	93	63	39	19	6	1	-
	1	1		Other	-	-	-	-	1	-	-	-	-
Jackson	1	210	13.5	All	-	36	76	59	26	10	3	-	-
	1	147		White	-	24	50	45	20	7	1	-	-
	-	63		Black	-	12	26	14	6	3	2	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Jefferson	7831	6469	14.3	All	18	905	1768	1693	1389	591	104	1	-
	5020	4075		White	4	410	958	1164	1017	448	74	-	-
	2457	2053		Black	14	462	748	419	287	98	24	1	-
	354	341		Other	-	33	62	110	85	45	6	-	-
Jeff. Davis	362	492	15.6	All	8	96	163	129	64	25	7	-	-
	294	372		White	6	59	118	108	58	18	5	-	-
	63	112		Black	2	35	44	17	5	7	2	-	-
	5	8		Other	-	2	1	4	1	-	-	-	-
Lafayette	5277	2964	16.1	All	6	406	760	818	626	299	48	1	-
	3617	1990		White	3	186	434	621	491	220	34	1	-
	1573	917		Black	3	218	313	182	121	68	12	-	-
	87	57		Other	-	2	13	15	14	11	2	-	-
Lafourche	1057	1305	14.8	All	7	238	384	352	223	90	11	-	-
	954	1005		White	5	141	286	301	192	69	11	-	-
	82	260		Black	2	87	90	39	23	19	-	-	-
	21	40		Other	-	10	8	12	8	2	-	-	-
LaSalle	45	199	14.1	All	-	39	73	49	31	7	-	-	-
	28	176		White	-	34	59	46	31	6	-	-	-
	17	23		Black	-	5	14	3	-	1	-	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Lincoln	580	549	13.2	All	-	97	184	146	80	34	8	-	-
	274	252		White	-	27	66	91	43	20	5	-	-
	301	287		Black	-	70	117	54	34	9	3	-	-
	5	10		Other	-	-	1	1	3	5	-	-	-
Livingston	2	1386	15.9	All	3	208	448	429	208	78	12	-	-
	1	1280		White	2	177	405	412	201	72	11	-	-
	1	100		Black	1	31	40	15	6	6	1	-	-
	-	6		Other	-	-	3	2	1	-	-	-	-

Live Births by Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 1998													
			Residence										
					Age in Years								
Parish	Total by Occurrence	Total by Residence	Rate*	Race	Less than 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk
Madison	8	216	16.5	All	3	58	73	49	25	7	1	-	-
	2	53		White	1	8	16	19	9	-	-	-	-
	6	163		Black	2	50	57	30	16	7	1	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Morehouse	471	510	16.2	All	5	133	187	114	49	19	3	-	-
	275	209		White	-	45	76	53	27	7	1	-	-
	195	301		Black	5	88	111	61	22	12	2	-	-
	1	-		Other	-	-	-	-	-	-	-	-	-
Natchitoches	612	604	16.0	All	5	115	214	155	71	39	5	-	-
	329	312		White	3	42	99	102	40	25	1	-	-
	280	288		Black	2	73	113	53	31	13	3	-	-
	3	4		Other	-	-	2	-	-	1	1	-	-
Orleans	9056	7573	16.2	All	42	1558	2415	1635	1182	602	133	6	-
	2434	1302		White	-	68	195	345	401	233	56	4	-
	6362	6062		Black	42	1480	2177	1210	729	355	67	2	-
	260	209		Other	-	10	43	80	52	14	10	-	-
Ouachita	3830	2319	15.7	All	13	421	759	617	353	138	15	2	1
	2148	1265		White	1	158	367	404	239	85	10	1	-
	1653	1035		Black	12	262	389	206	112	48	5	1	-
	29	19		Other	-	1	3	7	2	5	-	-	1
Plaquemines	6	366	13.9	All	1	57	128	91	63	24	2	-	-
	1	244		White	-	31	88	59	46	19	1	-	-
	4	103		Black	1	24	36	25	12	4	1	-	-
	1	19		Other	-	2	4	7	5	1	-	-	-
Pointe Coupee	4	331	14.2	All	3	69	105	76	50	24	3	1	-
	-	176		White	2	26	49	51	34	12	1	1	-
	4	155		Black	1	43	56	25	16	12	2	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Rapides	3176	1928	15.2	All	10	425	606	456	285	124	21	1	-
	2055	1111		White	1	167	351	293	203	81	14	1	-
	1091	795		Black	9	256	252	154	78	39	7	-	-
	30	22		Other	-	2	3	9	4	4	-	-	-
Red River	-	123	12.5	All	1	24	54	22	10	12	-	-	-
	-	65		White	1	11	29	11	5	8	-	-	-
	-	58		Black	-	13	25	11	5	4	-	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Richland	1	368	17.6	All	2	89	151	78	32	12	4	-	-
	1	186		White	-	35	75	46	19	10	1	-	-
	-	179		Black	2	54	76	31	11	2	3	-	-
	-	3		Other	-	-	-	1	2	-	-	-	-
Sabine	6	302	12.7	All	2	68	107	68	40	14	2	1	-
	1	215		White	-	49	72	50	31	11	1	1	-
	5	72		Black	2	18	27	17	6	2	-	-	-
	-	15		Other	-	1	8	1	3	1	1	-	-

Live Births by Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 1998

Parish	Total by Occurrence	Total by Residence	Rate*	Race	Residence: Age in Years: Less than 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk
St. Bernard	6	859	12.8	All	1	118	246	248	169	66	11	-	-
	3	753		White	1	91	217	214	160	59	11	-	-
	3	83		Black	-	24	25	26	3	5	-	-	-
	-	23		Other	-	3	4	8	6	2	-	-	-
St. Charles	3	713	14.8	All	2	97	180	191	158	79	6	-	-
	1	487		White	-	44	97	151	130	60	5	-	-
	2	215		Black	2	53	82	35	26	16	1	-	-
	-	11		Other	-	-	1	5	2	3	-	-	-
St. Helena	-	79	8.2	All	-	13	27	17	18	3	1	-	-
	-	37		White	-	4	19	4	9	1	-	-	-
	-	42		Black	-	9	8	13	9	2	1	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
St. James	1	313	14.7	All	3	57	84	78	60	25	4	2	-
	1	118		White	1	5	18	52	29	13	-	-	-
	-	195		Black	2	52	66	26	31	12	4	2	-
	-	-		Other	-	-	-	-	-	-	-	-	-
St. John	428	708	16.8	All	6	131	191	196	116	63	5	-	-
	248	353		White	-	43	84	117	67	39	3	-	-
	179	349		Black	6	88	106	79	46	23	1	-	-
	1	6		Other	-	-	1	-	3	1	1	-	-
St.Landry	1261	1457	17.7	All	10	314	454	346	219	96	17	1	-
	717	733		White	2	116	219	213	130	45	7	1	-
	540	720		Black	8	198	233	132	88	51	10	-	-
	4	4		Other	-	-	2	1	1	-	-	-	-
St. Martin	3	752	15.9	All	1	153	230	183	122	51	12	-	-
	2	425		White	-	63	133	119	77	28	5	-	-
	1	317		Black	1	90	96	58	44	22	6	-	-
	-	10		Other	-	-	1	6	1	1	1	-	-
St. Mary	643	929	16.2	All	8	184	325	234	118	47	12	1	-
	373	558		White	1	82	193	162	81	32	6	1	-
	241	332		Black	6	94	120	58	34	15	5	-	-
	29	39		Other	1	8	12	14	3	-	1	-	-
St. Tammany	3429	2606	14.2	All	8	285	576	717	654	314	50	2	-
	2732	2201		White	2	182	450	629	608	282	46	2	-
	661	370		Black	6	101	124	78	32	26	3	-	-
	36	35		Other	-	2	2	10	14	6	1	-	-
Tangipahoa	1548	1616	16.9	All	12	332	593	344	234	92	9	-	-
	897	947		White	3	134	320	245	176	62	7	-	-
	641	654		Black	9	197	272	94	52	28	2	-	-
	10	15		Other	-	1	1	5	6	2	-	-	-
Tensas	-	94	15.1	All	-	27	36	18	10	3	-	-	-
	-	26		White	-	5	6	9	5	1	-	-	-
	-	68		Black	-	22	30	9	5	2	-	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-

Live Births by Race, Age of Mother, Parish of Occurrence, and Parish of Residence Louisiana, 1998

Parish	Total by Occurrence	Total by Residence	Rate*	Race	Residence: Age in Years: Less than 15	15-19	20-24	25-29	30-34	35-39	40-44	45 +	Unk
Terrebonne	2327	1693	16.3	All	1	350	532	398	279	117	16	-	-
	1433	1179		White	1	220	349	302	209	87	11	-	-
	718	367		Black	-	80	146	68	49	20	4	-	-
	176	147		Other	-	50	37	28	21	10	1	-	-
Union	1	320	14.5	All	-	52	122	86	39	14	7	-	-
	-	209		White	-	31	76	58	26	12	6	-	-
	1	111		Black	-	21	46	28	13	2	1	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Vermilion	196	824	16.1	All	2	165	264	201	131	50	10	1	-
	101	631		White	1	112	196	174	102	39	7	-	-
	87	173		Black	1	53	66	20	22	8	2	1	-
	8	20		Other	-	-	2	7	7	3	1	-	-
Vernon	516	945	18.2	All	1	136	376	256	130	41	5	-	-
	354	715		White	-	94	287	197	103	32	2	-	-
	123	186		Black	1	37	74	45	20	6	3	-	-
	39	44		Other	-	5	15	14	7	3	-	-	-
Washington	52	681	15.4	All	5	147	264	162	73	27	3	-	-
	23	414		White	3	70	158	120	49	14	-	-	-
	29	266		Black	2	77	106	42	23	13	3	-	-
	-	1		Other	-	-	-	-	1	-	-	-	-
Webster	721	591	13.9	All	7	117	200	138	80	44	5	-	-
	393	349		White	2	53	126	86	50	30	2	-	-
	327	241		Black	5	64	74	51	30	14	3	-	-
	1	1		Other	-	-	-	1	-	-	-	-	-
W. Baton Rouge	-	337	16.3	All	1	52	93	101	67	21	1	1	-
	-	198		White	-	26	47	62	49	13	-	1	-
	-	138		Black	1	26	46	39	17	8	1	-	-
	-	1		Other	-	-	-	-	1	-	-	-	-
West Carroll	2	159	13.0	All	2	36	48	48	19	5	1	-	-
	2	118		White	-	28	33	42	13	2	-	-	-
	-	40		Black	2	8	14	6	6	3	1	-	-
	-	1		Other	-	-	1	-	-	-	-	-	-
W. Feliciana	-	114	8.5	All	-	20	29	31	23	8	3	-	-
	-	69		White	-	8	16	23	15	5	2	-	-
	-	45		Black	-	12	13	8	8	3	1	-	-
	-	-		Other	-	-	-	-	-	-	-	-	-
Winn	2	210	11.7	All	1	45	81	47	24	11	1	-	-
	1	134		White	-	19	50	35	20	9	1	-	-
	1	73		Black	1	25	29	12	4	2	-	-	-
	-	3		Other	-	1	2	-	-	-	-	-	-
Out of State	810	1137		All	2	113	300	358	231	102	24	4	3
	379	961		White	-	86	261	297	198	91	21	4	3
	425	157		Black	2	26	38	52	26	10	3	-	-
	6	19		Other	-	1	1	9	7	1	-	-	-

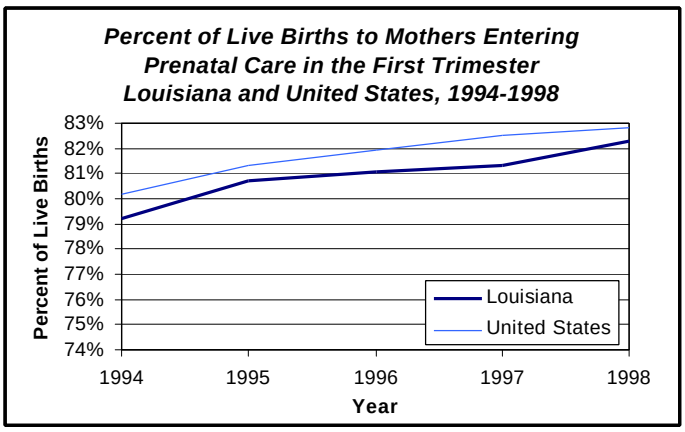
*Rate per 1,000 population

Source: Louisiana State Center for Health Statistics

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. It has been estimated that for every dollar spent on prenatal care, up to $3.38 can be saved in direct medical costs.[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) first enter the health care system during 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 has been steadily increasing. Louisiana, while consistently below the national percentage, has shown similar improvement.



Sources: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1998 data)

In the following table, percentages of live births to mothers utilizing prenatal care are furnished to allow comparison of Louisiana with neighboring states. (As previously noted, preliminary NCHS 1998 numbers are used for cross-state comparisons.) In 1998, 82.2% of Louisiana residents who gave birth entered prenatal care in the first trimester, as compared with 82.8% of mothers in the United States. Louisiana ranked 33rd in the nation and second among neighboring states.

Percent of Live Births to Mothers Receiving Prenatal Care in the First Trimester of Pregnancy Louisiana, Neighboring States, and United States, 1998

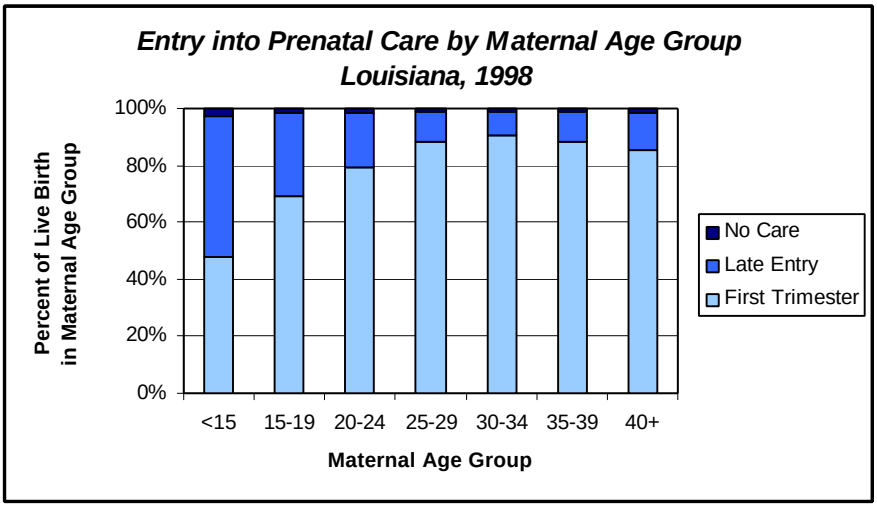
State	Percent of Mothers	National Ranking
Alabama	82.4	30
Arkansas	77.8	47
Louisiana	82.2	33
Mississippi	80.6	41
Texas	79.3	44
United States	82.8	-

Source: National Center for Health Statistics (preliminary 1998 data)

[2] Institute of Medicine. (1994). "Prenatal Care and Low Birthweight: Effects on Health Care Expenditures." In: *Preventing Low Birthweight.* (pp. 212-37) Washington, DC: National Academy Press.

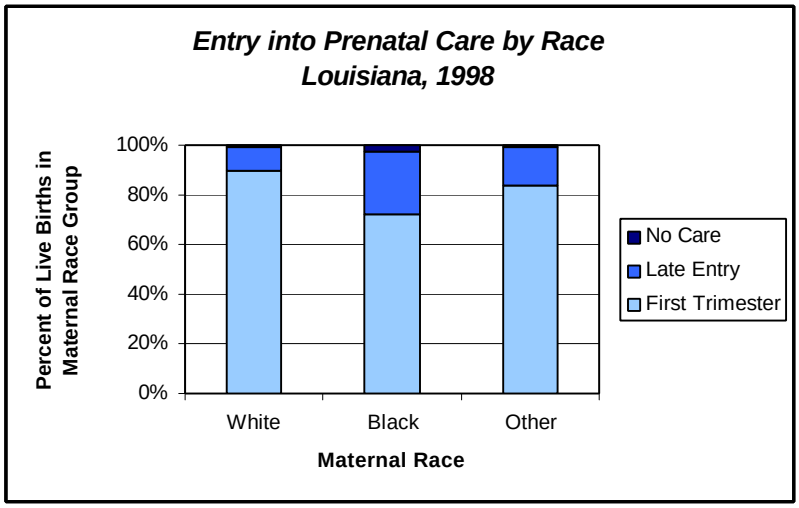
[3] Fiscella, K. (1995). "Does Prenatal Care Improve Birth Outcomes? A Critical Review." *Obstetrics & Gynecology* 85, 468-79.

Less than half (47.5%) of mothers under the age of 15 started prenatal care in the first trimester of pregnancy, and 3.0% of this age group never received any prenatal care. However, entry into care improved with age before leveling off in the mid-thirties.



Source: Louisiana State Center for Health Statistics

Black women entered into prenatal care in a timely manner less frequently than whites and other races. Only 72.1% of black mothers had their first prenatal visit in the first trimester, compared with 89.5% of white mothers. Also, 2.6% of black mothers received no prenatal care, as compared with 0.6% of white mothers.



Source: Louisiana State Center for Health Statistics

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 65,817 Louisiana residents who gave birth in 1998, 76.9% received adequate care.

Percent of Mothers Receiving Adequate* Prenatal Care by Parish Louisiana, 1993-1998						
Parish	***1993***	***1994***	***1995***	***1996***	***1997***	***1998***
Louisiana	70.1	71.8	73.5	74.8	75.4	76.9
Acadia	65.7	52.6	50.3	57.7	59.6	69.7
Allen	63.0	64.7	63.3	70.4	67.2	74.9
Ascension	76.3	78.3	79.5	79.1	83.0	82.7
Assumption	75.7	75.2	75.5	78.2	82.7	80.9
Avoyelles	57.1	61.1	64.4	70.0	69.7	69.7
Beauregard	58.5	60.7	60.7	63.5	70.8	70.3
Bienville	57.0	58.1	61.5	57.2	64.5	69.0
Bossier	77.2	77.2	79.5	77.9	76.3	80.8
Caddo	69.1	70.4	71.0	69.5	68.0	72.9
Calcasieu	76.3	78.3	80.0	79.6	81.6	81.6
Caldwell	71.6	75.4	80.7	79.4	79.0	78.8
Cameron	79.8	81.5	88.6	84.3	84.0	83.3
Catahoula	73.5	71.0	74.3	65.7	73.3	68.3
Claiborne	53.4	58.1	67.4	63.4	61.0	58.0
Concordia	67.1	65.9	72.7	73.7	65.7	64.1
DeSoto	68.1	69.2	68.8	66.8	68.1	76.0
East Baton Rouge	72.0	74.5	78.3	75.7	75.4	75.3
East Carroll	57.2	56.1	55.9	69.6	60.3	58.3
East Feliciana	63.7	65.8	67.7	60.1	70.8	72.6
Evangeline	65.1	66.2	62.7	69.7	69.0	66.1
Franklin	66.2	71.7	74.6	65.4	70.3	66.5
Grant	63.0	72.4	77.0	79.8	79.5	80.0
Iberia	64.6	66.5	66.9	61.2	61.1	57.5
Iberville	67.9	73.0	75.4	74.4	78.1	73.2
Jackson	47.2	47.9	57.8	59.1	57.8	58.3
Jefferson	77.9	79.4	81.6	61.1	83.6	82.2
Jefferson Davis	59.5	58.6	62.6	83.3	62.6	60.1
Lafayette	76.2	79.0	72.5	74.1	80.3	85.1
Lafourche	74.6	78.0	83.4	79.8	78.2	84.5
LaSalle	66.8	68.7	65.7	72.9	71.1	80.1
Lincoln	43.9	36.7	48.6	49.9	49.2	48.3
Livingston	83.3	79.4	79.7	83.9	85.2	84.5
Madison	52.1	57.1	56.8	64.4	55.5	59.4
Morehouse	53.2	55.6	50.0	50.6	49.8	49.2
Natchitoches	61.4	60.7	73.7	72.0	68.9	75.5
Orleans	65.0	66.7	65.8	71.4	74.7	76.1
Ouachita	66.3	74.2	78.3	78.0	77.1	79.8
Plaquemines	75.4	71.7	74.0	79.0	74.8	77.9
Pointe Coupee	68.2	69.1	76.5	76.5	75.9	75.5
Rapides	62.7	68.0	70.3	74.7	74.5	75.5
Red River	71.2	69.0	74.5	58.0	64.7	71.3
Richland	70.3	63.9	68.5	75.7	72.8	78.8
Sabine	66.2	64.4	72.9	69.8	73.1	76.8
St. Bernard	82.0	85.5	86.7	88.5	89.9	88.4
St. Charles	78.0	80.7	80.0	84.9	82.6	83.6
St. Helena	81.7	73.8	68.4	71.6	86.9	88.6
St. James	63.0	65.2	65.5	68.2	63.3	68.9
St. John	64.9	64.7	62.9	72.1	65.1	64.6

Percent of Mothers Receiving Adequate* Prenatal Care by Parish Louisiana, 1993-1998						
Parish	***1993***	***1994***	***1995***	***1996***	***1997***	***1998***
St. Landry	54.5	57.4	62.0	66.1	63.6	66.0
St. Martin	65.9	70.6	70.2	70.8	73.2	77.6
St. Mary	75.1	77.3	76.9	79.0	75.7	79.0
St. Tammany	84.5	85.8	87.3	86.0	85.8	85.7
Tangipahoa	79.1	72.8	78.8	79.8	87.5	90.9
Tensas	71.1	72.2	67.6	60.0	60.7	50.5
Terrebonne	70.2	71.0	75.9	76.1	73.4	79.8
Union	56.3	59.7	66.1	63.1	66.7	66.2
Vermilion	71.6	76.7	77.1	81.0	84.0	83.7
Vernon	68.6	75.7	76.8	76.9	77.7	77.1
Washington	57.4	62.0	65.6	78.4	74.1	76.3
Webster	72.5	69.7	72.6	76.9	68.9	69.2
West Baton Rouge	71.7	71.0	79.3	74.9	78.6	82.6
West Carroll	59.9	64.9	64.4	67.9	58.6	57.9
West Feliciana	68.1	65.1	75.8	63.3	71.3	84.8
Winn	47.5	49.1	51.4	64.0	57.4	63.6

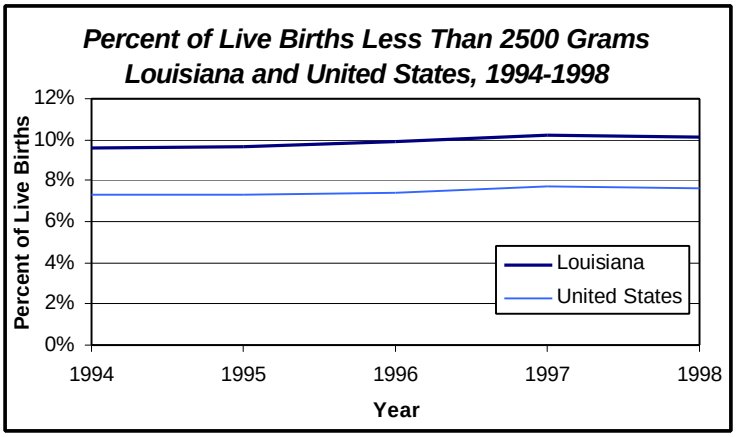
*According to modified Kessner index

Source: Louisiana State Center for Health Statistics

Low Birthweight

A low birthweight infant is defined as an infant weighing less than 2500 grams (5 pounds, 8 ounces) at birth. Low birthweight is a major cause of infant mortality, with more than three-quarters of infant deaths caused by babies being born too small or too early.[4] Low birthweight contributes significantly to later childhood handicap as well. Low birthweight infants are more likely to have brain damage, lung and liver disease, subnormal growth, developmental problems, and other adverse health conditions. The effects of low birthweight follow infants throughout life, as they are more likely to have mild learning disorders, attention disorders, and developmental impairments.[5] A higher proportion of low birthweight infants also go on to be enrolled in special education classes than their normal birthweight counterparts.[6]

In 1998, 6,768 of the infants born to Louisiana residents weighed less than 2500 grams (5lbs, 8oz). This represents 10.1% of the live births that year, as compared with 7.6% of the babies born in the United States who were low birthweight. With the exception of 1998, both Louisiana and the United States have seen an increase in the percentage of infants with low birthweight in recent years.



Sources: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1998 data)

In the following table, percentages are furnished to provide an idea of Louisiana's standing among the neighboring states in terms of low birthweight infants. (As previously noted, preliminary NCHS 1998 percentages are used for cross-state comparisons.) In 1998, Louisiana had the highest percentage of low birthweight babies in the nation.

[4] Paneth NS. (1995) "The Problem of Low Birth Weight." In *The Future of Children, Low Birth Weight* (19-34).

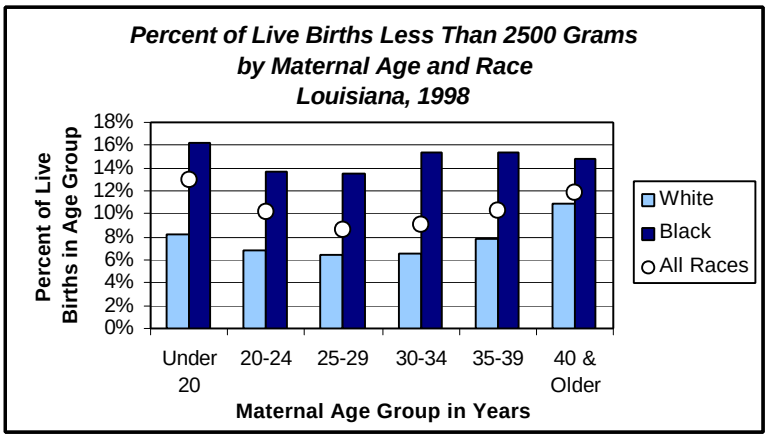
[5] Institute of Medicine. (1985). "The Significance of Low Birthweight." In *Preventing Low Birthweight.* (21-45). Washington, DC: National Academy Press.

[6] Hack M, Klein NK, Taylor HG. "Long-Term Developmental Outcomes of Low Birth Weight Infants." *The Future of Children, Low Birth Weight* 1995;5:19-34.

Percent of Live Births Less Than 2500 Grams Louisiana, Neighboring States, and United States, 1998		
State	**Percent of Live Births**	**National Ranking**
Alabama	9.3	4
Arkansas	8.9	6
Louisiana	10.1	1
Mississippi	10.1	1
Texas	7.4	30
United States	7.6	-

Source: National Center for Health Statistics (preliminary 1998 data)

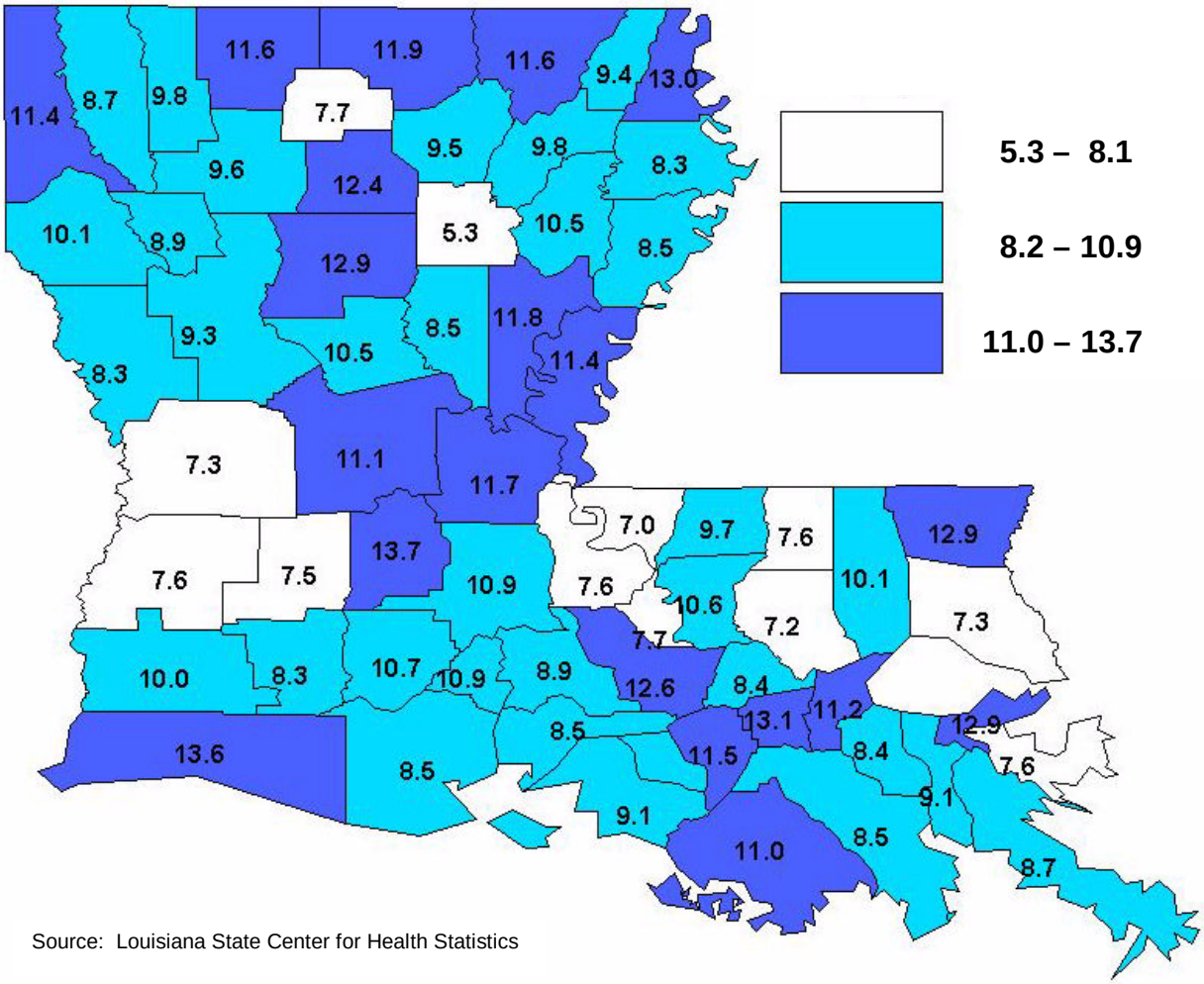
Blacks gave birth to infants of low birthweight more than twice as frequently as white women did, at 14.6% compared with 7.0% of live births. This discrepancy held true for all age groups. Examination of births by age groups found mothers under 20 had the highest percentage of low birthweight babies (12.9% of live births).



Source: Louisiana State Center for Health Statistics

In 1998 Evangeline parish had the highest percentage of low birthweight babies at 13.7% of live births, and Caldwell parish had the lowest at 5.3% of live births. The map on the following page shows the percent of live births that are low birthweight babies in each parish.

Percent Low Birthweight (<5lbs. 8oz.) Louisiana, 1998



Source: Louisiana State Center for Health Statistics

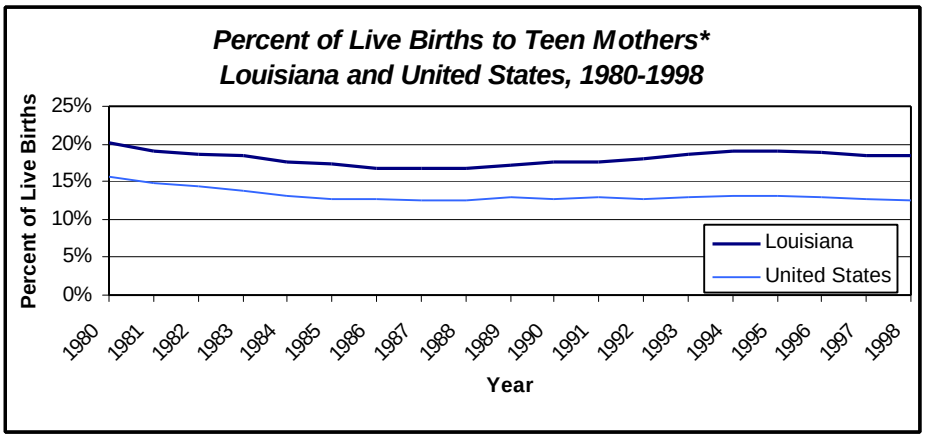
Infants weighing less than 1500 grams (3lbs, 5oz) at birth are considered to be very low birthweight and are at much greater risk of mortality and long-term disability. The risk of early death for very low birthweight infants is about 65 times that of infants who weigh at least 1500 grams.[7] In 1998, 2.1% of infants born to Louisiana residents weighed less than 1500 grams, as compared with 1.5% of infants born to United States residents. As with infants weighing less than 2500 grams, there were demographic differences in the mothers giving birth to very low birthweight infants. Black mothers gave birth to very low birthweight infants three times as frequently as white mothers did, at 3.5% compared with 1.2% of live births. Infants born to young mothers of all races were also more frequently very lowbirth weight. Of all infants born to mothers under the age of 20, 2.5% were very low birthweight.

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

Teen Births

Despite an overall decrease in teen birth rates over the last two decades, teenage pregnancy continues to be a problem for the nation. Teen mothers are less likely to receive adequate prenatal care and are more likely to give birth to low birthweight infants.[8] These infants are also more likely to be hospitalized and go on to have childhood health problems. National statistics report that most births to teens (76%) occur outside marriage[9] and 25% of teenage mothers go on to have 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. In 1993, of the 3.8 million mothers aged 15-44 who received welfare or Aid to Families with Dependent Children (AFDC), 55% first became mothers as teenagers.[11] In fiscal year 1995, Louisiana spent over $875 million on programs that support families begun by teens (in the form of AFDC, Food Stamps, WIC, and Medicaid). In contrast, Louisiana spent only $5.7 million on programs designed to prevent teenage pregnancy.[12]

In 1998, there were 12,294 live births to Louisiana residents under the age of 20. This number comprised 18.4% of the total live births to Louisiana residents in 1998, as compared with 12.5% at the national level.



*Teen mothers are less than 20 years old at the time of birth

Sources: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1998 data)

[8] Lewis CT, Mathews TJ, Heuser RL. *Prenatal Care in the United States, 1980-94* National Center for Health Statistics. Vital Health Stat 21(54). 1996.

[9] Ventura SJ, Martin JA, Mathews TJ, Clarke SC. "Advance Report of Final Natality Statistics, 1994." *Monthly Vital Statistics Report*; vol 44 no 11, supp. Hyattsville, Maryland: National Center for Health Statistics. 1996.

[10] The Alan Guttmacher Institute. *Sex and America's Teenagers* 1994.

[11] The Alan Guttmacher Institute. *Issues in Brief.* February 1995.

[12] Kreutzer, Tracy A. *Expenditures and Investments: Adolescent Pregnancy in the South* Volume II. Southern Regional Project on Infant Mortality. Washington, DC. 1997.

In the table below, percentages are furnished to provide an idea of Louisiana's standing among the neighboring states in terms of births to teenagers. (As noted previously, preliminary NCHS 1998 numbers are used to facilitate cross-state comparisons.) Louisiana has consistently ranked near the top of the states in terms of percentage of live births to teens, and 1998 was no exception. Louisiana had the third highest percentage of live births to teens in the nation, one of the four southern states at the top of the list.

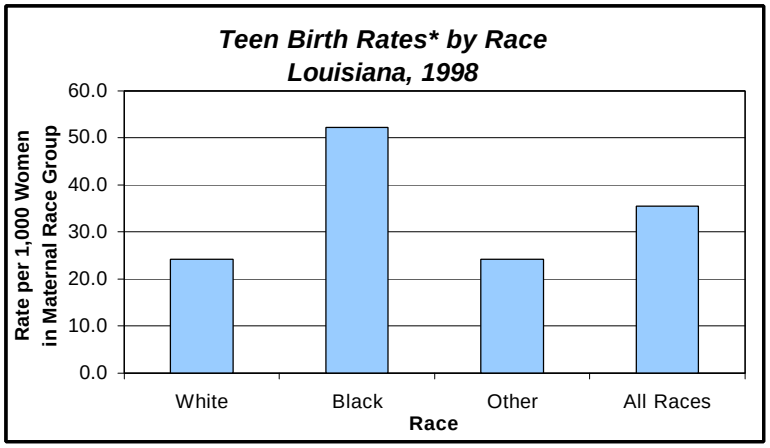
Percent of Live Births to Teens*
Louisiana, Neighboring States, and United States, 1998

State	Percent	National Ranking
Alabama	17.1	5
Arkansas	18.6	2
Louisiana	18.4	3
Mississippi	20.0	1
Texas	16.1	8
United States	12.5	-

*Teen mothers are less than 20 years old at the time of birth

Source: National Center for Health Statistics (preliminary 1998 data)

To make comparisons of births among teens in different race groups meaningful, 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 race group. This method of calculating teen birth rates controls for differences in the proportion of women in the race groups, and is the method used by the National Center for Health Statistics (NCHS).[13] In Louisiana, the birth rate for black teenagers in 1998 was more than twice that of white teenagers, at 52.4 compared with 24.1 births per 1,000 women in the respective age and race groups.



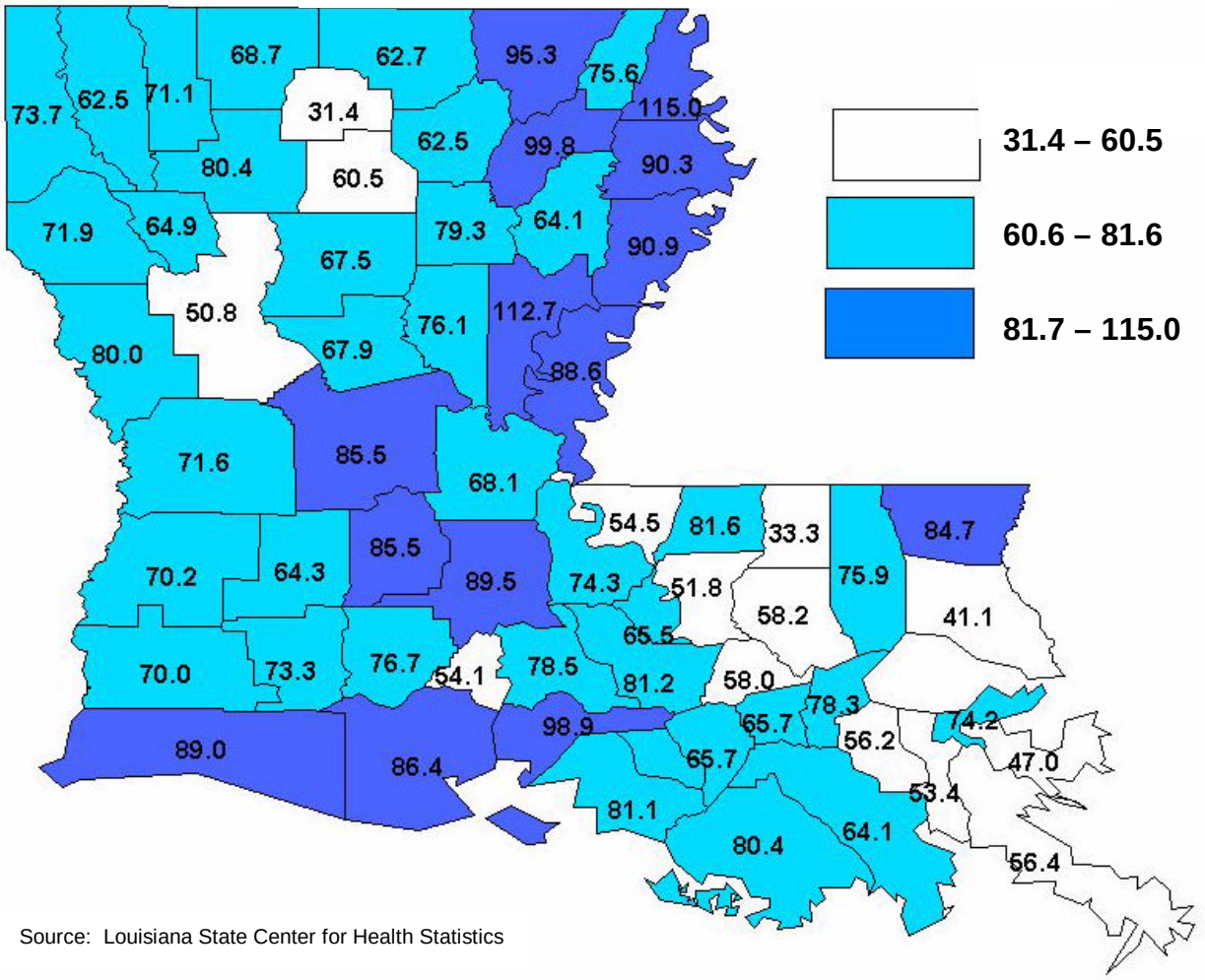
*Teen mothers are less than 20 years old at the time of birth

Source: Louisiana State Center for Health Statistics (preliminary 1998 data)

There is considerable variation in teenage birth rates by parish. In 1998 East Carroll parish had the highest rate at 115.0 births per 1,000 women aged 15-19. This is over three times the rate of Lincoln, the parish with the lowest rate at 31.4 births per 1,000 women aged 15-19. The following map shows teenage birth rates in Louisiana by parish.

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

Teen Birth Rate
Per 1,000 Women Ages 15-19
Louisiana, 1998



Source: Louisiana State Center for Health Statistics

Percent of Total Live Births to Teenagers 15-19 Years of Age Louisiana, 1994-1998															
Parish	15-17 Years					18-19 Years					15-19 Years*				
	94	95	96	97	98	94	95	96	97	98	94	95	96	97	98
Louisiana	8	7	7	7	6	11	11	11	11	11	19	19	18	18	18
Acadia	8	8	7	9	7	13	12	13	13	13	21	21	20	22	20
Allen	9	8	6	5	4	14	13	11	15	14	23	21	17	21	18
Ascension	6	5	6	5	5	8	10	9	9	9	15	15	15	13	14
Assumption	10	6	6	9	7	11	12	14	14	14	21	18	20	23	20
Avoyelles	9	7	7	10	8	13	13	11	13	11	22	20	19	22	18
Beauregard	7	4	5	9	5	11	13	12	12	14	19	17	18	20	19
Bienville	7	5	10	10	12	10	14	10	14	12	17	19	21	24	23
Bossier	7	5	6	6	5	10	10	10	11	12	16	16	16	17	17
Caddo	8	8	8	7	6	11	12	11	12	13	20	19	18	19	20
Calcasieu	7	7	6	7	6	11	12	13	12	12	18	19	19	19	18
Caldwell	4	11	10	6	11	11	11	12	16	14	16	22	22	20	25
Cameron	6	5	9	12	11	9	9	21	10	15	14	14	30	22	26
Catahoula	9	11	6	8	9	13	14	20	18	18	22	25	26	26	27
Claiborne	10	10	13	9	10	14	8	9	11	10	24	19	22	20	20
Concordia	16	14	10	11	14	16	18	20	16	12	33	32	30	26	26
DeSoto	7	9	8	7	7	12	14	13	14	12	19	24	21	20	18
E. Baton Rouge	6	6	6	6	6	9	9	10	9	10	15	14	16	14	15
E. Carroll	12	14	7	17	12	16	13	8	6	17	28	27	16	22	29
E. Feliciana	9	5	9	8	5	11	11	24	16	17	19	16	33	24	22
Evangeline	10	8	10	11	7	9	14	14	12	13	19	23	24	22	20
Franklin	11	9	8	7	7	15	14	16	16	13	25	23	24	22	20
Grant	6	6	9	5	8	14	16	14	15	13	20	22	23	20	20
Iberia	8	9	10	8	9	11	15	11	12	14	19	24	21	20	23
Iberville	6	7	8	7	6	10	11	13	11	13	16	18	21	16	19
Jackson	10	7	8	7	5	14	14	12	9	12	25	22	20	15	17
Jefferson	6	5	7	6	5	9	10	12	9	9	15	15	20	15	14
Jefferson Davis	8	8	6	9	7	12	13	9	12	13	20	21	15	21	20
Lafayette	5	5	5	5	5	8	10	9	9	9	13	15	15	14	14
Lafourche	6	8	6	7	6	10	10	11	11	12	15	18	17	17	18
LaSalle	8	9	7	8	8	13	10	12	10	12	20	19	19	18	20
Lincoln	8	8	7	7	8	10	9	7	13	10	18	17	14	19	18
Livingston	5	6	5	6	6	11	11	11	10	9	16	18	16	17	15
Madison	12	14	10	11	13	14	13	17	13	13	27	27	27	21	27
Morehouse	14	15	10	13	10	16	15	13	15	14	30	30	24	27	26
Natchitoches	10	9	8	9	6	14	15	14	12	13	23	24	21	21	19
Orleans	10	10	9	8	8	13	12	12	12	12	23	22	20	20	21
Ouachita	10	7	8	7	6	13	12	13	11	12	23	19	21	17	18
Plaquemines	10	6	10	8	5	9	11	12	12	11	19	17	21	19	16
Pointe Coupee	7	7	10	8	8	13	12	10	14	13	20	19	19	21	21
Rapides	8	7	7	9	8	12	14	14	12	14	20	21	21	21	22
Red River	10	6	9	11	7	17	13	15	9	13	27	19	24	18	20
Richland	13	14	10	12	11	16	15	14	12	14	29	29	23	23	24
Sabine	9	8	9	6	6	13	16	13	13	16	23	24	22	19	23
St. Bernard	5	6	6	4	5	10	10	11	10	8	15	15	17	14	14
St. Charles	5	7	4	6	5	9	6	9	10	9	14	13	13	15	14
St. Helena	8	8	10	7	10	13	15	17	14	6	20	23	27	20	16
St. James	6	8	7	5	6	10	9	8	9	12	16	18	15	14	18
St. John	7	6	6	7	6	9	11	12	12	12	16	17	18	18	19
St. Landry	9	7	8	9	8	12	12	13	12	14	21	19	22	21	22
St. Martin	8	6	8	8	8	12	12	12	11	13	20	18	20	19	20
St. Mary	8	9	9	8	7	13	14	14	14	13	21	23	23	22	20
St. Tammany	5	5	5	5	3	8	8	6	8	8	12	13	11	12	11
Tangipahoa	9	8	9	10	7	14	14	14	14	13	24	22	23	24	21
Tensas	13	11	12	19	5	16	19	17	14	23	28	31	30	32	29
Terrebonne	7	7	8	9	8	11	11	11	13	13	18	18	20	21	21
Union	13	8	8	10	6	10	13	15	9	10	23	22	22	19	16
Vermilion	6	7	5	6	8	12	12	12	11	13	18	19	18	16	20
Vernon	4	4	4	4	4	11	12	12	13	10	15	16	16	17	14
Washington	12	11	7	9	9	12	19	11	17	13	24	30	18	25	22
Webster	10	8	6	10	6	13	14	11	14	14	23	22	17	23	20
W. Baton Rouge	7	4	10	8	4	7	12	15	12	11	13	16	25	19	15
W. Carroll	7	7	9	5	11	10	13	11	15	11	16	21	20	20	23
W. Feliciana	8	10	7	8	6	10	5	17	9	11	17	15	23	17	18
Winn	10	12	7	10	9	11	13	13	16	13	21	25	19	26	21

*May not equal sum of "15-17 Years" and "18-19 Years" due to rounding

Source: Louisiana State Center for Health Statistics

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1998				
Parish	**Total Births**	**Percent with Adequate Prenatal Care***	**Percent Low Weight Births (<5lbs, 8oz)**	**% Births to Mothers Under Age 20 Years**
Louisiana	66,773	76.9	10.1	18.4
White	37,910	85.5	7.0	12.8
Black	27,424	65.1	14.6	26.5
Other	1,439	78.6	8.1	11.5
Acadia	926	69.7	10.7	20.5
White	681	77.7	8.4	15.9
Black	244	46.9	17.2	33.6
Other	1	100.0	-	-
Allen	322	74.9	7.5	18.0
White	244	77.6	6.6	17.6
Black	69	66.7	11.6	18.8
Other	9	66.7	-	22.2
Ascension	1,218	82.7	8.4	14.0
White	900	88.2	7.8	9.0
Black	307	66.6	10.1	28.7
Other	11	90.9	9.1	9.1
Assumption	305	80.9	11.5	20.7
White	175	85.9	8.0	14.9
Black	129	74.0	16.3	27.9
Other	1	100.0	-	100.0
Avoyelles	573	69.7	11.7	18.8
White	354	79.3	8.2	16.1
Black	216	53.7	17.6	22.7
Other	3	100.0	-	66.7
Beauregard	475	70.3	7.6	19.2
White	408	72.0	6.6	18.6
Black	59	56.9	15.3	25.4
Other	8	75.0	-	-
Bienville	197	69.0	9.6	23.4
White	100	77.0	4.0	13.0
Black	97	60.8	15.5	34.0
Other	-	-	-	-
Bossier	1,376	80.8	8.7	17.4
White	987	88.2	6.6	14.3
Black	359	60.5	15.3	25.9
Other	30	83.3	-	16.7
Caddo	3,614	72.9	11.4	20.1
White	1,601	88.8	7.7	12.2
Black	1,969	59.9	14.5	26.8
Other	44	79.6	6.8	9.1
Calcasieu	2,797	81.6	10.0	18.1
White	1,943	86.6	7.8	14.5
Black	833	69.9	15.1	26.8
Other	21	81.0	14.3	14.3
Caldwell	132	78.8	5.3	25.0
White	102	83.3	2.9	20.6
Black	30	63.3	13.3	40.0
Other	-	-	-	-

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1998				
Parish	Total Births	Percent with Adequate Prenatal Care*	Percent Low Weight Births (<5lbs, 8oz)	% Births to Mothers Under Age 20 Years
Cameron	110	83.3	13.6	26.4
White	103	85.2	14.6	24.3
Black	7	57.1	-	57.1
Other	-	-	-	-
Catahoula	169	68.3	11.8	28.4
White	112	77.3	11.6	21.4
Black	57	50.9	12.3	42.1
Other	-	-	-	-
Claiborne	199	58.0	11.6	20.1
White	78	78.7	9.0	17.9
Black	120	44.4	13.3	21.7
Other	1	100.0	-	0.0
Concordia	298	64.1	11.4	27.5
White	124	82.1	6.5	14.5
Black	173	50.9	15.0	34.1
Other	1	100.0	-	0.0
DeSoto	385	76.0	10.1	18.7
White	187	87.2	7.5	15.0
Black	197	65.1	12.7	22.3
Other	1	100.0	-	0.0
E. Baton Rouge	6,058	75.3	10.6	15.4
White	2,829	89.3	5.6	7.9
Black	3067	62.3	15.5	23.7
Other	162	75.2	4.9	5.6
East Carroll	177	58.3	13.0	32.2
White	40	75.0	10.0	12.5
Black	137	53.3	13.9	38.0
Other	-	-	-	-
E. Feliciana	290	72.6	9.7	22.8
White	133	88.0	6.0	15.0
Black	156	59.1	12.8	29.5
Other	1	100.0	-	0.0
Evangeline	585	66.1	13.7	20.3
White	382	73.0	9.7	17.0
Black	203	53.0	21.2	26.6
Other	-	-	-	-
Franklin	323	66.5	10.5	21.1
White	184	78.5	7.1	15.8
Black	139	50.7	15.1	28.1
Other	-	-	-	-
Grant	256	80.0	10.5	20.7
White	217	82.9	10.6	19.8
Black	37	62.2	10.8	24.3
Other	2	100.0	-	50.0
Iberia	1,265	57.5	8.5	23.4
White	722	70.1	6.5	17.7
Black	515	39.9	11.7	31.8
Other	28	57.1	3.6	14.3

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1998				
Parish	**Total Births**	**Percent with Adequate Prenatal Care***	**Percent Low Weight Births (<5lbs, 8oz)**	**% Births to Mothers Under Age 20 Years**
Iberville	509	73.2	12.6	19.6
White	215	88.2	9.3	13.0
Black	293	62.2	15.0	24.6
Other	1	100.0	-	0.0
Jackson	210	58.3	12.4	17.1
White	147	68.8	10.9	16.3
Black	63	33.9	15.9	19.0
Other	-	-	-	-
Jefferson	6,469	82.2	9.1	14.3
White	4,075	88.5	6.4	10.2
Black	2,053	70.6	14.1	23.2
Other	341	77.2	11.4	9.7
Jefferson Davis	492	60.1	8.3	21.1
White	372	69.0	6.2	17.5
Black	112	30.6	15.2	33.0
Other	8	50.0	12.5	25.0
Lafayette	2,964	85.1	10.9	13.9
White	1,990	92.0	7.0	9.5
Black	917	70.2	19.6	24.1
Other	57	86.0	5.3	3.5
Lafourche	1,305	84.5	8.5	18.8
White	1,005	85.6	7.7	14.5
Black	260	79.7	12.3	34.2
Other	40	87.5	5.0	25.0
LaSalle	199	80.1	8.5	19.6
White	176	86.1	7.4	19.3
Black	23	34.8	17.4	21.7
Other	-	-	-	-
Lincoln	549	48.3	7.7	17.7
White	252	67.9	4.4	10.7
Black	287	30.6	10.5	24.4
Other	10	66.7	10.0	0.0
Livingston	1,386	84.5	7.2	15.2
White	1,280	85.7	6.2	14.0
Black	100	69.0	21.0	32.0
Other	6	100.0	-	0.0
Madison	216	59.4	8.3	28.2
White	53	77.4	3.8	17.0
Black	163	53.5	9.8	31.9
Other	-	-	-	-
Morehouse	510	49.2	11.6	27.1
White	209	62.8	8.1	21.5
Black	301	39.8	14.0	30.9
Other	-	-	-	-
Natchitoches	604	75.5	9.3	19.9
White	312	85.3	7.1	14.4
Black	288	64.9	11.5	26.0
Other	4	75.0	25.0	-

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1998				
Parish	**Total Births**	**Percent with Adequate Prenatal Care***	**Percent Low Weight Births (<5lbs, 8oz)**	**% Births to Mothers Under Age 20 Years**
Orleans	7,573	76.1	12.9	21.1
White	1,302	91.0	6.7	5.2
Black	6,062	72.7	14.4	25.1
Other	209	85.0	8.1	4.8
Ouachita	2,319	79.8	9.5	18.7
White	1,265	88.3	5.9	12.6
Black	1,035	68.8	13.9	26.5
Other	19	100.0	5.3	5.3
Plaquemines	366	77.9	8.7	15.8
White	244	83.8	8.2	12.7
Black	103	66.0	11.7	24.3
Other	19	68.4	-	10.5
Pointe Coupee	331	75.5	7.6	21.8
White	176	88.4	3.4	15.9
Black	155	60.8	12.3	28.4
Other	-	-	-	-
Rapides	1,928	75.5	11.1	22.6
White	1,111	84.7	7.5	15.1
Black	795	62.4	16.4	33.3
Other	22	77.3	4.5	9.1
Red River	123	71.3	8.9	20.3
White	65	90.8	7.7	18.5
Black	58	49.1	10.3	22.4
Other	-	-	-	-
Richland	368	78.8	9.8	24.7
White	186	85.8	9.7	18.8
Black	179	72.3	10.1	31.3
Other	3	32.3	-	0.0
Sabine	302	76.8	8.3	23.2
White	215	81.5	7.0	22.8
Black	72	61.1	12.5	27.8
Other	15	85.7	6.7	6.7
St. Bernard	859	88.4	7.6	13.9
White	753	90.6	6.8	12.2
Black	83	69.5	15.7	28.9
Other	23	86.4	4.3	13.0
St. Charles	713	83.6	8.4	13.9
White	487	87.1	7.2	9.0
Black	215	75.1	10.7	25.6
Other	11	100.0	18.2	0.0
St. Helena	79	88.6	7.6	16.5
White	37	89.2	-	10.8
Black	42	88.1	14.3	21.4
Other	-	-	-	-
St. James	313	68.9	13.1	19.2
White	118	78.0	10.2	5.1
Black	195	63.4	14.9	27.7
Other	-	-	-	-

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1998				
Parish	**Total Births**	**Percent with Adequate Prenatal Care***	**Percent Low Weight Births (<5lbs, 8oz)**	**% Births to Mothers Under Age 20 Years**
St. John	708	64.6	11.2	19.4
White	353	73.1	12.2	12.2
Black	349	55.8	10.3	26.9
Other	6	83.3	-	0.0
St. Landry	1,457	66.0	10.9	22.2
White	733	78.2	6.1	16.1
Black	720	53.7	15.7	206.0
Other	4	50.0	25.0	0.0
St. Martin	752	77.6	8.9	20.5
White	425	85.8	7.3	14.8
Black	317	66.4	11.0	28.7
Other	10	90.0	10.0	0.0
St. Mary	929	79.0	9.1	20.7
White	558	86.2	5.9	14.9
Black	332	68.3	15.1	30.1
Other	39	67.6	5.1	23.1
St. Tammany	2,606	85.7	7.3	11.2
White	2,201	88.4	6.4	8.4
Black	370	70.2	13.0	28.9
Other	35	82.9	5.7	5.7
Tangipahoa	1,616	90.9	10.1	21.3
White	947	93.1	6.2	14.5
Black	654	88.0	15.7	31.5
Other	15	80.0	13.3	6.7
Tensas	94	50.5	8.5	28.7
White	26	65.4	-	19.2
Black	68	44.8	11.8	32.4
Other	-	-	-	-
Terrebonne	1,693	79.8	11.0	20.7
White	1,179	81.8	9.0	18.7
Black	367	77.8	19.1	21.8
Other	147	68.8	7.5	34.0
Union	320	66.2	11.9	16.3
White	209	77.7	9.6	14.8
Black	111	43.8	16.2	18.9
Other	-	-	-	-
Vermilion	824	83.7	8.5	20.3
White	631	88.1	6.5	17.9
Black	173	69.4	15.6	31.2
Other	20	70.0	10.0	0.0
Vernon	945	77.1	7.3	14.5
White	715	78.9	6.0	13.1
Black	186	67.4	10.8	20.4
Other	44	88.6	13.6	11.4
Washington	681	76.3	12.9	22.3
White	414	85.6	7.0	17.6
Black	266	61.4	21.8	29.7
Other	1	100.0	100.0	0.0

Births by Parish, Race of Mother, and Selected Characteristics Louisiana, 1998				
Parish	**Total Births**	**Percent with Adequate Prenatal Care***	**Percent Low Weight Births (<5lbs, 8oz)**	**% Births to Mothers Under Age 20 Years**
Webster	591	69.2	9.8	21.0
White	349	81.2	6.3	15.8
Black	241	51.3	14.9	28.6
Other	1	100.0	-	0.0
W. Baton Rouge	337	82.6	7.7	15.7
White	198	89.2	4.5	13.1
Black	138	73.0	12.3	19.6
Other	1	100.0	-	0.0
West Carroll	159	57.9	9.4	23.9
White	118	60.2	5.9	23.7
Black	40	50.0	20.0	25.0
Other	1	100.0	-	0.0
W. Feliciana	114	84.8	7.0	17.5
White	69	94.0	5.8	11.6
Black	45	71.1	8.9	26.7
Other	-	-	-	-
Winn	210	63.6	12.9	21.9
White	134	69.2	9.0	14.2
Black	73	53.5	17.8	35.6
Other	3	50.0	66.7	33.3

*According to modified Kessner index

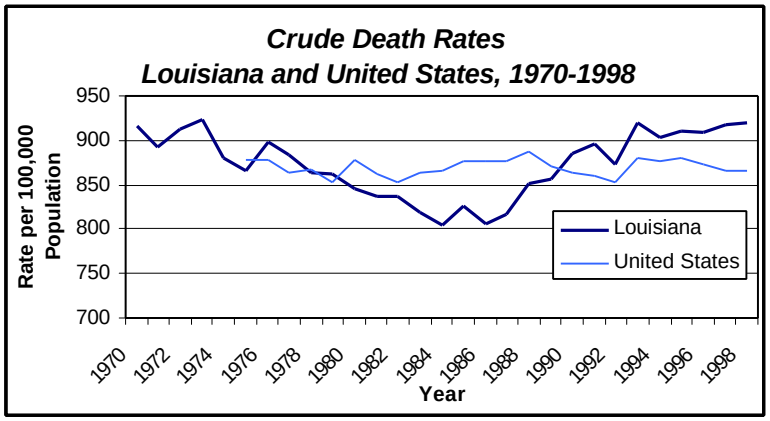
Source: Louisiana State Center for Health Statistics

C. DEATHS

Death Counts and Mortality Rates (Crude and Age-Adjusted)

There were 40,209 deaths among Louisiana residents in 1998, representing a slight increase from 39,917 deaths in 1997. Of total deaths, there were approximately equal numbers of males (50.3%) and females (49.7%). In terms of race, 1998 deaths included 27,187 white, 12,810 black, and 212 other race deaths. On three death certificates, race was not recorded. Of total resident deaths, 19.5%, 47.4%, and 21.9% occurred among those aged 45-64 years, 65-84 years, and 85 years and older, respectively. Age information was not recorded in 13 deaths.

Crude 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 slightly from 917.3 per 100,000 population in 1997 to 920.3 in 1998. In comparison, the United States rate was 864.7 in 1997 and 865.0 in 1998. In Louisiana, the crude death rate has been steadily increasing since the mid-1980s. In 1990 the crude death rate in Louisiana leapt beyond the United States rate and has maintained a wide margin ever since.



Sources: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary US 1998 data)

Crude (or unadjusted) death rates give us an estimate of the overall mortality for a population, because they measure deaths in the population as a whole. Crude rates, however, ignore idiosyncrasies in the composition of a population, such as the unusually large number of elderly people who live in parts of Florida. Population idiosyncrasies like this can cause an increase in the crude death rate because of the large number of people in the population who are at high risk of dying because of advancing age.

Adjusted rates (also called standardized rates) are derived from statistical procedures that adjust for differences in population composition, such as age, race, or sex, which can increase or decrease the likelihood of death in one or more of the populations being considered. Age is the most common factor for which adjustment is done, since it is the most significant characteristic related to death and disease.

Because age-adjusted death rates control for the variations in age structures of populations, they make comparisons between mortality rates meaningful. However, the age-adjusted mortality measure is not a true estimation of the death rate, as the crude mortality measure is, and it should not be used in comparisons with crude mortality rates. Differences seen in age-

adjusted rates in two different populations may reflect an actual difference in death rates in the two populations, or may be due to other factors, such as race or sex, which were not taken into account when the adjustments for age were made.

In the table below, crude and age-adjusted mortality rates (adjusted to 1940 United States standard population) are furnished to provide an idea of Louisiana's standing among the neighboring states. (Note: Although Louisiana's final 1998 rates are available and are reported in this document, National Center for Health Statistics preliminary 1998 data for all states have been used in the table to permit comparison with surrounding states.) While all neighboring states' rates are above the national figure, Louisiana's age-adjusted mortality rate lies within the range of the neighboring states' rates.

Mortality Rates
Louisiana, Neighboring States, and United States, 1998

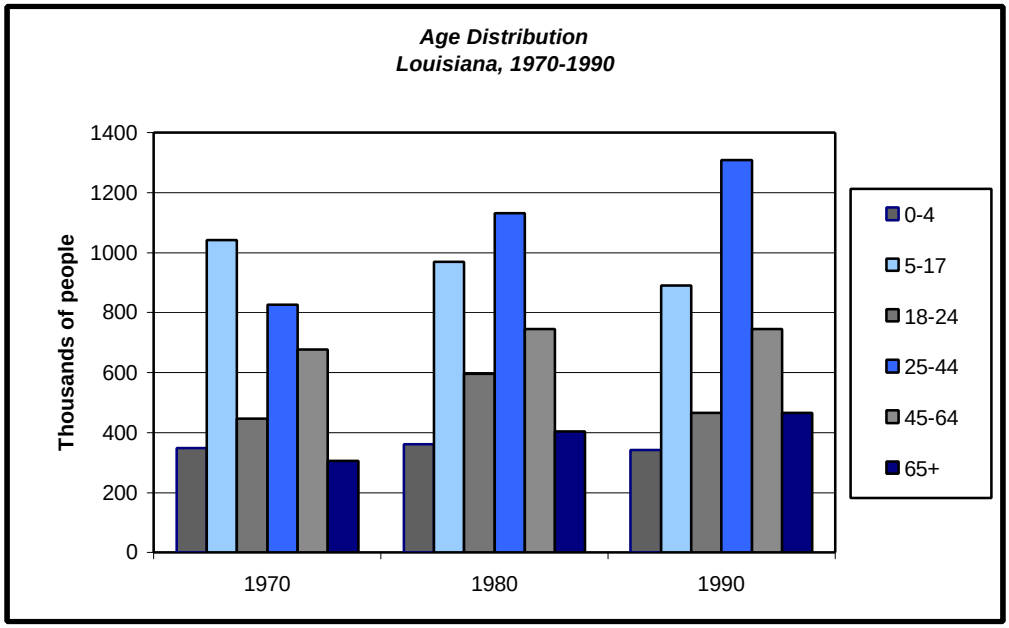
State	Crude Rate*	Age-Adjusted Rate**
Alabama	1,009.4	565.7
Arkansas	1,084.5	551.4
Louisiana	924.5	576.3
Mississippi	1,012.2	606.9
Texas	721.1	474.6
United States	865.0	470.8

*Rates per 100,000 1998 population

**Rates per 100,000 1940 U.S. standard population

Source: National Center for Health Statistics (preliminary 1998 data)

Some of the difference between Louisiana's crude death rate and the United States rate was affected by the age distribution of the population. The graph below demonstrates how age distributions of populations change over time and highlights the importance of using age-adjusted rates to make comparisons among populations.



Source: Louisiana State Center for Health Statistics

The increase in the crude death rate seen in Louisiana since the mid-1980's is attributable at least in part to the age distribution of the population given in the previous figure. The large 5-24 year old population in 1970 has become older over time and constituted a large 25-44 year old population in 1990. Simply stated, the population of Louisiana in 1990 was older than the state population was in 1970.

As expected, the greatest proportion of deaths occurred in those of the 65-84 and the 85 and older age groups. Death counts for males exceeded those for females in the younger and middle age groups, and were therefore well below female counts in the eldest age group.

Number of Deaths by Age Group and Sex
Louisiana, 1998

	Age Group								
Sex	**Under 5**	**5-14**	**15-24**	**25-44**	**45-64**	**65-84**	**85+**	**Unknown**	**Total**
Male	412	79	572	1,897	4,755	9,762	2,734	10	20,221
Female	334	72	187	975	3,071	9,282	6,064	3	19,988
Total	746	151	759	2,872	7,826	19,044	8,798	13	40,209

Source: Louisiana State Center for Health Statistics

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1998

				Age in Years													
Parish	**Total**	**Rate***	**Race Sex**	**Less than 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.**
Louisiana	40209	9.2	ALL	606	140	71	80	317	442	959	1913	3004	4822	8319	10725	8798	13
	13418		WM	125	35	13	25	110	154	323	639	1068	1802	3284	3830	2001	9
	13769		WF	93	20	16	26	56	52	137	340	585	1175	2483	4107	4676	3
	6680		BM	205	44	23	16	125	180	342	572	802	1049	1339	1260	722	1
	6130		BF	178	41	18	12	23	53	139	348	529	758	1170	1490	1371	-
	123		OM	3	-	1	1	2	1	12	9	12	22	27	22	11	-
	89		OF	2	-	-	-	1	2	6	5	8	16	16	16	17	-
Acadia	557	9.6	ALL	3	2	-	1	4	5	13	25	28	74	122	152	128	-
	226		WM	2	1	-	1	2	4	9	12	11	39	52	63	30	-
	233		WF	1	1	-	-	1	-	1	7	5	24	48	70	75	-
	43		BM	-	-	-	-	1	-	1	3	7	6	9	11	5	-
	55		BF	-	-	-	-	-	1	2	3	5	5	13	8	18	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Allen	237	9.8	ALL	1	1	-	-	2	-	6	9	13	31	50	66	58	-
	81		WM	-	-	-	-	1	-	2	3	6	14	22	21	12	-
	96		WF	-	-	-	-	1	-	1	2	1	14	11	28	38	-
	25		BM	-	1	-	-	-	-	3	1	1	3	5	9	2	-
	27		BF	1	-	-	-	-	-	-	3	2	-	8	7	6	-
	3		OM	-	-	-	-	-	-	-	-	2	-	1	-	-	-
	5		OF	-	-	-	-	-	-	-	-	1	-	3	1	-	-
Ascension	485	6.8	ALL	21	1	-	2	7	4	24	29	40	62	82	131	82	-
	191		WM	4	-	-	1	4	2	10	14	14	24	37	62	19	-
	179		WF	6	-	-	1	2	2	9	9	11	14	36	44	45	-
	58		BM	4	-	-	-	1	-	3	2	11	13	4	13	7	-
	56		BF	7	1	-	-	-	-	2	4	4	11	5	11	11	-
	1		OM	-	-	-	-	-	-	-	-	-	-	-	1	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Assumption	195	8.5	ALL	4	-	-	1	1	3	6	9	17	21	39	45	49	-
	65		WM	2	-	-	1	-	2	3	3	6	5	14	17	12	-
	61		WF	-	-	-	-	-	1	2	-	2	6	9	16	25	-
	39		BM	1	-	-	-	1	-	1	3	6	6	10	5	6	-
	30		BF	1	-	-	-	-	-	-	3	3	4	6	7	6	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1998

Parish	Total	Rate*	Race Sex	Age in Years: Less than 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.
Avoyelles	446	10.7	ALL	8	1	-	1	1	4	7	10	27	59	84	122	122	-
	181		WM	3	1	-	1	-	2	4	6	10	27	39	58	30	-
	173		WF	2	-	-	-	-	2	-	3	6	11	29	46	74	-
	47		BM	2	-	-	-	1	-	3	1	7	12	9	8	4	-
	43		BF	1	-	-	-	-	-	-	-	4	8	6	10	14	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		OF	-	-	-	-	-	-	-	-	-	1	1	-	-	-
Beauregard	317	10.2	ALL	2	-	-	-	2	3	3	15	24	42	79	87	60	-
	138		WM	1	-	-	-	2	2	2	10	12	19	40	41	9	-
	140		WF	1	-	-	-	-	-	1	3	9	16	30	36	44	-
	20		BM	-	-	-	-	-	-	-	-	1	6	5	6	2	-
	19		BF	-	-	-	-	-	1	-	2	2	1	4	4	5	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bienville	215	13.7	ALL	1	-	-	1	2	3	2	7	17	23	40	62	57	-
	55		WM	-	-	-	-	-	1	2	3	6	8	13	14	8	-
	70		WF	-	-	-	1	-	-	-	1	3	2	12	21	30	-
	56		BM	1	-	-	-	2	2	-	1	5	10	9	18	8	-
	34		BF	-	-	-	-	-	-	-	2	3	3	6	9	11	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bossier	716	7.6	ALL	12	1	-	3	5	4	11	26	48	86	155	211	154	-
	288		WM	6	-	-	2	1	2	5	12	22	43	82	78	35	-
	285		WF	2	1	-	1	1	2	3	4	11	28	51	96	85	-
	66		BM	-	-	-	-	3	-	1	4	8	10	9	18	13	-
	75		BF	4	-	-	-	-	-	2	5	7	5	12	19	21	-
	1		OM	-	-	-	-	-	-	-	-	-	-	1	-	-	-
	1		OF	-	-	-	-	-	-	-	1	-	-	-	-	-	-
Caddo	2590	10.7	ALL	46	9	4	4	18	21	56	133	192	262	500	719	625	1
	719		WM	5	-	1	2	4	7	17	36	53	77	161	240	115	1
	849		WF	5	1	1	1	4	2	9	20	26	66	125	266	323	-
	507		BM	20	4	1	1	9	10	20	39	70	72	108	90	63	-
	508		BF	16	4	1	-	1	2	9	38	42	46	103	122	124	-
	5		OM	-	-	-	-	-	-	-	-	-	1	3	1	-	-
	2		OF	-	-	-	-	-	-	1	-	1	-	-	-	-	-
Calcasieu	1581	8.7	ALL	27	9	3	3	7	15	33	70	119	209	326	428	332	-
	615		WM	11	6	-	2	3	8	17	34	54	77	139	177	87	-
	576		WF	5	1	1	1	1	1	5	12	25	67	104	168	185	-
	191		BM	4	1	2	-	3	6	7	16	23	31	46	32	20	-
	198		BF	6	1	-	-	-	-	4	8	17	34	37	51	40	-
	1		OM	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Caldwell	132	12.4	ALL	-	-	-	3	1	2	1	3	11	17	27	32	35	-
	57		WM	-	-	-	1	-	2	1	2	7	10	11	14	9	-
	52		WF	-	-	-	2	1	-	-	-	2	5	11	13	18	-
	10		BM	-	-	-	-	-	-	-	-	-	2	4	1	3	-
	12		BF	-	-	-	-	-	-	-	1	1	-	1	4	5	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	1	-	-	-	-	-
Cameron	65	7.2	ALL	-	1	-	1	-	1	2	5	2	6	16	15	16	-
	31		WM	-	1	-	-	-	1	-	3	1	3	10	9	3	-
	29		WF	-	-	-	1	-	-	2	-	1	3	5	6	11	-
	3		BM	-	-	-	-	-	-	-	1	-	-	-	-	2	-
	2		BF	-	-	-	-	-	-	-	1	-	-	1	-	-	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Catahoula	114	10.6	ALL	1	-	-	-	1	1	1	2	10	11	27	32	28	-
	47		WM	-	-	-	-	1	-	1	1	4	6	13	14	7	-
	40		WF	-	-	-	-	-	-	-	1	3	2	10	10	14	-
	13		BM	-	-	-	-	-	1	-	-	-	3	2	3	4	-
	14		BF	1	-	-	-	-	-	-	-	3	-	2	5	3	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1998

Parish	Total	Rate*	Race Sex	Age in Years: Less than 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.
Claiborne	210	12.3	ALL	3	2	-	1	-	2	6	10	13	22	42	46	63	-
	61		WM	-	-	-	-	-	1	1	4	4	11	15	11	14	-
	58		WF	-	-	-	-	-	-	-	1	1	-	12	17	27	-
	46		BM	2	-	-	1	-	1	4	3	7	3	8	8	9	-
	45		BF	1	2	-	-	-	-	1	2	1	8	7	10	13	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Concordia	232	10.9	ALL	2	1	-	-	-	4	3	7	14	26	49	75	50	1
	74		WM	1	-	-	-	-	-	1	3	6	11	23	17	11	1
	74		WF	1	-	-	-	-	2	-	-	2	8	14	26	21	-
	38		BM	-	1	-	-	-	-	1	4	3	2	7	15	5	-
	44		BF	-	-	-	-	-	1	1	-	3	5	5	16	13	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	2		OF	-	-	-	-	-	1	-	-	-	-	-	1	-	-
DeSoto	330	13.3	ALL	5	1	2	-	2	2	7	12	23	39	65	88	84	-
	87		WM	-	-	1	-	-	-	2	2	4	16	23	22	17	-
	96		WF	1	-	-	-	-	1	-	2	3	14	18	28	29	-
	75		BM	4	1	-	-	1	1	3	6	9	7	12	18	13	-
	72		BF	-	-	1	-	1	-	2	2	7	2	12	20	25	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E. Baton Rouge	3095	7.8	ALL	71	11	6	5	33	47	108	179	250	341	586	815	642	1
	859		WM	7	2	1	1	6	11	11	35	60	109	200	276	139	1
	955		WF	6	-	2	1	7	1	10	24	43	59	167	308	327	-
	689		BM	24	3	1	1	16	26	61	80	101	101	107	105	63	-
	578		BF	34	6	2	2	4	9	22	40	46	68	110	123	112	-
	8		OM	-	-	-	-	-	-	2	-	-	2	1	3	-	-
	6		OF	-	-	-	-	-	-	2	-	-	2	1	-	1	-
East Carroll	106	12.1	ALL	-	-	-	-	-	3	3	3	12	14	24	21	26	-
	27		WM	-	-	-	-	-	-	-	2	-	2	14	4	5	-
	15		WF	-	-	-	-	-	1	-	-	1	-	2	3	8	-
	42		BM	-	-	-	-	-	2	3	1	9	8	5	8	6	-
	22		BF	-	-	-	-	-	-	-	-	2	4	3	6	7	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
E. Feliciana	218	10.5	ALL	4	-	-	-	3	5	5	10	16	35	48	44	48	-
	74		WM	-	-	-	-	1	2	-	2	7	13	22	18	9	-
	44		WF	-	-	-	-	1	1	1	1	4	4	7	7	18	-
	51		BM	3	-	-	-	1	1	4	5	2	9	11	9	6	-
	49		BF	1	-	-	-	-	1	-	2	3	9	8	10	15	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Evangeline	328	9.5	ALL	4	1	1	-	3	5	5	10	23	38	76	98	64	-
	137		WM	1	-	-	-	3	2	3	3	6	15	36	49	19	-
	122		WF	1	1	-	-	-	-	-	1	6	10	26	39	38	-
	36		BM	1	-	1	-	-	1	1	3	7	5	9	4	4	-
	33		BF	1	-	-	-	-	2	1	3	4	8	5	6	3	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Franklin	280	12.8	ALL	2	2	1	1	2	1	2	15	14	33	60	80	67	-
	95		WM	2	-	-	-	1	-	-	5	5	12	29	24	17	-
	98		WF	-	-	-	1	1	-	-	2	6	8	18	32	30	-
	47		BM	-	1	1	-	-	1	1	5	-	9	6	11	12	-
	40		BF	-	1	-	-	-	-	1	3	3	4	7	13	8	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Grant	184	9.8	ALL	4	-	-	-	2	-	5	3	10	28	34	50	48	-
	84		WM	3	-	-	-	2	-	3	1	7	14	19	19	16	-
	70		WF	-	-	-	-	-	-	-	1	1	9	9	23	27	-
	14		BM	-	-	-	-	-	-	-	-	1	2	4	5	2	-
	16		BF	1	-	-	-	-	-	2	1	1	3	2	3	3	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1998

Parish	Total	Rate*	Race Sex	Age in Years: Less than 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.
Iberia	582	8.0	ALL	10	5	2	1	4	6	10	21	44	62	130	148	139	-
	178		WM	1	2	1	-	3	2	3	6	13	18	48	47	34	-
	216		WF	2	1	1	-	-	2	1	3	14	18	41	60	73	-
	80		BM	4	1	-	1	-	1	2	6	11	12	17	13	12	-
	104		BF	3	1	-	-	1	1	3	6	6	14	23	27	19	-
	1		OM	-	-	-	-	-	-	1	-	-	-	-	-	-	-
	3		OF	-	-	-	-	-	-	-	-	-	-	1	1	1	-
Iberville	309	10.1	ALL	4	1	-	1	2	4	15	18	30	39	60	74	61	-
	89		WM	-	-	-	-	1	1	4	6	7	14	22	21	13	-
	73		WF	-	-	-	-	-	1	-	-	4	4	13	23	28	-
	97		BM	3	1	-	1	-	2	9	8	15	18	15	13	12	-
	49		BF	1	-	-	-	1	-	2	4	4	3	10	16	8	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	-	-	1	-	-
Jackson	195	12.5	ALL	1	-	-	1	1	1	4	6	15	19	40	53	54	-
	71		WM	-	-	-	-	1	-	1	3	6	14	15	17	14	-
	65		WF	-	-	-	1	-	1	-	-	3	2	11	21	26	-
	34		BM	1	-	-	-	-	-	2	1	2	3	10	7	8	-
	25		BF	-	-	-	-	-	-	1	2	4	-	4	8	6	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Jefferson	4111	9.1	ALL	53	13	8	5	17	31	102	165	339	487	893	1147	850	1
	1616		WM	15	5	1	1	8	10	39	66	148	207	423	472	220	1
	1749		WF	6	2	2	1	4	5	18	43	93	155	329	537	554	-
	376		BM	20	5	3	2	3	16	24	35	58	65	73	51	21	-
	325		BF	11	1	2	1	1	-	14	18	39	52	59	80	47	-
	29		OM	1	-	-	-	1	-	7	2	1	5	6	5	1	-
	16		OF	-	-	-	-	-	-	-	1	-	3	3	2	7	-
Jefferson Davis	344	10.9	ALL	6	1	-	-	6	2	6	16	17	30	76	106	78	-
	152		WM	3	1	-	-	2	1	2	8	9	16	44	50	16	-
	129		WF	3	-	-	-	1	-	-	1	4	8	16	44	52	-
	30		BM	-	-	-	-	2	1	3	5	3	4	5	4	3	-
	33		BF	-	-	-	-	1	-	1	2	1	2	11	8	7	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lafayette	1298	7.0	ALL	37	7	-	1	4	16	27	79	110	138	283	312	284	-
	463		WM	8	1	-	-	1	6	17	32	45	51	106	122	74	-
	501		WF	7	3	-	-	1	3	2	17	24	43	92	133	176	-
	171		BM	9	1	-	1	2	5	7	21	20	24	46	22	13	-
	156		BF	13	2	-	-	-	2	1	8	18	20	39	32	21	-
	4		OM	-	-	-	-	-	-	-	-	2	-	-	2	-	-
	3		OF	-	-	-	-	-	-	-	1	1	-	-	1	-	-
Lafourche	678	7.7	ALL	7	1	5	-	6	8	11	29	47	100	145	167	152	-
	303		WM	2	-	-	-	2	4	3	24	20	47	78	81	42	-
	283		WF	4	-	1	-	1	1	5	5	18	34	48	71	95	-
	41		BM	-	-	2	-	3	2	1	-	6	14	6	5	2	-
	46		BF	1	1	2	-	-	-	1	-	3	5	11	10	12	-
	4		OM	-	-	-	-	-	1	1	-	-	-	2	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	-	-	-	1	-
LaSalle	156	11.1	ALL	1	1	1	-	2	1	1	3	9	17	33	39	48	-
	59		WM	-	1	-	-	-	-	1	2	6	5	15	18	11	-
	86		WF	1	-	1	-	1	1	-	-	2	10	13	21	36	-
	5		BM	-	-	-	-	1	-	-	-	-	1	3	-	-	-
	5		BF	-	-	-	-	-	-	-	-	1	1	2	-	1	-
	1		OM	-	-	-	-	-	-	-	1	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lincoln	350	8.4	ALL	3	-	-	-	3	4	9	18	20	38	60	116	78	1
	90		WM	2	-	-	-	1	1	1	4	7	12	15	38	9	-
	116		WF	-	-	-	-	1	1	4	1	3	8	19	36	42	1
	78		BM	-	-	-	-	-	2	4	6	6	10	16	21	13	-
	66		BF	1	-	-	-	1	-	-	7	4	8	10	21	14	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1998

Parish	Total	Rate*	Race Sex	Age in Years: Less than 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.
Livingston	530	6.1	ALL	7	2	1	1	10	7	11	24	44	84	121	131	87	-
	268		WM	3	1	-	-	7	4	9	13	27	50	70	56	28	-
	229		WF	4	-	1	1	3	2	2	8	12	30	42	69	55	-
	20		BM	-	1	-	-	-	1	-	1	5	1	5	4	2	-
	13		BF	-	-	-	-	-	-	-	2	-	3	4	2	2	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Madison	135	10.3	ALL	1	1	1	-	1	1	1	4	12	15	30	35	33	-
	27		WM	-	-	-	-	1	-	-	2	4	4	6	5	5	-
	28		WF	-	-	-	-	-	-	-	-	1	2	8	8	9	-
	38		BM	-	-	1	-	-	-	1	1	4	4	10	10	7	-
	42		BF	1	1	-	-	-	1	-	1	3	5	6	12	12	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Morehouse	381	12.1	ALL	11	-	1	-	7	1	9	14	28	39	73	102	96	-
	111		WM	2	-	-	-	3	-	3	5	6	13	24	38	17	-
	117		WF	-	-	1	-	2	1	1	3	8	10	23	30	38	-
	68		BM	4	-	-	-	2	-	3	3	7	7	13	18	11	-
	85		BF	5	-	-	-	-	-	2	3	7	9	13	16	30	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Natchitoches	360	9.5	ALL	6	-	2	-	3	1	7	17	20	49	60	97	98	-
	118		WM	1	-	-	-	1	-	1	5	13	18	23	28	28	-
	109		WF	-	-	1	-	1	-	2	2	-	14	16	34	39	-
	61		BM	3	-	-	-	-	1	2	7	2	11	8	16	11	-
	70		BF	2	-	1	-	1	-	2	2	5	5	13	19	20	-
	1		OM	-	-	-	-	-	-	-	1	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Orleans	5192	11.1	ALL	52	17	8	7	47	94	166	326	439	635	1002	1291	1106	2
	930		WM	1	-	-	-	1	10	21	48	68	108	205	287	180	1
	1043		WF	2	1	-	1	-	-	6	14	25	46	154	332	461	1
	1677		BM	29	11	5	3	41	71	106	170	189	281	343	293	135	-
	1510		BF	20	5	3	3	5	13	31	91	153	197	292	375	322	-
	23		OM	-	-	-	-	-	-	1	3	2	2	6	3	6	-
	9		OF	-	-	-	-	-	-	1	-	2	1	2	1	2	-
Ouachita	1327	9.0	ALL	22	2	9	4	9	8	32	57	85	150	261	381	307	-
	463		WM	2	1	4	2	2	2	12	18	36	64	93	166	61	-
	436		WF	2	-	3	1	2	2	4	14	14	30	87	118	159	-
	208		BM	10	1	2	1	4	3	13	12	21	31	39	48	23	-
	216		BF	8	-	-	-	1	1	3	12	14	24	42	48	63	-
	1		OM	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	3		OF	-	-	-	-	-	-	-	1	-	-	-	1	1	-
Plaquemines	168	6.4	ALL	3	-	1	1	3	4	2	14	20	29	39	33	19	-
	58		WM	-	-	-	-	-	2	1	6	8	7	17	14	3	-
	52		WF	2	-	-	-	2	2	1	4	4	7	10	13	7	-
	25		BM	1	-	-	-	1	-	-	4	7	4	4	1	3	-
	31		BF	-	-	-	1	-	-	-	-	1	10	8	5	6	-
	1		OM	-	-	1	-	-	-	-	-	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Pointe Coupee	248	10.6	ALL	1	4	1	2	1	-	7	8	20	36	40	65	63	-
	74		WM	-	-	-	-	-	-	3	4	7	12	14	20	14	-
	62		WF	-	-	-	-	-	-	-	-	3	8	4	22	25	-
	47		BM	1	2	-	-	1	-	1	2	5	5	16	9	5	-
	65		BF	-	2	1	2	-	-	3	2	5	11	6	14	19	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Rapides	1342	10.6	ALL	20	4	3	4	7	10	27	46	99	156	292	360	314	-
	437		WM	5	1	1	1	3	3	11	13	35	60	113	119	72	-
	508		WF	2	1	-	2	2	1	4	12	20	40	98	159	167	-
	217		BM	11	1	2	-	1	-	7	17	30	34	41	38	35	-
	175		BF	2	1	-	1	1	6	5	4	13	21	39	42	40	-
	3		OM	-	-	-	-	-	-	-	-	1	1	-	1	-	-
	2		OF	-	-	-	-	-	-	-	-	-	-	1	1	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1998

Parish	Total	Rate*	Race Sex	Age in Years: Less than 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.
Red River	117	11.8	ALL	1	-	-	-	-	-	1	5	6	20	26	34	24	-
	32		WM	-	-	-	-	-	-	-	1	2	7	6	9	7	-
	45		WF	1	-	-	-	-	-	-	2	1	4	10	14	13	-
	22		BM	-	-	-	-	-	-	1	1	1	5	7	5	2	-
	18		BF	-	-	-	-	-	-	-	1	2	4	3	6	2	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Richland	269	12.9	ALL	4	-	-	-	4	1	4	18	8	29	48	76	77	-
	99		WM	2	-	-	-	-	1	2	8	3	15	25	25	18	-
	85		WF	-	-	-	-	-	-	2	2	1	4	10	28	38	-
	33		BM	1	-	-	-	4	-	-	3	2	4	7	8	4	-
	51		BF	1	-	-	-	-	-	-	5	2	5	6	15	17	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	1	-	-	-	-
Sabine	244	10.2	ALL	2	2	-	3	3	5	5	4	15	24	57	64	60	-
	95		WM	-	-	-	1	3	4	4	2	6	14	19	27	15	-
	106		WF	1	1	-	1	-	-	1	1	3	7	23	31	37	-
	17		BM	-	-	-	1	-	1	-	1	3	-	6	4	1	-
	25		BF	-	1	-	-	-	-	-	-	3	3	9	2	7	-
	1		OM	1	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Bernard	693	10.3	ALL	3	5	1	1	3	6	10	34	49	79	189	189	124	-
	308		WM	2	4	-	-	3	1	5	16	32	40	90	82	33	-
	347		WF	1	1	1	1	-	1	4	16	15	32	94	98	83	-
	22		BM	-	-	-	-	-	3	-	2	2	4	3	5	3	-
	13		BF	-	-	-	-	-	1	1	-	-	1	2	4	4	-
	3		OM	-	-	-	-	-	-	-	-	-	2	-	-	1	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Charles	294	6.1	ALL	5	2	1	1	4	4	6	15	25	38	76	68	49	-
	104		WM	-	-	-	1	-	4	3	9	10	15	29	23	10	-
	104		WF	2	-	-	-	2	-	2	3	5	10	27	25	28	-
	47		BM	1	1	-	-	2	-	-	1	7	7	17	8	3	-
	38		BF	2	1	1	-	-	-	-	2	3	6	3	12	8	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	1		OF	-	-	-	-	-	-	1	-	-	-	-	-	-	-
St. Helena	91	9.5	ALL	1	1	-	-	-	1	2	4	9	8	16	31	18	-
	22		WM	1	-	-	-	-	1	1	-	2	1	5	8	3	-
	33		WF	-	1	-	-	-	-	1	2	2	3	6	9	9	-
	15		BM	-	-	-	-	-	-	-	1	2	4	2	4	2	-
	21		BF	-	-	-	-	-	-	-	1	3	-	3	10	4	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. James	192	9.0	ALL	2	1	-	-	1	1	4	8	6	31	36	53	49	-
	40		WM	-	-	-	-	-	-	-	3	2	7	12	9	7	-
	64		WF	-	-	-	-	-	-	-	-	-	7	11	20	26	-
	45		BM	1	1	-	-	1	-	1	3	2	12	7	10	7	-
	43		BF	1	-	-	-	-	1	3	2	2	5	6	14	9	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. John	280	6.6	ALL	6	3	1	-	1	2	9	14	38	37	51	74	44	-
	71		WM	-	-	-	-	1	1	3	6	8	15	15	18	4	-
	74		WF	-	1	-	-	-	-	1	4	4	4	14	24	22	-
	78		BM	6	-	1	-	-	1	3	2	17	11	12	18	7	-
	57		BF	-	2	-	-	-	-	2	2	9	7	10	14	11	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Landry	879	10.7	ALL	12	5	-	2	9	11	17	40	56	112	191	228	196	-
	274		WM	-	1	-	-	4	4	7	13	17	46	62	67	53	-
	272		WF	1	-	-	1	1	-	2	7	8	24	53	85	90	-
	183		BM	5	2	-	-	4	6	4	12	23	27	38	41	21	-
	150		BF	6	2	-	1	-	1	4	8	8	15	38	35	32	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1998

Parish	Total	Rate*	Race Sex	Age in Years: Less than 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. Martin	367	7.7	ALL	6	1	1	2	2	8	3	21	25	55	71	98	74	-
	140		WM	-	-	1	-	1	3	1	11	9	26	35	38	15	-
	120		WF	-	-	-	-	-	1	1	3	6	12	20	35	42	-
	60		BM	2	-	-	1	-	1	1	3	5	13	7	16	11	-
	45		BF	3	1	-	1	1	3	-	4	5	4	9	9	5	-
	1		OM	-	-	-	-	-	-	-	-	-	-	-	-	1	-
	1		OF	1	-	-	-	-	-	-	-	-	-	-	-	-	-
St. Mary	477	8.3	ALL	7	-	2	3	4	2	15	25	33	69	97	126	94	-
	160		WM	1	-	1	1	-	1	5	10	11	23	39	46	22	-
	153		WF	1	-	-	1	-	-	2	4	9	18	24	45	49	-
	83		BM	3	-	-	-	2	1	6	7	6	17	16	20	5	-
	74		BF	2	-	1	-	2	-	2	3	6	11	16	14	17	-
	3		OM	-	-	-	1	-	-	-	-	1	-	1	-	-	-
	4		OF	-	-	-	-	-	-	-	1	-	-	1	1	1	-
St. Tammany	1319	7.2	ALL	16	4	1	5	15	15	23	59	95	164	295	342	284	1
	568		WM	6	2	1	2	8	10	17	21	54	74	148	146	78	1
	586		WF	3	1	-	3	4	2	4	25	26	67	108	162	181	-
	83		BM	4	1	-	-	2	3	-	7	8	14	21	13	10	-
	77		BF	3	-	-	-	-	-	2	6	7	7	17	21	14	-
	4		OM	-	-	-	-	1	-	-	-	-	2	1	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Tangipahoa	963	10.1	ALL	14	2	-	1	7	6	17	48	74	123	211	256	201	3
	347		WM	2	1	-	-	4	2	4	13	27	54	87	95	56	2
	359		WF	4	-	-	1	-	1	3	13	25	33	61	106	111	1
	145		BM	5	1	-	-	2	2	9	13	11	21	37	36	8	-
	112		BF	3	-	-	-	1	1	1	9	11	15	26	19	26	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tensas	94	15.1	ALL	1	-	-	-	-	-	2	5	8	9	18	26	25	-
	23		WM	-	-	-	-	-	-	-	2	3	2	7	8	1	-
	20		WF	-	-	-	-	-	-	-	1	1	1	4	2	11	-
	24		BM	-	-	-	-	-	-	1	2	3	2	6	6	4	-
	27		BF	1	-	-	-	-	-	1	-	1	4	1	10	9	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Terrebonne	755	7.3	ALL	16	3	1	1	9	8	23	42	48	111	171	201	121	-
	315		WM	4	2	-	1	5	5	12	23	25	50	88	62	38	-
	284		WF	3	-	-	-	1	-	7	12	11	34	48	101	67	-
	66		BM	3	1	-	-	2	1	4	4	4	7	16	19	5	-
	49		BF	5	-	1	-	-	1	-	1	3	11	11	8	8	-
	23		OM	-	-	-	-	-	-	-	2	3	5	5	6	2	-
	18		OF	1	-	-	-	1	1	-	-	2	4	3	5	1	-
Union	269	12.2	ALL	5	1	-	1	-	1	6	7	16	29	34	99	70	-
	100		WM	1	-	-	1	-	1	3	-	8	11	17	41	17	-
	82		WF	1	-	-	-	-	-	2	-	2	6	11	27	33	-
	43		BM	2	1	-	-	-	-	1	4	5	5	2	15	8	-
	44		BF	1	-	-	-	-	-	-	3	1	7	4	16	12	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Vermilion	504	9.8	ALL	5	1	-	2	4	6	12	17	32	49	98	136	142	-
	222		WM	1	-	-	1	2	6	8	6	18	21	45	64	50	-
	208		WF	1	1	-	1	2	-	4	4	9	17	34	55	80	-
	35		BM	2	-	-	-	-	-	-	4	3	4	13	5	4	-
	37		BF	1	-	-	-	-	-	-	3	2	6	6	12	7	-
	1		OM	-	-	-	-	-	-	-	-	-	1	-	-	-	-
	1		OF	-	-	-	-	-	-	-	-	-	-	-	-	1	-
Vernon	340	6.6	ALL	14	1	-	1	5	8	10	19	19	50	88	74	51	-
	163		WM	6	1	-	1	3	3	7	8	10	24	48	36	16	-
	140		WF	5	-	-	-	1	3	1	8	9	18	33	33	29	-
	19		BM	2	-	-	-	1	1	1	2	-	3	4	3	2	-
	15		BF	1	-	-	-	-	1	-	1	-	3	3	2	4	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	3		OF	-	-	-	-	-	-	1	-	-	2	-	-	-	-

Number and Rate of Deaths by Race, Sex, Age Group, and Parish
Louisiana, 1998

Parish	Total	Rate*	Race Sex	Age in Years: Less than 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	561	12.7	ALL	9	3	1	1	6	11	12	23	38	54	138	139	125	1
	212		WM	2	-	-	-	2	6	5	5	15	28	58	59	32	-
	189		WF	3	-	-	-	-	2	2	4	8	9	44	49	68	-
	83		BM	2	-	-	1	4	2	3	10	9	11	20	14	6	1
	77		BF	2	3	1	-	-	1	2	4	6	6	16	17	19	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Webster	541	12.7	ALL	4	-	2	1	4	1	6	19	31	59	111	167	136	-
	185		WM	1	-	-	-	1	-	4	6	12	25	46	60	30	-
	193		WF	-	-	-	-	3	-	2	2	8	12	31	68	67	-
	85		BM	2	-	1	1	-	1	-	6	7	13	24	17	13	-
	78		BF	1	-	1	-	-	-	-	5	4	9	10	22	26	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W. Baton Rouge	176	8.5	ALL	1	1	-	-	3	4	6	9	21	28	36	42	25	-
	68		WM	-	-	-	-	3	2	2	5	6	9	19	15	7	-
	42		WF	-	1	-	-	-	1	1	1	5	5	7	11	10	-
	35		BM	1	-	-	-	-	-	2	3	5	9	5	6	4	-
	31		BF	-	-	-	-	-	1	1	-	5	5	5	10	4	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Carroll	169	13.8	ALL	1	1	-	-	-	4	4	7	10	15	35	50	42	-
	73		WM	1	-	-	-	-	3	3	4	7	10	16	18	11	-
	69		WF	-	-	-	-	-	1	1	2	-	4	15	24	22	-
	13		BM	-	-	-	-	-	-	-	1	2	-	-	3	7	-
	14		BF	-	1	-	-	-	-	-	-	1	1	4	5	2	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
W. Feliciana	80	5.9	ALL	1	-	-	-	1	1	4	3	11	7	15	22	15	-
	25		WM	1	-	-	-	-	1	-	1	5	3	4	8	2	-
	15		WF	-	-	-	-	-	-	-	1	2	1	3	5	3	-
	25		BM	-	-	-	-	1	-	3	1	3	3	6	5	3	-
	15		BF	-	-	-	-	-	-	1	-	1	-	2	4	7	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Winn	182	10.1	ALL	4	1	-	-	2	2	-	8	5	19	40	54	47	-
	62		WM	1	-	-	-	1	-	-	3	2	7	17	19	12	-
	62		WF	-	-	-	-	1	1	-	2	1	4	14	16	23	-
	28		BM	1	-	-	-	-	-	-	2	2	3	4	9	7	-
	30		BF	2	1	-	-	-	1	-	1	-	5	5	10	5	-
	-		OM	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-		OF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

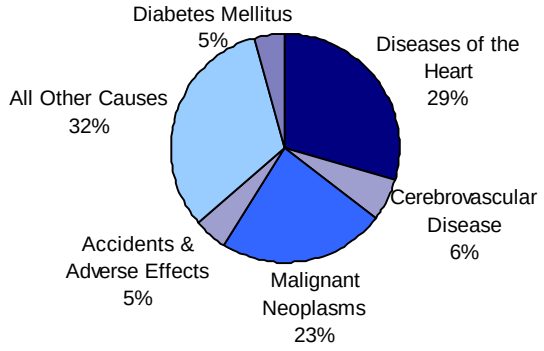
*Rate per 1,000 population

The age-adjusted death rate from all causes for Louisiana in 1998 was 572.9 per 100,000 population. In comparison with the United States and other states, using preliminary 1998 data from the CDC's National Center for Health Statistics, Louisiana's age-adjusted death rate (576.3 per 100,000) is the second highest in the nation, and is markedly higher than that of the United States as a whole (470.8 per 100,000). Louisiana belongs to a group of southern states (Mississippi, Alabama, Georgia, and South Carolina) that traditionally has higher age-adjusted death rates for stroke, cancer, cardiovascular disease, and all-cause mortality.

Leading Causes of Death

Of the total 40,209 deaths to Louisiana residents in 1998, the leading causes of death were (in order) diseases of the heart, malignant neoplasms (cancer), cerebrovascular disease (stroke), accidents & adverse effects, and diabetes, as displayed in the figure below. Sixty-eight percent of all deaths in Louisiana in 1998 are attributable to these five causes.

Percents of Deaths from the Five Leading Causes of Death Louisiana, 1998



Source: Louisiana State Center for Health Statistics

The top three causes, diseases of the heart, malignant neoplasms, and cerebrovascular disease, together account for 59% of total deaths. Little variation was observed in the rates compared with 1997. In fact, these top four causes have consistently been the leading causes of death in Louisiana for the past twenty years (see following tables), though the rankings may have changed. The fifth-ranked cause has varied among diabetes, chronic obstructive pulmonary disease (COPD), and influenza and pneumonia. The three leading causes of death in Louisiana are identical to those of the nation as a whole. However, diabetes is a more serious problem in the state (5th) than on the national level (7th), and accidents are ranked higher in Louisiana (4th) than nationally (6th). COPD nationally is ranked higher (4th) than in Louisiana (6th).

While diseases of the heart have been the number one cause of death in Louisiana for many years, the 1998 crude death rate continues the dramatic downward trend over the past two decades in both Louisiana and the United States as a whole. When we look beyond the top five causes of death in Louisiana in 1998, we find COPD; pneumonia and influenza; nephritis, nephrotic syndrome, and nephrosis; septicemia; and homicide and legal intervention rounding out the top ten causes of death in the state. On the national level, the 1998 preliminary (CDC) top ten causes do not include homicide and legal intervention or septicemia, but do include suicide and chronic liver disease and cirrhosis.

The age-adjusted death rates for 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 (in the same order) for age.

The top five cause-specific, age-adjusted death rates for Louisiana in 1998 were:

- Diseases of the heart
- Cancer
- Cerebrovascular disease
- Accidents and adverse effects
- Diabetes mellitus

In comparing the ten most common causes of death in Louisiana with those of the United States as a whole, deaths from accidents and adverse effects; diabetes mellitus; nephritis, nephrotic syndrome, and nephrosis; septicemia; and homicide and legal intervention ranked higher in Louisiana than in the nation; deaths from COPD and pneumonia and influenza ranked lower. Similarly, almost all of Louisiana's ten age-adjusted rates for leading causes of death are higher than in the United States, COPD and pneumonia being the exceptions.

Age-Adjusted Mortality Rates* for the Top Ten Causes of Death Louisiana and United States, 1998					
Louisiana			***United States***		
Rank**	***Cause of Death***	***Age-Adjusted Death Rate***	***Rank*****	***Cause of Death***	***Age-Adjusted Death Rate***
-	All Causes	572.9	-	All Causes	470.6
1	Diseases of the Heart	149.4	1	Diseases of the Heart	126.0
2	Malignant Neoplasms	143.5	2	Malignant Neoplasms	122.9
3	Cerebrovascular Disease	29.9	3	Cerebrovascular Disease	25.0
4	Accidents and Adverse Effects	39.4	4	Chronic Obstructive Pulmonary Diseases	21.6
5	Diabetes Mellitus	25.8	5	Pneumonia and Influenza	13.5
6	Chronic Obstructive Pulmonary Diseases	20.8	6	Accidents and Adverse Effects	28.5
7	Pneumonia and Influenza	11.5	7	Diabetes Mellitus	13.6
8	Nephritis, Nephrotic Syndrome, and Nephrosis	7.7	8	Suicide	10.0
9	Septicemia	7.7	9	Nephritis, Nephrotic Syndrome, and Nephrosis	4.5
10	Homicide & Legal Intervention	14.3	10	Chronic Liver Disease and Cirrhosis	7.1

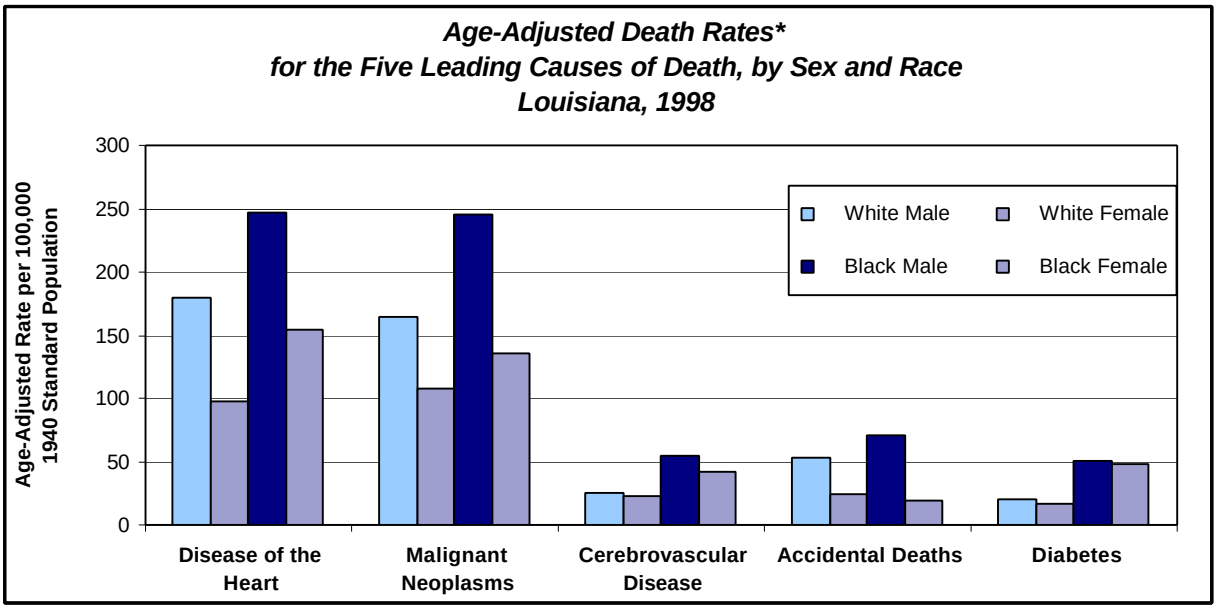
*Rates per 100,000 1940 U.S. standard population

**Causes of death are ranked based on crude death rates before adjusting for age

Sources: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary U.S.data)

The following chart illustrates the use of age-adjusted mortality rates when comparing mortality in different population groups. This chart displays age-adjusted mortality rates for the five leading causes of death in Louisiana in 1998.

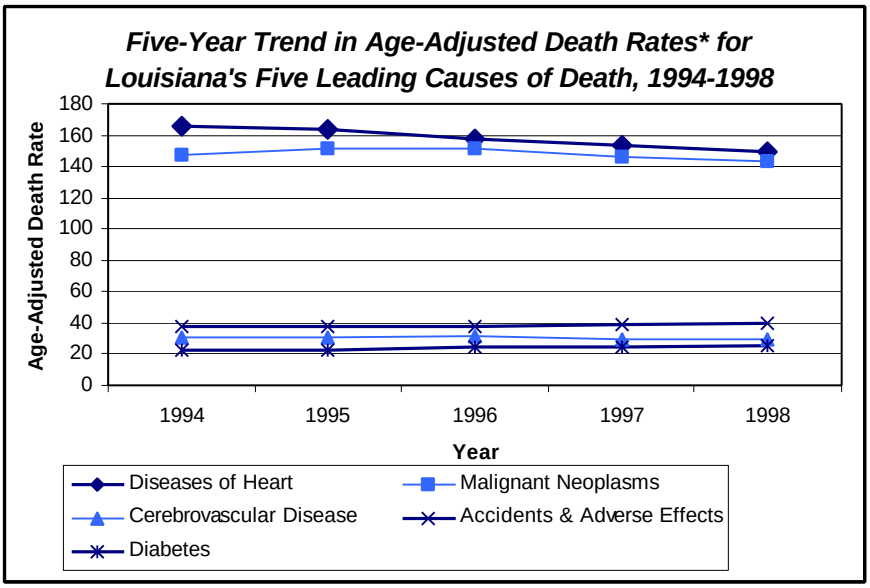
The age-adjusted rates show that males, particularly black males, are at higher risk than females for death from heart disease, cancer, and accidents. Blacks are at higher risk than whites for death from diabetes and cerebrovascular disease.



*Rates per 100,000 1940 U.S.standard population

Source: Louisiana State Center for Health Statistics

The following graph displays overall age-adjusted mortality rates for Louisiana's major causes of death over the past five years. With the exception of heart disease deaths, little has changed since 1994.



Rates per 100,000 1940 U.S. standard population

Source: Louisiana State Center for Health Statistics

The following table lists age-adjusted mortality rates for the four major race-sex groups over the last five years.

Age-Adjusted Death Rates* for Selected Causes of Mortality, by Race and Sex Louisiana, 1994-1998					
Cause of Death/Race/Sex	**1994**	**1995**	**1996**	**1997**	**1998**
Diseases of the Heart	165.5	163.2	157.5	153.3	149.4
White Male	203.3	200.7	198.1	191.4	179.4
White Female	108.6	103.5	103.8	101.1	97.8
Black Male	263.7	271.6	248.1	243.2	247.1
Black Female	171.5	172.1	157	150.9	154.6
Cerebrovascular Diseases	30.4	31.1	32.2	30.0	29.9
White Male	27.8	28.8	29.9	27.4	25.2
White Female	22.2	24.9	24.3	22.2	22.6
Black Male	55.8	54.0	57.6	51.2	54.5
Black Female	42.5	38.3	42.2	42.0	42.4
Malignant Neoplasm	147.4	151.2	151.1	146.3	143.5
White Male	173.5	171.4	177.6	163.6	164.9
White Female	112.5	116.7	112.2	112.7	107.3
Black Male	247.9	258.5	256.7	245.7	245.4
Black Female	131.4	142.8	142.1	143.2	135.4
Chronic Obstructive Pulmonary Disease	20.7	20.1	20.1	19.8	20.8
White Male	29.2	25.4	27.2	26.8	26.2
White Female	17.2	17.6	17.1	17.0	18.2
Black Male	25.8	28.9	26.7	25.0	26.7
Black Female	11.1	12.1	11.3	10.3	13.6
Human Immunodeficiency Virus	14.8	16.7	13.8	9.0	8.1
White Male	22.1	20.6	14.2	6.0	5.9
White Female	1.6	0.9	1.5	0.5	0.7
Black Male	40.4	55.32	48.6	37.9	33.3
Black Female	6.9	11.95	12.6	9.8	7.8
Accidental Deaths	38.0	37.6	37.7	38.9	39.4
White Male	55.5	54.8	53.0	56.0	53.6
White Female	20.7	21.3	20.1	22.6	24.4
Black Male	64.4	61.9	69.9	62.5	70.9
Black Female	20.8	20.8	18.6	19.6	19.5
Homicide	22.0	18.5	19.4	16.9	14.3
White Male	9.7	8.0	8.6	8.2	7.3
White Female	2.7	2.2	3.5	3.6	3.8
Black Male	101.4	12.1	82.5	68.2	57.6
Black Female	13.9	45.9	14.2	12.7	9.1
Suicide	12.3	11.8	12.0	11.5	10.3
White Male	22.3	21.8	22.9	21.5	20.3
White Female	6.4	6.1	5.9	6.5	4.8
Black Male	13.5	13.9	13.7	11.7	10.9
Black Female	2.8	2.3	1.6	1.7	1.4
Pneumonia and Influenza	12.0	11.4	11.5	12.2	11.5
White Male	13.9	13.6	13.9	14.5	12.9
White Female	9.1	8.8	9.4	9.3	8.9
Black Male	22.1	17.3	19	20.1	18.2
Black Female	10.6	11.2	8.4	10.3	11.1
Diabetes	22.3	22.7	24.2	24.3	25.8
White Male	16.9	16.9	18.8	18.9	19.8
White Female	15.2	15.1	16.2	15.4	16.5
Black Male	39.6	44.9	42	46.2	50.3
Black Female	42.7	44.1	46.9	46.7	48.5

*Rates per 100,000 1940 U.S. standard population

Source: Louisiana State Center for Health Statistics

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. Other measures include post-neonatal mortality, which measures deaths occurring from 28 days to one year, hebdomadal mortality, which is limited to the first seven days, and perinatal mortality, which measures deaths occurring late in gestation and after birth.

Infant Mortality Rates* by Race of Chilc
Louisiana, 1998

Race	Number of Deaths	Infant Mortality Rate	Neonatal Mortality Rate	Post-Neonatal Mortality Rate	Hebdomadal Mortality Rate	Perinatal Mortality Rate
Total	606	9.1	5.9	3.2	4.8	12.5
White	218	5.8	3.8	2.0	2.8	8.7
Black	383	14.0	9.2	4.8	7.7	18.0
Other	5	3.5	0.7	2.8	-	7.6

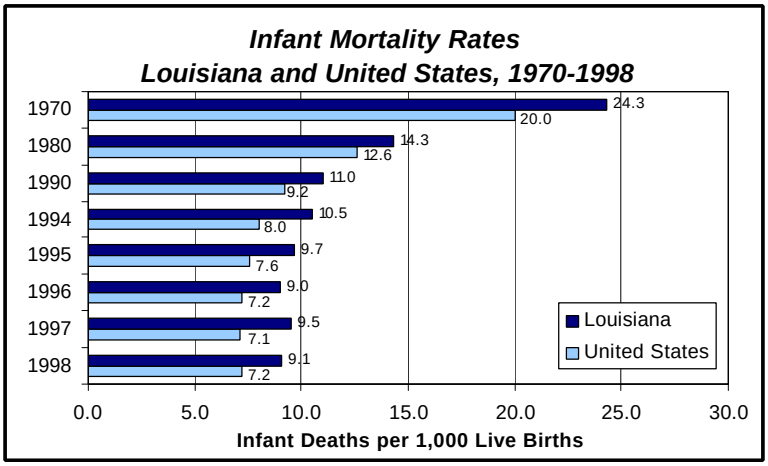
*All rates, except perinatal, are per 1,000 live births

"-" indicates that no death occurred in these categories

Source: Louisiana State Center for Health Statistics

Infant Mortality

Infant mortality is defined as death during the first year of life. This measure excludes fetal deaths (abortions and miscarriages). In 1998 in the state of Louisiana, there were 606 deaths to children under one year of age. The infant mortality rate is defined as the number of deaths within the first year of life per 1,000 live births. As shown in the figure below, the infant mortality rate has been dropping steadily in the past several decades, with the greatest change observed between 1970 and 1980—a 41% reduction. The infant mortality rate has seen an overall decline in the past few years—from 10.5 deaths per 1000 live births in 1994 to 9.1 in 1998.



Sources: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1998 data)

While the trend in Louisiana reflects a decline in infant mortality rates over the past several decades, the rate is still high compared with the national infant mortality rate. The state mortality rate has been at least 20% greater than the national rate since 1992. In both 1997 and 1998, the United States rate was 7.2 deaths per 1,000 live births. By international standards, even this national rate is high. In 1993, 24 other countries' infant mortality rates were lower than the United States.[14]

There are geographic variations in infant mortality as well. As shown in the parish-level tables that follow this section, rates range from 3.0 to 21.6, with the rate for Morehouse parish being seven times the infant mortality rate in Pointe Coupee and West Baton Rouge.

In the table below, infant mortality rates are furnished to provide an idea of Louisiana's standing among the neighboring states. (Note: Although Louisiana's final 1998 rate is available and is reported in this document, National Center for Health Statistics preliminary data for all states have been used in the table below to permit comparison with surrounding states.) While all except Texas' rate are well above the national figure, Louisiana's infant mortality rate lies in the middle of the spectrum of the neighboring state rates.

Infant Mortality Rates*
Louisiana, Neighboring States, and the United States, 1998

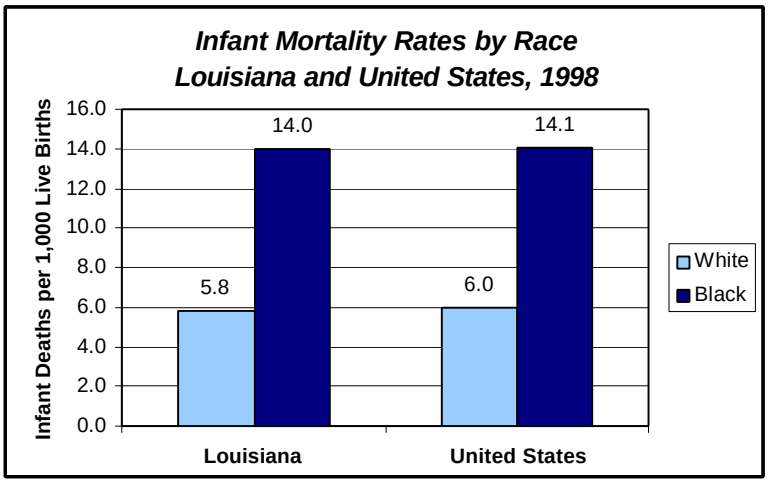
State	Rate	Ranking
Alabama	9.5	5
Arkansas	7.1	26
Louisiana	9.1	6
Mississippi	10.2	1
Texas	6.5	33
United States	7.0	-

*Rate per 1,000 live births

Source: National Center for Health Statistics (provisional 1998 data)

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 infant mortality rates than those born to white mothers. It is important to note that starting in 1989, the race of the mother is used for analyses instead of the race of the child, so race-specific infant mortality rates prior to 1989 are not comparable with more current rates. In 1998, there were 218 white, 383 black, and 5 other race deaths in Louisiana. The infant mortality rates were 5.8, 14.0, and 3.5 deaths per 1,000 race-specific live births respectively. The overall infant mortality rate for blacks is double that of whites.

[14] National Center for Health Statistics. *Health, United States 1996-1997 and Injury Chartbook*. Hyattsville, Maryland, 1997.

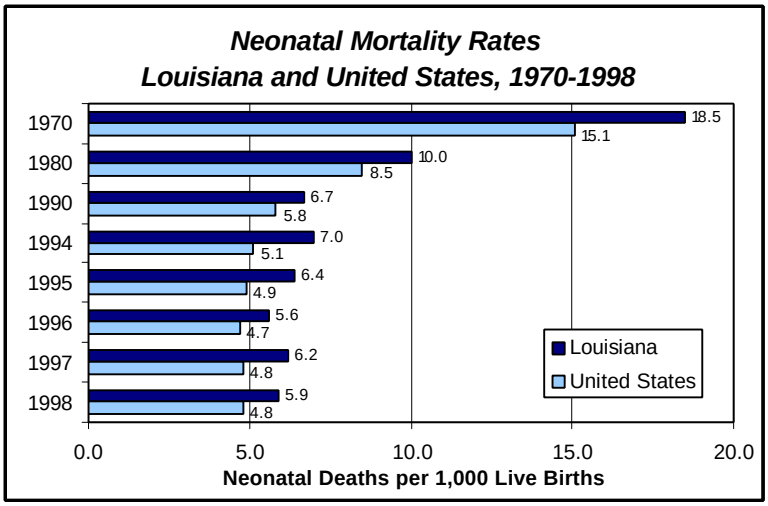


Sources: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1998 data)

Neonatal Mortality

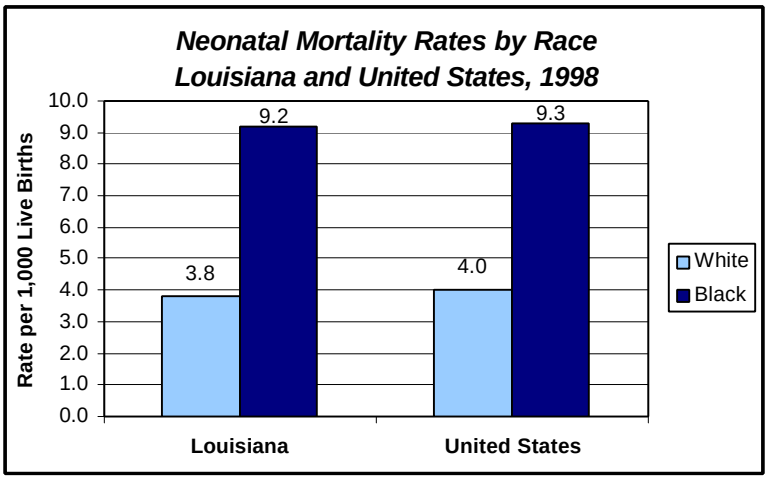
Neonatal mortality represents the period from birth through the first 27 days of life, and the neonatal mortality rate is calculated as the number of deaths during this period per 1,000 live births. In 1998, 395 neonatal deaths accounted for 65% of total infant deaths. The overall neonatal mortality rate was 5.9 per 1,000 live births. This is a decrease from 1997, when the rate was 6.2 per 1,000 live births.

Displayed in the figure below is the pattern of neonatal mortality in Louisiana and the United States. The state rate has been decreasing, though it is still higher than the national rate.



Source: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1998 data)

Racial disparity is still observed; Louisiana's 1998 neonatal mortality rate for whites was 3.8 per 1,000 live births, while the rate for blacks was twice as high at 9.2 per 1,000 live births. While Louisiana's overall rate is higher than the national rate, the state's race-specific rates are slightly lower than those of the United States.



Source: Louisiana State Center for Health Statistics
National Center for Health Statistics (preliminary 1998 data)

Infant Mortality by Parish and Race of Mother Louisiana, 1994-1998		
Parish / Race	1998 Number of Infant Deaths	1994-1998 Infant Mortality Rate*
Louisiana	606	9.6
White	218	6.4
Black	383	14.3
Other	5	3.4
Acadia	3	12.0
White	3	9.2
Black	0	19.6
Other	0	-
Allen	1	4.3
White	0	3.2
Black	1	8.5
Other	0	-
Ascension	21	9.2
White	10	5.7
Black	11	19.0
Other	0	-
Assumption	4	13.3
White	2	14.6
Black	2	11.7
Other	0	-
Avoyelles	8	8.4
White	5	7.6
Black	3	9.9
Other	0	-
Beauregard	2	7.3
White	2	6.7
Black	0	11.4
Other	0	-
Bienville	1	9.7
White	0	3.8
Black	1	15.9
Other	0	-
Bossier	12	8.5
White	8	6.0
Black	4	14.9
Other	0	12.8
Caddo	46	11.3
White	10	5.2
Black	36	16.8
Other	0	-
Calcasieu	27	8.8
White	16	7.0
Black	10	13.3
Other	1	9.4
Caldwell	0	9.5
White	0	6.0
Black	0	22.7
Other	0	-

Infant Mortality by Parish and Race of Mother Louisiana, 1994-1998		
Parish / Race	1998 Number of Infant Deaths	1994-1998 Infant Mortality Rate*
Cameron	0	9.2
White	0	9.8
Black	0	-
Other	0	-
Catahoula	1	6.9
White	0	6.4
Black	1	8.0
Other	0	-
Claiborne	3	13.0
White	0	4.9
Black	3	18.8
Other	0	-
Concordia	2	8.9
White	2	7.9
Black	0	9.9
Other	0	-
DeSoto	5	10.3
White	1	6.9
Black	4	13.4
Other	0	-
E.Baton Rouge	71	11.3
White	13	4.8
Black	58	18.0
Other	0	6.3
E.Carroll	0	1.2
White	0	-
Black	0	1.6
Other	0	-
E.Feliciana	4	14.0
White	0	9.5
Black	4	18.7
Other	0	-
Evangeline	4	9.4
White	2	7.1
Black	2	13.5
Other	0	-
Franklin	2	8.6
White	2	4.5
Black	0	13.4
Other	0	-
Grant	4	9.9
White	3	8.2
Black	1	19.7
Other	0	-
Iberia	10	10.6
White	3	7.1
Black	7	15.1
Other	0	12.3

Infant Mortality by Parish and Race of Mother Louisiana, 1994-1998		
Parish / Race	1998 Number of Infant Deaths	1994-1998 Infant Mortality Rate*
Iberville	4	9.9
White	0	5.1
Black	4	13.6
Other	0	-
Jackson	1	7.8
White	0	4.4
Black	1	14.2
Other	0	-
Jefferson	53	7.9
White	21	6.1
Black	31	12.9
Other	1	2.2
Jeff. Davis	6	8.0
White	6	5.8
Black	0	15.5
Other	0	-
Lafayette	37	9.6
White	15	6.0
Black	22	18.1
Other	0	-
Lafourche	7	7.3
White	6	6.3
Black	1	12.3
Other	0	-
LaSalle	1	8.8
White	1	10.0
Black	0	-
Other	0	-
Lincoln	3	11.5
White	2	7.8
Black	1	15.1
Other	0	-
Livingston	7	8.2
White	7	7.0
Black	0	23.6
Other	0	-
Madison	1	11.9
White	0	6.6
Black	1	13.8
Other	0	-
Morehouse	11	17.3
White	2	9.4
Black	9	23.5
Other	0	-
Natchitoches	6	11.2
White	1	5.0
Black	5	17.3
Other	0	-

Infant Mortality by Parish and Race of Mother Louisiana, 1994-1998		
Parish / Race	***1998 Number of Infant Deaths***	***1994-1998 Infant Mortality Rate****
Orleans	52	10.2
White	3	7.0
Black	49	11.2
Other	0	2.5
Ouachita	22	9.5
White	4	4.7
Black	18	15.3
Other	0	-
Plaquemines	3	8.5
White	2	8.4
Black	1	8.4
Other	0	9.8
Pt. Coupee	1	8.8
White	0	10.4
Black	1	7.2
Other	0	-
Rapides	20	11.2
White	7	9.0
Black	13	14.6
Other	0	8.1
Red River	1	8.5
White	1	5.7
Black	0	11.5
Other	0	-
Richland	4	11.3
White	2	11.9
Black	2	10.7
Other	0	-
Sabine	2	11.3
White	1	8.7
Black	0	18.0
Other	1	13.3
St.Bernard	3	5.5
White	3	4.9
Black	0	12.9
Other	0	-
St.Charles	5	6.6
White	2	4.9
Black	3	10.3
Other	0	-
St.Helena	1	16.8
White	1	12.1
Black	0	20.9
Other	0	-
St.James	2	10.2
White	0	10.4
Black	2	10.2
Other	0	-

Infant Mortality by Parish and Race of Mother Louisiana, 1994-1998		
Parish / Race	1998 Number of Infant Deaths	1994-1998 Infant Mortality Rate*
St.John	6	9.8
White	0	5.6
Black	6	14.4
Other	0	-
St.Landry	12	10.3
White	1	6.7
Black	11	13.9
Other	0	-
St.Martin	6	10.1
White	0	6.6
Black	5	14.5
Other	1	20.0
St.Mary	7	9.0
White	2	3.8
Black	5	17.6
Other	0	-
St. Tammany	16	6.1
White	9	5.1
Black	7	12.9
Other	0	-
Tangipahoa	14	8.2
White	6	5.4
Black	8	12.4
Other	0	-
Tensas	1	12.6
White	0	-
Black	1	19.6
Other	0	-
Terrebonne	16	10.3
White	7	8.0
Black	8	18.9
Other	1	5.0
Union	5	14.7
White	2	10.1
Black	3	24.0
Other	0	-
Vermilion	5	8.5
White	2	6.2
Black	3	17.5
Other	0	-
Vernon	14	9.1
White	11	8.2
Black	3	14.3
Other	0	-
Washington	9	12.1
White	5	8.7
Black	4	17.3
Other	0	-

Infant Mortality by Parish and Race of Mother Louisiana, 1994-1998		
Parish / Race	***1998 Number of Infant Deaths***	***1994-1998 Infant Mortality Rate****
Webster	4	8.0
White	1	4.4
Black	3	12.8
Other	0	-
W.Baton Rouge	1	8.9
White	0	4.2
Black	1	15.1
Other	0	-
W.Carroll	1	6.8
White	1	9.0
Black	0	-
Other	0	-
W.Feliciana	1	13.9
White	1	6.6
Black	0	22.2
Other	0	-
Winn	4	13.4
White	1	8.7
Black	3	21.0
Other	0	-

*Rate per 1,000 live births. Very small numbers of deaths, such as those seen for 1998 infant mortality, result in rates that are likely to fluctuate from year to year. To create rates that are more stable, 1994-98 five-year infant mortality rates have been calculated.

Source: Louisiana State Center for Health Statistics

Injury Deaths

Injury deaths are a substantial and preventable public health problem and account for approximately 8% of deaths in Louisiana. In 1993, injuries accounted for 57% of all deaths among persons aged 1-34 and 78% of all deaths among persons 15-24 years. Many injury epidemiology and control programs depend on injury mortality and morbidity data for program planning and evaluation.

When referring to injury deaths, the term "injury" includes (a) unintentional injuries, suicides, and homicides and (b) injuries from undetermined intent, legal intervention (i.e. law enforcement), and operations of war. The term does not include adverse effects of either medical care or therapeutic use of drugs.[15]

Number and Rate* of Injury Deaths by Cause and Intent of Injury
Louisiana, 1998
N=2990

Cause	Intent											
	Unintentional		Suicide		Homicide		Undetermined		Other		Total	
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate
Cut/pierce	1	0.02	5	0.1	64	1.5	0	0.00	0	0.00	70	1.6
Drowning/submersion	130	3.0	7	0.2	0	0.00	9	0.2	---	---	146	3.3
Fall	190	4.3	3	0.07	0	0.00	0	0.00	---	---	193	4.4
Fire/Burn	96	2.2	1	0.02	2	0.05	2	0.05	---	---	101	2.3
Firearm	35	0.8	343	7.9	439	10.0	7	0.2	3	0.1	827	18.9
Machinery	19	0.4	---	---	---	---	---	---	---	---	19	0.4
Motor-vehicle, Traffic	943	21.6	6	0.1	---	---	0	0.00	---	---	949	21.7
Pedal Cyclist, other**	2	0.05	---	---	---	---	---	---	---	---	2	0.05
Pedestrian, other	21	0.5	---	---	---	---	---	---	---	---	21	0.5
Transport, other	31	0.7	0	0.00	---	---	0	0.00	---	---	31	0.7
Natural,environmental	55	1.3	0	0.00	---	---	1	0.02	---	---	56	1.3
Overexertion	0	0.00	---	---	---	---	---	---	---	---	0	0.00
Poisoning	125	2.9	39	0.9	0	0.00	38	0.9	0	0.00	202	4.6
Struck by, against	20	0.5	---	---	6	0.1	---	---	0	0.00	26	0.6
Suffocation	94	2.2	67	1.5	13	0.3	3	0.1	---	---	177	4.1
Other specified,classifiable	34	0.8	1	0.02	5	0.1	0	0.00	0	0.00	40	0.9
Other specified, not elsewhere classifiable	1	0.02	1	0.02	36	0.8	0	0.00	0	0.00	38	0.9
Unspecified	59	1.4	3	0.1	24	0.5	6	0.1	0	0.00	92	2.1
Total	1856	42.5	476	10.9	589	13.5	66	1.5	3	0.1	2990	68.4

Source: Louisiana Office of Public Health, Injury Research and Prevention Section, Vital Statistics Electronic Files

Note: "---" Indicates category not specified by International Classification of Diseases Coding System

*Rate per 100,000 Residents; Based on 1998 U.S. Census Bureau Estimate

** Other includes railway and nontraffic crashes

[15] Centers for Disease Control and Prevention. "Recommended Framework for Presenting Mortality Data." *MMWR* (46:RR-14) 1997.

II. MORBIDITY

A. INFECTIOUS DISEASES

Background

Vaccines are among the most effective and reliable of medicines for people of all ages. 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 illness that vaccines offer. Currently, there are ten diseases from which children are routinely protected through the use of standard childhood immunizations. These diseases are: diphtheria, tetanus, pertussis (whooping cough), polio, measles, mumps, rubella (German measles), hepatitis B, Haemophilus influenzae B (bacterial meningitis), and varicella (chicken pox). Enormous reductions have been seen in each of these serious diseases since the introduction of vaccines. For example, there were 894,134 cases of measles reported in the United States in 1941, but only 100 in 1998. Louisiana had no reported cases of measles in 1998.

Although the public is most familiar with the vaccines used for childhood immunization, there are many others that afford protection to individuals at risk of infection from other types of exposures. An example is the hepatitis A vaccine, which recently has become available to select populations, such as travelers to areas where the disease is endemic.

In addition to being reliable and effective, vaccines are also one of the most cost-effective medical procedures available. The ten 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 $10-$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 out of every 1,000 cases dies, usually from measles infection of the lungs and of the brain.

The diseases that are prevented by routine childhood immunizations have not disappeared. Pertussis is spread by direct contact, such as coughing, to others who are not immune. As a result of childhood immunization, Louisiana reported only 13 cases of pertussis in 1998. In countries where childhood immunization against pertussis has been halted, there have been large outbreaks of whooping cough. Diphtheria, another dangerous infection, which has been controlled through childhood immunization, has not been seen in Louisiana since 1972. However, there currently is an epidemic of diphtheria in Eastern Europe and Asia. Without immunization, re-introduction of this disease into Louisiana via an infected person from one of these regions is easily possible.

1998 Status

Hepatitis A (HAV) is a viral disease that affects the liver. The number of hepatitis A cases reported in 1998 decreased by 35% from 1997 and represents the lowest number of cases reported in Louisiana since 1994. Louisiana's case rate has consistently remained lower than the national rate (4.0 vs. 11.2 per 100,000). Sex-race specific rates per 100,000 were highest among Caucasian females (4.3) followed by African-American females (3.6). Rates by age groups were highest among three different age groups: 5-9 years (5.5/100,000), 20-24 years and 55-64 years (4.8/100,000 each).

Approximately half of the 173 cases statewide reported risk factor information. Of these case reports, 9.6% attended day care and 33% were contacts of a known hepatitis A case, of which 77% were household-related. Parishes reporting the highest case rates and quadrupling the overall state case rate per 100,000 include: Acadia (49), Jefferson Davis (19), Ouachita and Vernon (18 each).

Hepatitis B (HBV) is a serious public health problem that affects people of all ages in the United States and around the world. Each year an estimated 300,000 people become infected with the hepatitis B virus in the United States. The disease is caused by a virus that attacks the liver. A person can get hepatitis B by direct contact with the blood or body fluids of an infected person. A baby can get hepatitis B from an infected mother during childbirth. Symptoms of hepatitis B include yellowing of the skin or eyes, loss of appetite, nausea, vomiting, fever, extreme tiredness, or stomach pain.

The most effective means of preventing hepatitis B infection is to be immunized with the hepatitis B vaccine. Research is also being carried out on drugs that have the potential for improving treatment of chronic hepatitis.

In 1998, hepatitis B case reports increased by 5% from 1997. Sex-specific rates continue to be higher for males than females (6.3 vs. 4.0 per 100,000). Race-specific rates were almost six times higher for African-Americans than for Caucasians (9.9 vs. 1.7 per 100,000). Sex-race specific rates were highest among African American males (12.0 per 100,000) followed by African American females (8.0). The 20-44 age group accounted for 60% of all reported cases. Of the 219 cases reported, 40 reported drug use. Of these, 2 (5%) cases reportedly used IV drugs during the six weeks to six months prior to illness. Of the 37 cases with tattoo information, 6 (16%) reported receiving one or more tattoos during the six weeks to six months prior to illness. Of those reporting number of sexual partners in the six months prior to infection, 33% had greater than two sexual partners. Of the cases reporting a sexual preference, 88% were heterosexual. Parishes reporting the highest case rates per 100,000 included Tangipahoa (17), West Feliciana (15), Pointe Coupee (13), Orleans (12), Washington (12), and St. Charles (11).

Hepatitis C is a viral disease that causes liver inflammation and can lead to cirrhosis and cancer of the liver. It is a disease of growing magnitude in the United States: an estimated 3.9 million (1.8%) Americans have been infected with HCV, of whom 2.7 million are chronically infected. There are approximately 36,000 new infections diagnosed in the United States each year, of which 25-30% are symptomatic. Symptoms of hepatitis C are often non-specific, but may include jaundice, fatigue, abdominal pain, loss of appetite, intermittent nausea, and vomiting. Persons at increased risk of contracting hepatitis C include injecting drug users, sex contacts of infected persons, persons with multiple sex partners, recipients of blood transfusions before July 1992, health care workers exposed to blood, and infants born to infected women.

While there is no vaccine available to prevent hepatitis C, antiviral drugs such as interferon used alone or in combination with ribavirin, are approved for the treatment of persons with chronic hepatitis C.

In 1998, 137 (3.2 per 100,000) cases of acute hepatitis C were reported, 50% less than in 1997. This decrease may be due to better screening of chronic cases from acute cases. Sex-race specific rates were highest among African-American males (6.7 per 100,000) and lowest among white females (1.6 per 100,000). Of all reported cases, 43% were between the ages of 35 and 44. Parishes reporting the highest case rates per 100,000 include West Carroll (17), Pointe Coupee (13), and Catahoula (9).

Pertussis (whooping cough) is a respiratory illness that can affect all age groups, but mostly is found in infants and young children. It is caused by a bacterium called *Bordetella pertussis*. These bacteria are present in the mouths and noses of infected people. Pertussis symptoms are the usual cold symptoms, which then develop into coughing fits with a high-pitched "whooping" sound. Pertussis can be fatal in infants.

Immunization against pertussis involves five doses of the DTP (diphtheria, tetanus, and pertussis) combination vaccination starting at age two months.

There were 13 cases reported in 1998, which is a decrease of 41% from 1997 and is the lowest reported total since 1984. Cases continue to cluster by age, with 77% of all reported cases under four years of age and no reported cases over twelve years of age. Eighty-five percent of the cases were Caucasian and 62% were male. Of the 7 cases reporting vaccine histories, 4 cases had no DTP doses prior to the onset of illness, and 1 case had one dose. A twelve-year-old male had all 5 DTP doses prior to illness. One six-year-old case had reportedly never been vaccinated with DTP.

Mumps is a viral respiratory disease that causes swelling and pain of salivary glands in the face and neck. Mumps is spread by contact with infected people. This disease is contagious from one to two days before and until seven days after symptoms appear. It is most infectious when the swelling starts. The symptoms are fever, pain in front of the ears that increases during chewing, and swollen glands in the cheeks and sometimes under the jaw. It is most likely to affect children ages five to nine, but may occur at any age. It is likely to be more serious and painful in teenagers and adults.

Immunization against mumps involves two doses of MMR (measles, mumps and rubella) vaccine, usually at age twelve months and at four to six years.

In 1998, 9 cases of mumps were reported, a decrease of 50% from 1997 and of 63% from 1996. Two-thirds of the reported cases were male; 44% were less than 9 years of age. Cases were distributed throughout Louisiana with no parish reporting more than two cases. Region I (the New Orleans area) and Region II (the Baton Rouge area) each reported 3 cases. One patient had received one dose of MMR vaccine at one year old and became infected with mumps almost one year later. Vaccine histories of other cases were not reported.

Selected Infectious Diseases
Louisiana 1994-1998

	1994	***1995***	***1996***	***1997***	***1998***
Hepatitis A	171	196	261	266	173
Hepatitis B	206	244	209	208	219
Pertussis	15	22	15	22	13
Mumps	39	15	24	18	9

Source: LA Office of Public Health, Infectious Disease Epidemiology Program

Selected Infectious Diseases by Parish* Louisiana, 1998							
Parish	**Hepatitis A**	**Hepatitis B**	**Measles**	**Mumps**	**Pertussis**	**Rubella**	**Total**
Louisiana	173	219	0	9	13	1	415
Acadia	28	3	0	0	0	0	31
Allen	0	1	0	0	0	0	1
Ascension	0	2	0	1	0	0	3
Assumption	0	1	0	0	0	0	1
Avoyelles	0	1	0	0	0	0	1
Beauregard	1	0	0	0	1	0	2
Bossier	2	5	0	0	0	0	7
Caddo	13	15	0	1	0	0	29
Calcasieu	2	6	0	0	0	0	8
DeSoto	2	1	0	0	0	0	3
East Baton Rouge	3	15	0	2	1	0	21
East Feliciana	0	1	0	0	0	0	1
Iberia	0	1	0	1	0	0	2
Jefferson	12	27	0	0	4	1	44
Jefferson Davis	6	0	0	0	0	0	6
Lafayette	10	6	0	0	0	0	16
Lafourche	0	3	0	0	0	0	3
Lincoln	1	2	0	0	0	0	3
Livingston	0	4	0	0	0	0	4
Madison	1	0	0	0	0	0	1
Morehouse	2	0	0	0	0	0	2
Natchitoches	2	0	0	0	0	0	2
Orleans	21	61	0	2	1	0	85
Ouachita	26	11	0	0	3	0	40
Plaquemines	1	0	0	0	0	0	1
Pointe Coupee	1	3	0	0	0	0	4
Rapides	3	3	0	0	0	0	6
Red River	1	0	0	0	0	0	1
Richland	1	0	0	0	0	0	1
St. Bernard	1	2	0	1	0	0	4
St. Charles	0	5	0	0	1	0	6
St. Helena	0	1	0	0	0	0	1
St. John the Baptist	1	3	0	0	0	0	4
St. Landry	5	2	0	0	0	0	7
St. Mary	0	1	0	0	0	0	1
St. Tammany	7	6	0	1	0	0	14
Tangipahoa	6	15	0	0	0	0	21
Terrebonne	2	1	0	0	0	0	3
Union	1	0	0	0	0	0	1
Vermilion	0	2	0	0	0	0	2
Vernon	10	2	0	0	2	0	14
Washington	0	5	0	0	0	0	5
West Carroll	1	0	0	0	0	0	1
West Feliciana	0	2	0	0	0	0	2

*Parishes with no cases reported are not included.

Source: Louisiana Office of Public Health, Infectious Disease Epidemiology Program

B. TUBERCULOSIS

Background

Pulmonary Tuberculosis (TB) results from infection with an organism named Mycobacterium tuberculosis. Persons with TB may transmit the organism by coughing. If untreated, the pulmonary TB case may infect others who breathe in the organisms expelled by the infected person. Infection is not limited to the lungs; 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 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.

1999 Status

Louisiana reported 357 cases of TB in 1999, for a case rate of 8.2 per 100,000 people. This represents a 6.0% decrease from the 1998 figure of 380 cases (8.7 per 100,000) and a 12.1% decrease since the 1997 report of 406 cases (9.3 per 100,000). Caution should be urged however; decreases over such a short period do not necessarily reflect a trend in tuberculosis control.

Tuberculosis Case Counts Louisiana, 1995-1999				
1995	***1996***	***1997***	***1998***	***1999***
475	420	406	380	357

Source: Louisiana Office of Public Health, Tuberculosis Program

In 1998, Louisiana's state ranking for TB case rates (per 100,000) was still the 8th highest in the nation. Louisiana's 1998 rate was similar to those in neighboring states, but was significantly higher than the national rate of 6.8 per 100,000. The national rate for 1999 is as of yet unavailable; however, the state rate of 8.2 per 100,000 is expected to exceed the United States rate this year as well.

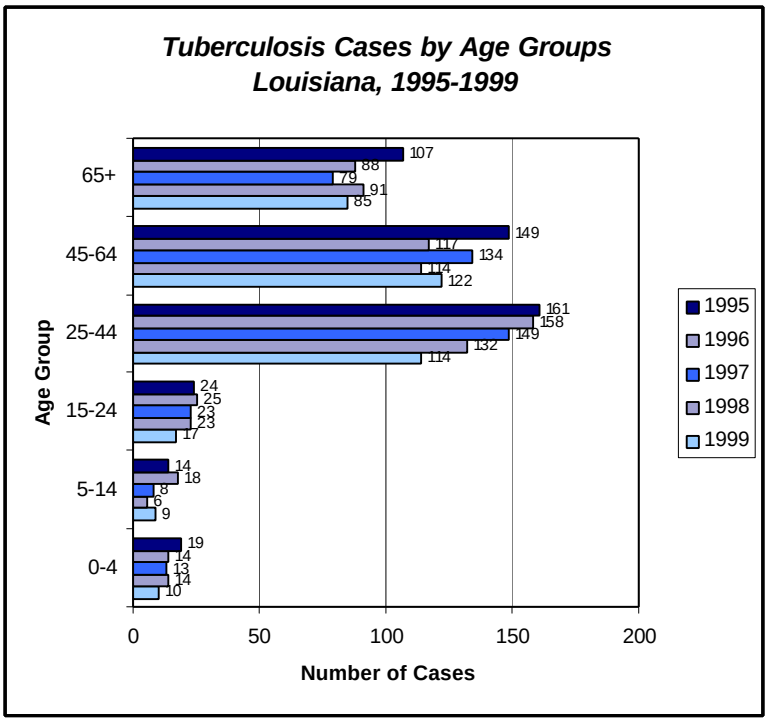
Tuberculosis Cases and Rates* Louisiana and Neighboring States, 1999		
State	Number of Cases	Case Rate
Alabama	314	7.2
Arkansas	181	7.1
Louisiana	357	8.2
Mississippi	215	7.8
Texas	1649	8.2
United States	17,528	6.4

*Rate per 100,000 population

Source: Louisiana Office of Public Health, Tuberculosis Program

Drug-resistant TB continues to be a problem in Louisiana. While only one case of multi-drug-resistant tuberculosis (MDR-TB) was reported in 1999, the incidence of single-drug (INH) resistance continues to exceed 4% -- the recommended threshold for initiating a four-drug anti-TB regimen for new (or suspected) cases of TB.

As shown in the following graph, decreases were observed in each age group, with the exception of a 50% increase in the 5-14 age group (6 cases in 1998 to 9 cases in 1999).



Source: Louisiana Office of Public Health, Tuberculosis Program

Louisiana Tuberculosis Cases and Rates By Region and Parish, 1999		
State Total = 357 State Case Rate = 8.2 per 100,000		
Region/Parish	**Cases**	**Rate/100,000**
Region 1	110	10.9
Jefferson	41	9.1
Orleans	67	14.4
Plaquemines	2	7.6
St. Bernard	0	0.0
Region 2	39	6.8
Ascension	5	7.0
E. Baton Rouge	27	6.8
E. Feliciana	2	9.8
Iberville	1	3.2
Pointe Coupee	2	8.5
W. Baton Rouge	2	9.7
W. Feliciana	0	0.0
Region 3	16	5.4
Assumption	0	0.0
Lafourche	3	3.4
St. Charles	1	2.1
St. James	0	0.0
St. John	1	2.4
St. Mary	3	5.2
Terrebonne	8	7.7
Region 4	37	6.9
Acadia	4	6.9
Evangeline	2	5.9
Iberia	3	4.1
Lafayette	19	10.2
St. Landry	8	9.5
St. Martin	0	0.0
Vermilion	1	1.9
Region 5	19	6.9
Allen	0	0.0
Beauregard	0	0.0
Calcasieu	18	10.0
Cameron	0	0.0
Jefferson Davis	1	3.2
Region 6	12	4.0
Avoyelles	1	2.4
Catahoula	1	9.0
Concordia	2	9.6
Grant	1	5.3
LaSalle	0	0.0
Rapides	5	3.9
Vernon	1	1.9
Winn	1	5.6

Louisiana Tuberculosis Cases and Rates By Region and Parish, 1999		
Region/Parish	***Cases***	***Rate/100,000***
Region 7	51	10.1
Bienville	1	6.3
Bossier	7	7.5
Caddo	28	11.5
Claiborne	2	11.8
DeSoto	0	0.0
Natchitoches	0	0.0
Red River	0	0.0
Sabine	4	16.8
Webster	9	21.1
Region 8	43	12.2
Caldwell	0	0.0
E. Carroll	1	11.2
Franklin	3	13.5
Jackson	1	6.4
Lincoln	1	2.4
Madison	2	15.6
Morehouse	1	3.2
Ouchita	25	17.0
Richland	6	28.5
Tensas	0	0.0
Union	3	13.6
W. Carroll	0	0.0
Region 9	30	7.0
Livingston	5	5.7
St. Helena	1	10.4
St. Tammany	10	5.3
Tangipahoa	6	6.2
Washington	8	18.6

Source: Louisiana Office of Public Health, Tuberculosis Program

C. Sexually Transmitted Diseases

Overview

Sexually transmitted diseases are the most commonly reported diseases in the United States and affect almost 15.3 million Americans in all population groups each year. By age 21, one in five young adults will have received treatment for an STD. Among the most serious complications are pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer associated with human papillomavirus, fetal and infant deaths, and congenital defects.[1]

STD Rates* and National Rankings** Louisiana, 1995-1999						
	Primary and Secondary Syphilis		Gonorrhea		Chlamydia	
Year	Rate	Rank	Rate	Rank	Rate	Rank
1995	24	2	251	10	254	11
1996	13	6	222	8	260	4
1997	9	7	255	5	273	7
1998	10	3	297	4	363	5
1999	7	-	313	-	393	-

*Rates per 100,000 population 1990.

**States ranked from highest to lowest disease incidence. Nationwide figures for 1999 are not yet available.

Sources: Louisiana Office of Public Health, STD Control Program 1999.
CDC STD Surveillance Report 1998.

Syphilis

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

Louisiana had the 2nd highest rate of syphilis nationwide during 1995; then in 1996 the rate fell to the 6th highest rate, followed by a drop to 7th in 1997. In 1998, the rate rose to the 3rd highest. The total number of cases of early syphilis (primary, secondary, and early latent syphilis) is consistently declining, from 5,373 cases in 1993, to 709 cases in 1999. In 1999, 53% of early syphilis cases occurred in females, and 87% of the cases occurred in African-Americans. Sixty-six percent of early syphilis cases occurred among the 15-34 year-old population.

During the last five years, sharp and consistent declines in early syphilis rates have occurred. In the white population, the rate decreased 40% between 1995 and 1996 and 33% between 1996 and 1997. However, early syphilis rates increased 50% between 1997 and 1998 and remained unchanged in 1999. In African-Americans, the rate decreased 43% between 1995 and 1996, 40% between 1996 and 1997, 6% between 1997 and 1998, and 21% between 1998 and 1999.

[1] National Center for Health Statistics. *Healthy People 2000 Review, 1997*. Hyattsville, Maryland: Public Health Service. 1997.

Early Syphilis (Primary, Secondary, and Early Latent) Rates,* by Sex and Rac Louisiana, 1995-1999									
	White			Black			Other		
Year	Males	Females	Total	Males	Females	Total	Males	Females	Total
1995	3	6	5	181	197	189	17	7	12
1996	2	3	3	107	109	108	2	5	4
1997	2	2	2	61	68	65	2	2	2
1998	3	3	3	64	58	61	10	7	9
1999	3	3	3	48	47	48	0	7	4

*Rates per 100,000 population 1990

Source: Louisiana Office of Public Health, STD Control Program

The Louisiana incidence rate for primary and secondary syphilis for 1999 was 9.9 per 100,000 people (Census 1990), and the national rate was 2.6. *The Healthy People 2000 Review 1997* objective for primary and secondary syphilis is to reduce the incidence rate to no more than 4 cases per 100,000 people and the incidence among African-Americans to no more than 30 cases per 100,000.

Primary and Secondary Syphilis Rates* Louisiana, Neighboring States, and United States, 1994-1998					
	1994	1995	1996	1997	1998
Alabama	15.7	14.4	12.4	9.6	6.3
Arkansas	18.2	19.9	10.5	6.9	4.3
Louisiana	39.0	24.0	13.0	8.4	9.9
Mississippi	78.1	72.4	30.4	14.4	9.6
Texas	10.4	8.3	4.8	3.5	2.3
United States	7.9	6.3	4.3	3.2	2.6

*Rates per 100,000 population

Sources: Louisiana Office of Public Health, STD Control Program

CDC STD Surveillance Report 1998

Gonorrhea

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

Louisiana had the 10th highest rate of gonorrhea nationwide in 1995. In 1996, Louisiana moved to the 8th highest, then to the 5th highest in 1997, and to the 4th highest in 1998. The total number of cases of gonorrhea had been consistently declining, from 10,816 cases in 1995 to 10,761 cases in 1997, but in 1998 the number rose to 12,543, mainly due to improved laboratory reporting. In 1999, the total number was 13,198. In 1999, 50% of the cases of gonorrhea occurred in females; 86% of cases occurred in African-Americans; 32% of the cases occurred among teens 15-19 year old, and 34% of the cases of gonorrhea occurred among 20-24 year olds.

Gonorrhea Rates* by Sex And Race Louisiana, 1995-1999									
	White			Black			Other		
Year	Males	Females	Total	Males	Females	Total	Males	Females	Total
1995	18	29	23	940	564	740	37	41	39
1996	14	27	21	842	489	655	37	59	48
1997	17	36	27	833	615	717	66	88	78
1998	19	35	28	958	757	851	49	124	88
1999	25	48	37	966	792	874	41	63	52

*Rates per 100,000 population 1990.

Source: Louisiana Office of Public Health, STD Control Program

The Louisiana incidence rate of gonorrhea for 1998 was 297 per 100,000 population (Census 1990), and the national rate for 1998 was 133. *The Healthy People 2000 Review 1997* objective for gonorrhea, is to reduce the rate to: a) an incidence of no more than 100 cases per 100,000 people; b) an incidence of no more than 650 cases per 100,000 among African-Americans; c) an incidence of no more than 375 per 100,000 persons age 15-19, and d) an incidence of no more than 175 per 100,000 persons age 15-44.

Gonorrhea Rates* Louisiana, Neighboring States, and United States, 1994-1998					
State	1994	1995	1996	1997	1998
Alabama	376	345	310	282	295
Arkansas	281	227	204	175	157
Louisiana	291	251	222	255	287
Mississippi	429	353	250	307	392
Texas	162	165	124	139	169
United States	165	149	124	123	133

*Rates per 100,000 population 1990.

Sources: Louisiana Office of Public Health, STD Control Program
CDC STD Surveillance Report 1998

Chlamydia

Infection caused by *Chlamydia trachomatis* is among the most prevalent STDs in the United States. Therapy for these infections is commonly based on the clinical syndrome, or as simultaneous treatment for gonorrhea.

Louisiana had the 11th highest rate of chlamydia nationwide in 1995. Then in 1996, Louisiana rose to the 4th highest rate, and then dropped to the 7th highest in 1997. In 1998 Louisiana had the 5th highest rate. The total number of cases of chlamydia had been declining, from 11,079 cases in 1993 to 10,727 cases in 1995, but went slightly up to 10,991 in 1996, up to 11,512 in 1997, and rose to 15,305 in 1998 and 16,573 in 1999. In 1999, 79% of chlamydia cases occurred in females; 74% of cases occurred in African-Americans; 42% of cases among 15-19 year-olds, and 36% of the chlamydia cases occurred among 20-24 year-olds.

The Louisiana chlamydia rate for 1998 was 349 per 100,000 population (Census 1990), and the national rate for 1998 was 236.6. *The Healthy People 2000 Review 1997* objective for chlamydia trachomatis infections is to reduce the prevalence in women under 25 years of age to no more than 5% (as measured by a decrease in the prevalence of chlamydia infection among family planning clients).

Chlamydia Rates* by Sex and Race Louisiana, 1995-1999									
	White			Black			Other		
Year	Males	Females	Total	Males	Females	Total	Males	Females	Total
1995	12	102	58	251	1011	657	37	176	106
1996	14	27	21	842	489	655	37	59	48
1997	17	36	27	833	615	717	66	88	78
1998	25	125	76	411	1360	919	71	278	174
1999	30	141	87	448	1369	941	24	198	111

*Rates per 100,000 population 1990.

Source: Louisiana Office of Public Health, STD Control Program

Chlamydia Rates* Louisiana, Neighboring States, and United States, 1994-199					
State	1994	1995	1996	1997	1998
Alabama	12	75	195	204	233
Arkansas	28	32	27	85	163
Louisiana	262	254	260	363	349
Mississippi	NR**	34	161	291	389
Texas	251	238	230	265	311
United States	193.3	190.4	194.5	207.0	236.6

*Rates per 100,000 population

**NR=No report

Sources: Louisiana Office of Public Health, STD Control Program
CDC STD Surveillance Report 1998

Sexually Transmitted Disease Rates* by Parish Louisiana, 1999			
Parish	Early Syphilis (Primary, Secondary, and Early Latent)	Gonorrhea	Chlamydia
Acadia	32	175	150
Allen	5	75	245
Ascension	48	136	213
Assumption	35	180	436
Avoyelles	0	72	66
Beauregard	7	90	186
Bienville	6	275	513
Bossier	3	186	314
Caddo	7	774	754
Calcasieu	57	335	328
Caldwell	0	163	306
Cameron	0	97	184
Catahoula	0	90	163
Claiborne	0	241	454
Concordia	0	110	163
DeSoto	0	422	525
East Baton Rouge	19	359	337
East Carroll	10	443	628
East Feliciana	0	141	187
Evangeline	0	183	267
Franklin	0	107	228
Grant	0	23	34

*Rates per 100,000 population 1990

Sexually Transmitted Disease Rates* by Parish Louisiana, 1999			
Parish	**Early Syphilis (Primary, Secondary, and Early Latent)**	**Gonorrhea**	**Chlamydia**
Iberia	42	466	466
Iberville	16	138	209
Jackson	0	236	369
Jefferson	9	132	239
Jefferson Davis	0	192	322
Lafayette	29	262	367
Lafourche	82	172	227
LaSalle	0	22	66
Lincoln	0	362	493
Livingston	13	54	139
Madison	0	329	706
Morehouse	6	523	539
Natchitoches	8	559	801
Orleans	23	566	769
Ouachita	4	525	562
Plaquemines	8	78	102
Pointe Coupee	53	169	315
Rapides	4	259	401
Red River	21	586	1097
Richland	5	271	475
Sabine	0	199	358
St. Bernard	3	47	122
St. Charles	12	94	191
St. Helena	0	243	425
St. James	10	192	421
St. John	20	275	470
St. Landry	9	344	336
St. Martin	0	171	246
St. Mary	14	210	293
St. Tammany	10	119	107
Tangipahoa	19	511	614
Tensas	0	267	338
Terrebonne	38	288	364
Union	0	280	319
Vermilion	0	118	104
Vernon	6	97	242
Washington	16	340	245
Webster	0	269	433
West Baton Rouge	15	113	129
West Carroll	0	41	149
West Feliciana	8	77	163
Winn	6	68	123
State Total	17	313	393

*Rates per 100,000 population 1990

Source: Louisiana Office of Public Health, STD Control Program

D. HIV/AIDS

1998 Status

Louisiana's rank increased from 9th highest in 1997 to 7th highest in 1998 and is among states with the highest AIDS (Acquired Immunodeficiency Syndrome) rates. Among United States cities, New Orleans ranked 11th and Baton Rouge ranked 14th highest.

HIV/AIDS is a growing threat to public health and will continue to make major demands on our health and social service systems for many decades. The lifetime medical cost of caring for a person with AIDS is over $100,000, most of which is paid by the government. Each year new infections obligate Louisiana to $150 million in future medical costs.

New highly active antiretroviral therapies (HAART) have been shown to be effective in the treatment of HIV (Human Immunodeficiency Virus) infection. These new therapies have altered the natural history of HIV infection, slowing progression from HIV to AIDS and from AIDS to death for persons infected with HIV. While HAART contributes to the recent reduction in morbidity and mortality among HIV-infected persons, the prevalence of HIV continues to increase and resources should continue to be directed toward programs and services that address prevention, early detection, and effective treatment.

In keeping with national trends, Louisiana has seen an increase in HIV/AIDS cases in minorities, adolescents, women, high-risk heterosexuals, and intravenous drug users and in rural communities. HIV/AIDS has been steadily on the rise in the heterosexual population – HIV/AIDS cases due to high-risk heterosexual contact increased from less than 5% in 1990 to an estimated 26% in 1998. High-risk heterosexual contact is becoming the leading exposure among African-Americans. However, the majority of all cases continue to be in men who have sex with men.

The gap between the case rate of African-American individuals and white individuals continues to increase. During 1998, 73% of newly-detected HIV/AIDS cases and 70% of newly-diagnosed AIDS cases were in African-Americans. The HIV detection rates for African-Americans are over five times higher than those among whites and two times higher than those among Hispanics.

Despite the increasing number of women infected with HIV, the number of pediatric HIV/AIDS cases (children diagnosed when younger than thirteen years of age) has been decreasing in recent years. This decline is credited to improved treatment protocols for HIV-infected pregnant women and increased use of antiretrovirals in this same group.

Persons Living with Diagnosed HIV/AIDS, by Risk Factor
Louisiana, 1994-1998

	Diagnosed by and Living in Year				
Risk Behavior	***1994***	***1995***	***1996***	***1997***	***1998***
Total Living Cases	8,508	9,255	10,002	10,788	11,604
Cases with Specified Risk	7,141	7,527	7,787	8,018	8,331
MSM*	60%	58%	55%	54%	53%
IDU*	23%	24%	25%	25%	25%
HRH*	14%	15%	16%	18%	18%
Transf/Hemo*	2%	2%	2%	2%	2%
Perinatal	1%	2%	2%	2%	2%
Risk Unknown/Still under Investigation	1,367	1,728	2,215	2,770	3,273

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

AIDS Cases and Rates Louisiana, Neighboring States, and United States, 1996-1998									
State	1996		1997		1998		Cumulative Totals		
	Cases	Rate/ 100,000	Cases	Rate/ 100,000	Cases	Rate/ 100,000	Adults	Children less than 13	Total
Alabama	607	14.2	568	13.1	484	11.1	5,251	67	5,318
Arkansas	267	10.7	242	9.6	203	8	2,553	38	2,591
Louisiana	1,463	33.7	1,090	25	951	21.8	11,018	118	11,136
Mississippi	450	16.6	345	12.6	415	15.1	3,562	53	3,615
Texas	4,799	25.1	4,672	24.1	3,967	20.1	47,994	356	48,350
United States	68,808	25.5	60,270	22.1	48,269	17.6	679,739	8,461	688,200

Source: Louisiana Office of Public Health, HIV/AIDS Program

E. CANCER

1993-1997 Status

According to the AMERICAN CANCER SOCIETY, one in every four deaths in the United States is attributable to cancer. More people are surviving cancer now than ever before, but this trend is not true for all groups. Survival rates can vary according to race.

Due to the possibility of natural fluctuations in cancer incidence during the course of a year, disease counts and rates have been combined to encompass a five-year period. This allows a more reliable identification of the cancers that are of most concern in our state.

Five Most Common Cancers Louisiana, 1993-1997	
Type	Number of Cases
All Cancers	91,992
Lung	16,087
Prostate	14,202
Breast	12,753
Colon & Rectum	10,835
Bladder	3,507

Source: Louisiana Tumor Registry

The risk for many cancers can be significantly reduced by practicing preventive measures. The National Cancer Institute estimates that tobacco accounts for 30% of cancers, and dietary factors account for another 35%. For example, most of the lung cancers can be prevented by not smoking, and diets low in fat and high in fiber may help prevent colon, rectal, breast, prostate, and other cancers.

Both preventive measures and early detection are important in lowering cancer death rates. Mammography, clinical breast examination, Pap tests, fecal occult blood tests, and proctosigmoidoscopy (colon exam with lighted scope) make it possible to detect and treat cancers in their early stages and prevent spreading. However, despite modern technology and knowledge, a significant portion of the population at risk for various cancers fails to participate in screening procedures.[2]

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

Cancer is not just one, but many, diseases and is associated with a variety of risk factors. Since 1950, overall cancer mortality rates have changed little, but there have been significant changes in mortality for some age groups and cancers. Several prevalent forms of cancer can be either prevented or – in the case of breast or prostate cancer – diagnosed early enough to prevent the spread to other organs.

Five Most Common Cancers in Males Louisiana, 1993-1997					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	489.6	All Cancers	564.9	All Cancers	49,135
Prostate	136.6	Prostate	183.6	Prostate	14,102
Lung	100.5	Lung	131.3	Lung	10,565
Colon & Rectum	55.1	Colon & Rectum	53.6	Colon & Rectum	5,176
Bladder	30.1	Stomach	19.8	Bladder	2,548
Non-Hodgkin's Lymphoma	18.9	Oral Cavity & Pharynx	18.2	Non-Hodgkin's Lymphoma	1,690

* All races combined

** Average annual age-adjusted (1970 US) incidence rates per 100,000 population (1992-1996)

Source: Louisiana Tumor Registry

Five Most Common Cancers in Females Louisiana, 1993-1997					
Whites		Blacks		Total *	
Type	Rate**	Type	Rate**	Type	Number
All Cancers	322.1	All Cancers	310.2	All Cancers	41,452
Breast	100.5	Breast	87.7	Breast	12,199
Lung	47.0	Lung	39.2	Lung	5,702
Colon & Rectum	46.4	Colon & Rectum	41.6	Colon & Rectum	5,367
Corpus Uteri	13.9	Cervix Uteri	16.7	Corpus Uteri	1,720
Non-Hodgkin's Lymphoma	12.8	Corpus Uteri	12.9	Non-Hodgkin's Lymphoma	1,525

* All races combined

** Average annual age-adjusted (1970 US) incidence rates per 100,000 population (1992-1996)

Source: Louisiana Tumor Registry

Background[3]

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 decreased 6% between 1987-91 and 1992-96. Certain factors—such as family history, exposure to hormones, reproduction issues, and excessive alcohol use—can influence the risk for breast cancer. The association between high-fat diets and increased breast cancer risk has not been firmly established. 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. Early detection improves the chances of survival, and the National Cancer Institute recommended in 1997 that women in their forties or older get screening mammograms on a regular basis, every one to two years. 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.

[3] From National Cancer Institute (NCI) and American Cancer Society resources and publications. Statistics quoted pertain to the United States.

Cervical cancer (cervix uteri) afflicts 13,000 women each year. Increased use of the Pap test has contributed to an almost 50 percent drop in cervical cancer deaths since 1973. Women who are or have been sexually active, or have reached age 18, should have Pap tests and physical exams regularly.

Colorectal cancer was the second leading cause of cancer death, third among men and third in women, in 1992-96. Studies have shown that lifestyle factors may cause colon and rectum cancers. A diet high in fruits, vegetables, and fiber and low in fat appears to reduce the risk of colorectal cancer. Exercise may also lower risk for this cancer. Although there is no general agreement that screening for colon cancer definitely reduces mortality, annual fecal occult blood tests have proved useful in identifying people who should have further tests to rule out colon cancer and other diseases, especially for those over 50. The potential benefit of regular sigmoidoscopies is currently being investigated by NCI.

Kidney cancer accounted for approximately 2% of all new 1992-96 cancers in the United States. Renal cell cancer and renal pelvis cancer accounted for 70% and 15% of kidney cases respectively, with the remainder being primarily composed of cancer of the ureter (8%) and urethra (4%). While abuse of analgesics has been causally linked to increased risk, and beverages such as coffee, tea, and alcoholic drinks have not been found to be important risk factors, a consistent risk factor has been obesity. Perhaps the best known factor is cigarette smoking. Given the present knowledge about cancers of the kidney, prevention is best achieved by cessation of cigarette smoking. About one-third of renal cell cancers and more than one-half of renal pelvis and ureter cancers could be avoided by eliminating the use of tobacco.

Leukemias together accounted for 2.5% of the total 1992-96 cancer incidence in the United States and about one-third of cancers in children. Five main types (and an increasing number of subtypes) have been identified. Rates for all types of leukemia are higher among males than among females; for most leukemias, rates are higher among Caucasians than African-Americans.

Lung cancer is the largest single cause of cancer mortality in the United States. It is difficult to detect and hard to treat, and in 1992-96 caused approximately 30% of all cancer deaths. Smoking is responsible for 85% of lung cancers. The risk of dying of lung cancer is 22 times higher for male smokers and 12 times higher for female smokers than for people who have never smoked. Unfortunately, smoking rates have begun to rise in children over the last several years.

Melanoma of the skin incidence has increased dramatically over the last several decades. It represented only about 5% of all 1992-96 skin cancers in the United States but was responsible for about 75% of all skin cancer deaths. Survival rates have been increasing because of earlier diagnoses, but the total mortality rate continues to rise with the increase in incidence.

Non-Hodgkin's lymphoma cases have been increasing continuously but inexplicably over the past several decades, but the rate of increase apparently slowed in the 1990s. Part of this increase is due to AIDS-related cases. The cofactors that predispose AIDS cases to lymphoma need elucidation, and research is needed into other possible causes, such as hair-coloring products, pesticides, nitrates, solvents, other industrial chemicals, and viruses other than HIV.

Oral cavity & pharynx cancer accounted for approximately 3% of all malignancies in 1992-96. In Americans, oral cancer is 2-3 times more common among males than females. Tobacco and alcohol account for approximately three-fourths of all oral cancers in the United States. Epidemiologic evidence indicates that smoking and drinking are independent risk factors that produce a synergistic effect when combined. Use of snuff is a primary cause of cancers of the

gum and cheek. Although not as prevalent, habitual use of pipes, cigars, and smokeless tobacco is associated with relative risks as great as that for cigarette smoking.

Ovarian cancer strikes almost 25,000 women every year. Currently, the five-year survival rate is approximately 50%. The NCI is conducting a study to determine whether screening can detect the cancer early enough to reduce mortality.

Pancreatic cancer is a 'silent' disease that is asymptomatic until well advanced. Survival is poor; only about 4% of patients are alive five years after diagnosis. In 1992-96 it ranked 11th of all cancers in the United States for incidence but was fifth for cancer mortality. Little is known about the etiology, and the only established risk factor is cigarette smoking.

Prostate cancer is the most frequently diagnosed invasive cancer in men but is a distant second to lung cancer as a cause of death. There is increasing evidence that diet plays an important role in prostate cancer development. Hormones are also being investigated, as well as occupational and other lifestyle factors. The 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) is beneficial.

Uterine cancer (corpus uteri), the fourth most common cancer in among women in the United States, accounted for approximately 6% of all 1992-96 cases. However, a limited number of deaths results from this disease, as reflected in a high five-year survival rate of 84%.

Urinary bladder cancer was the fifth most common of all 1992-96 cancers in the United States, where it is chiefly a disease of white men over 65. The most important known risk factor is cigarette smoking; smokers demonstrate a 2-3 fold increased risk over non-smokers. Workers who are exposed to benzidine and 2-naphthylamine are believed to be at an elevated risk for bladder cancer due to the potent carcinogenicity of these two chemicals. Artificial sweeteners do not appear to increase risk, and coffee drinking appears to have little or no effect.

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
Louisiana	All Cancers	91,992	All Cancers	49,388	All Cancers	42,604
	Lung	16,087	Prostate	14,202	Breast	12,605
	Prostate	14,202	Lung	10,181	Lung	5,906
	Breast	12,753	Colon & Rectum	5,401	Colon & Rectum	5,434
	Colon & Rectum	10,835	Bladder	2,552	Corpus Uteri	1,785
	Bladder	3,507	Non-Hodgkin's Lymphoma	1,752	Non-Hodgkin's Lymphoma	1,626
Region 1	All Cancers	23,089	All Cancers	12,063	All Cancers	11,026
	Lung	3,985	Prostate	3,253	Breast	3,320
	Breast	3,358	Lung	2,408	Lung	1,577
	Prostate	3,253	Colon & Rectum	1,314	Colon & Rectum	1,445
	Colon & Rectum	2,759	Bladder	684	Corpus Uteri	442
	Bladder	932	Non-Hodgkin's Lymphoma	498	Non-Hodgkin's Lymphoma	397
Jefferson	All Cancers	9,826	All Cancers	5,101	All Cancers	4,725
	Lung	1,647	Prostate	1,424	Breast	1,440
	Breast	1,456	Lung	954	Lung	693
	Prostate	1,424	Colon & Rectum	568	Colon & Rectum	586
	Colon & Rectum	1,154	Bladder	338	Non-Hodgkin's Lymphoma	196
	Bladder	437	Non-Hodgkin's Lymphoma	222	Corpus Uteri	183
Orleans	All Cancers	11,188	All Cancers	5,870	All Cancers	5,318
	Lung	1,914	Prostate	1,586	Breast	1,620
	Breast	1,638	Lung	1,195	Colon & Rectum	725
	Prostate	1,586	Colon & Rectum	619	Lung	194
	Colon & Rectum	1,344	Bladder	276	Corpus Uteri	224
	Bladder	400	Non-Hodgkin's Lymphoma	229	Cervix Uteri	203
Plaquemines	All Cancers	460	All Cancers	258	All Cancers	202
	Lung	93	Lung	65	Breast	62
	Breast	63	Prostate	60	Lung	28
	Prostate	60	Colon & Rectum	23	Colon & Rectum	20
	Colon & Rectum	43	Oral Cavity & Pharynx	18	Non-Hodgkin's Lymphoma / Corpus Uteri	7*
	Bladder	22	Bladder	16	Stomach / Skin Melanomas / Bladder / Pancreas	6*

*Number of cases is the same at each site.

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
St. Bernard	All Cancers	1,615	All Cancers	834	All Cancers	781
	Lung	331	Lung	194	Breast	198
	Colon & Rectum	218	Prostate	183	Lung	137
	Breast	201	Colon & Rectum	104	Colon & Rectum	114
	Prostate	183	Bladder	54	Non-Hodgkin's Lymphoma	37
	Non-Hodgkin's Lymphoma	75	Non-Hodgkin's Lymphoma	38	Ovary	30
Region 2	All Cancers	11,379	All Cancers	6,325	All Cancers	5.054
	Prostate	2,195	Prostate	2,195	Breast	1,638
	Lung	1,725	Lung	1,082	Lung	643
	Breast	1,664	Colon & Rectum	687	Colon & Rectum	642
	Colon & Rectum	1,329	Bladder	336	Corpus Uteri	210
	Bladder	436	Non-Hodgkin's Lymphoma	209	Non-Hodgkin's Lymphoma	172
Ascension	All Cancers	1,145	All Cancers	653	All Cancers	492
	Prostate	226	Prostate	226	Breast	146
	Lung	181	Lung	112	Lung	69
	Breast	149	Colon & Rectum	64	Colon & Rectum	62
	Colon & Rectum	126	Bladder	34	Ovary	23
	Bladder	43	Kidney & Renal Pelvis	25	Corpus Uteri	17
East Baton Rouge	All Cancers	7,780	All Cancers	4,252	All Cancers	3,528
	Prostate	1,515	Prostate	1,515	Breast	1,166
	Breast	1,183	Lung	712	Colon & Rectum	451
	Lung	1,059	Colon & Rectum	470	Lung	447
	Colon & Rectum	921	Bladder	226	Corpus Uteri	144
	Bladder	294	Non-Hodgkin's Lymphoma	137	Non-Hodgkin's Lymphoma	130
East Feliciana	All Cancers	495	All Cancers	291	All Cancers	204
	Prostate	99	Prostate	99	Breast	72
	Lung	77	Lung	59	Colon & Rectum	23
	Breast	73	Colon & Rectum	33	Lung	18
	Colon & Rectum	56	Bladder	12	Corpus Uteri	14
	Bladder	18	Oral Cavity & Pharynx / Non-Hodgkin's Lymphoma	10*	Pancreas / Non-Hodgkin's Lymphoma	7*

*Number of cases is the same at each site.

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
Iberville	All Cancers	735	All Cancers	421	All Cancers	314
	Prostate	137	Prostate	137	Breast	94
	Lung	114	Lung	68	Lung	46
	Breast	95	Colon & Rectum	38	Colon & Rectum	35
	Colon & Rectum	73	Bladder	25	Cervix Uteri	17
	Bladder	30	Kidney & Renal Pelvis / Non-Hodgkin's Lymphoma	16*	Corpus Uteri	14
Pointe Coupee	All Cancers	539	All Cancers	311	All Cancers	228
	Prostate	91	Prostate	91	Breast	69
	Colon & Rectum	79	Lung	54	Colon & Rectum	43
	Lung	77	Colon & Rectum	36	Lung	23
	Breast	70	Bladder	18	Kidney & Renal Pelvis / Corpus Uteri / Ovary / Pancreas	7*
	Bladder	23	Oral Cavity & Pharynx	12	Cervix Uteri	6
West Baton Rouge	All Cancers	467	All Cancers	248	All Cancers	219
	Prostate	82	Prostate	82	Breast	72
	Breast	73	Lung	43	Lung	28
	Lung	71	Colon & Rectum	30	Colon & Rectum	23
	Colon & Rectum	53	Bladder	17	Corpus Uteri / Ovary	11*
	Bladder	22	Pancreas	12	Non-Hodgkin's Lymphoma / Pancreas	7*
West Feliciana	All Cancers	218	All Cancers	149	All Cancers	69
	Lung	46	Prostate	45	Breast	19
	Prostate	45	Lung	34	Lung	123
	Colon & Rectum / Breast	21*	Colon & Rectum	16	Colon & Rectum / Cervix Uteri	5*
	Non-Hodgkin's Lymphoma	10	Oral Cavity & Pharynx / Non-Hodgkin's Lymphoma	7*	**	**
	Oral Cavity & Pharynx / Brain	7*	**	**	**	**

* Number of cases is the same at each site.

** Contents of cells containing fewer than five cases are suppressed for reasons of confidentiality.

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
Region 3	All Cancers	6,661	All Cancers	3,726	All Cancers	2,935
	Lung	1,202	Prostate	970	Breast	897
	Prostate	970	Lung	820	Lung	382
	Breast	906	Colon & Rectum	438	Colon & Rectum	367
	Colon & Rectum	805	Bladder	205	Corpus Uteri	124
	Bladder	285	Non-Hodgkin's Lymphoma	154	Non-Hodgkin's Lymphoma	115
Assumption	All Cancers	433	All Cancers	245	All Cancers	188
	Prostate	76	Prostate	76	Breast	65
	Lung	74	Lung	56	Colon & Rectum	21
	Breast	65	Colon & Rectum	26	Lung	18
	Colon & Rectum	47	Bladder	17	Cervix Uteri	8
	Bladder	22	Pancreas	9	Pancreas / Thyroid / Corpus Uteri / Non-Hodgkin's Lymphoma	6*
Lafourche	All Cancers	1,510	All Cancers	828	All Cancers	682
	Lung	287	Prostate	210	Breast	203
	Prostate / Colon & Rectum	210*	Lung	189	Lung / Colon & Rectum	98*
	Breast	206	Colon & Rectum	112	Non-Hodgkin's Lymphoma	37
	Non-Hodgkin's Lymphoma	72	Bladder	48	Corpus Uteri	29
	Bladder	64	Non-Hodgkin's Lymphoma	35	Kidney & Renal Pelvis	18
St. Charles	All Cancers	780	All Cancers	428	All Cancers	352
	Prostate	126	Prostate	126	Breast	114
	Lung	124	Lung	76	Lung	48
	Breast	115	Colon & Rectum	52	Colon & Rectum	44
	Colon & Rectum	96	Non-Hodgkin's Lymphoma / Bladder	17*	Ovary	14
	Non-Hodgkin's Lymphoma	26	Oral Cavity & Pharynx / Leukemias	15*	Kidney & Renal Pelvis / Pancreas / Corpus Uteri	11*

* Number of cases is the same at each site.

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
St. James	All Cancers	432	All Cancers	239	All Cancers	193
	Prostate / Lung / Breast	68*	Prostate	68	Breast	68
	Colon & Rectum	42	Lung	49	Colon & Rectum	22
	Kidney & Renal Pelvis	20	Colon & Rectum	20	Lung	19
	Bladder	17	Bladder	15	Corpus Uteri / Kidney & Renal Pelvis	10*
	Pancreas	16	Non-Hodgkin's Lymphoma / Kidney & Renal Pelvis	10*	Pancreas	8
St. John	All Cancers	667	All Cancers	363	All Cancers	304
	Prostate	112	Prostate	112	Breast	94
	Lung	111	Lung	67	Lung	44
	Breast	96	Colon & Rectum	38	Colon & Rectum	35
	Colon & Rectum	73	Bladder	15	Non-Hodgkin's Lymphoma	13
	Bladder	26	Oral Cavity & Pharynx / Kidney & Renal Pelvis	13*	Bladder / Corpus Uteri / Cervix Uteri	11*
St. Mary	All Cancers	1,137	All Cancers	656	All Cancers	481
	Lung	192	Prostate	178	Breast	132
	Prostate	178	Lung	135	Colon & Rectum	60
	Breast	132	Colon & Rectum	64	Lung	57
	Colon & Rectum	124	Bladder	45	Corpus Uteri	20
	Bladder	61	Non-Hodgkin's Lymphoma	21	Cervix Uteri / Leukemias	17*
Terrebonne	All Cancers	1,702	All Cancers	967	All Cancers	735
	Lung	346	Lung	248	Breast	221
	Breast	224	Prostate	200	Lung	98
	Colon & Rectum	213	Colon & Rectum	126	Colon & Rectum	87
	Prostate	200	Non-Hodgkin's Lymphoma	54	Corpus Uteri	37
	Non-Hodgkin's Lymphoma	83	Bladder	48	Non-Hodgkin's Lymphoma	29

* Number of cases is the same at each site.

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
Region 4	All Cancers	10,921	All Cancers	5,663	All Cancers	5,258
	Lung	2,019	Prostate	1,352	Breast	1,571
	Breast	1,583	Lung	1,292	Lung	727
	Prostate	1,352	Colon & Rectum	641	Colon & Rectum	616
	Colon & Rectum	1,257	Bladder	269	Non-Hodgkin's Lymphoma	208
	Non-Hodgkin's Lymphoma	421	Oral Cavity & Pharynx	218	Corpus Uteri	202
Acadia	All Cancers	1,364	All Cancers	717	All Cancers	647
	Lung	236	Prostate	174	Breast	190
	Breast	190	Lung	149	Colon & Rectum	90
	Colon & Rectum	185	Colon & Rectum	95	Lung	87
	Prostate	174	Bladder	36	Corpus Uteri	31
	Bladder	51	Oral Cavity & Pharynx	28	Leukemias	29
Evangeline	All Cancers	759	All Cancers	379	All Cancers	380
	Lung	153	Lung	97	Breast	95
	Breast	95	Prostate	83	Lung	56
	Colon & Rectum	89	Colon & Rectum	41	Colon & Rectum	48
	Prostate	83	Bladder	19	Pancreas	20
	Pancreas	37	Pancreas	17	Corpus Uteri	16
Iberia	All Cancers	1,549	All Cancers	815	All Cancers	734
	Lung	277	Prostate	225	Breast	214
	Prostate	225	Lung	168	Lung	109
	Breast	216	Colon & Rectum	106	Colon & Rectum	82
	Colon & Rectum	188	Oral Cavity & Pharynx	35	Corpus Uteri	32
	Oral Cavity & Pharynx	49	Bladder	27	Cervix Uteri	29
Lafayette	All Cancers	3,224	All Cancers	1,608	All Cancers	1,616
	Lung	550	Lung	358	Breast	535
	Beast	539	Prostate	334	Lung	192
	Colon & Rectum	341	Colon & Rectum	173	Colon & Rectum	168
	Prostate	334	Bladder	90	Non-Hodgkin's Lymphoma	71
	Non-Hodgkin's Lymphoma	144	Non-Hodgkin's Lymphoma	73	Pancreas	59

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
St. Landry	All Cancers	1,920	All Cancers	1,006	All Cancers	914
	Lung	379	Prostate	263	Breast	261
	Breast	265	Lung	242	Lung	137
	Prostate	263	Colon & Rectum	112	Colon & Rectum	117
	Colon & Rectum	229	Bladder	50	Pancreas	45
	Pancreas	79	Pancreas	34	Non-Hodgkin's Lymphoma	39
St. Martin	All Cancers	869	All Cancers	463	All Cancers	406
	Lung	191	Lung	128	Breast	115
	Breast	115	Prostate	98	Lung	63
	Colon & Rectum	99	Colon & Rectum	53	Colon & Rectum	46
	Prostate	98	Bladder	21	Cervix Uteri	18
	Non-Hodgkin's Lymphoma	34	Pancreas	19	Corpus Uteri / Non-Hodgkin's Lymphoma	16*
Vermilion	All Cancers	1,236	All Cancers	675	All Cancers	561
	Lung	233	Prostate	175	Breast	161
	Prostate	175	Lung	150	Lung	83
	Breast	163	Colon & Rectum	61	Colon & Rectum	65
	Colon & Rectum	126	Non-Hodgkin's Lymphoma	30	Non-Hodgkin's Lymphoma	31
	Non-Hodgkin's Lymphoma	61	Oral Cavity & Pharynx	28	Corpus Uteri	24
Region 5	All Cancers	5,651	All Cancers	3,024	All Cancers	2,627
	Lung	1,032	Prostate	826	Breast	721
	Prostate	826	Lung	618	Lung	414
	Breast	729	Colon & Rectum	331	Colon & Rectum	336
	Colon & Rectum	667	Bladder	202	Corpus Uteri	109
	Bladder	271	Skin Melanomas	118	Non-Hodgkin's Lymphoma	103
Allen	All Cancers	428	All Cancers	238	All Cancers	190
	Lung	93	Lung	60	Breast	49
	Prostate	57	Prostate	57	Lung	33
	Breast	50	Colon & Rectum	21	Colon & Rectum	25
	Colon & Rectum	46	Oral Cavity & Pharynx	12	Cervix Uteri / Ovary	7*
	Oral Cavity & Pharynx	17	Non-Hodgkin's Lymphoma	11	Corpus Uteri	6

* Number of cases is the same at each site.

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
Beauregard	All Cancers	630	All Cancers	328	All Cancers	302
	Lung	112	Prostate	91	Breast	81
	Prostate	91	Lung	65	Lung	47
	Breast	82	Colon & Rectum	37	Colon & Rectum	35
	Colon & Rectum	72	Bladder	25	Cervix Uteri / Non-Hodgkin's Lymphoma	15*
	Bladder	34	Non-Hodgkin's Lymphoma	13	Corpus Uteri	12
Calcasieu	All Cancers	3,775	All Cancers	2,053	All Cancers	1,722
	Lung	665	Prostate	570	Breast	481
	Prostate	570	Lung	403	Lung	262
	Breast	486	Colon & Rectum	231	Colon & Rectum	230
	Colon & Rectum	461	Bladder	142	Non-Hodgkin's Lymphoma	68
	Bladder	189	Skin Melanomas	89	Corpus Uteri	65
Cameron	All Cancers	154	All Cancers	78	All Cancers	76
	Lung	34	Lung	23	Breast	27
	Breast	27	Prostate	16	Lung	11
	Prostate	16	Colon & Rectum / Bladder	6*	Colon & Rectum	7
	Colon & Rectum	13	Leukemias	5	**	**
	Bladder	8	**	**	**	**
Jefferson Davis	All Cancers	664	All Cancers	327	All Cancers	337
	Lung	128	Prostate	92	Breast	83
	Prostate	92	Lung	67	Lung	61
	Breast	84	Colon & Rectum	36	Colon & Rectum	39
	Colon & Rectum	75	Bladder	19	Corpus Uteri	23
	Bladder	27	Oral Cavity & Pharynx / Non-Hodgkin's Lymphoma	12*	Pancreas	15

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Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
Region 6	All Cancers	6,046	All Cancers	3,265	All Cancers	2,781
	Lung	1,149	Prostate	881	Breast	727
	Prostate	881	Lung	738	Lung	411
	Colon & Rectum	765	Colon & Rectum	394	Colon & Rectum	371
	Breast	739	Bladder	161	Non-Hodgkin's Lymphoma	125
	Bladder	225	Oral Cavity & Pharynx	110	Corpus Uteri	111
Avoyelles	All Cancers	841	All Cancers	485	All Cancers	356
	Lung	171	Prostate / Lung	119*	Breast	85
	Prostate	119	Colon & Rectum	69	Lung	52
	Colon & Rectum	117	Pancreas	21	Colon & Rectum	48
	Breast	86	Kidney & Renal Pelvis / Bladder	19*	Cervix Uteri	17
	Pancreas	33	Leukemias	13	Non-Hodgkin's Lymphoma	15
Catahoula	All Cancers	206	All Cancers	127	All Cancers	79
	Lung	41	Prostate	38	Breast	19
	Prostate	38	Lung	28	Colon & Rectum	14
	Colon & Rectum	24	Colon & Rectum	10	Lung	13
	Breast	20	Bladder	7	Pancreas	7
	Pancreas	11	Pancreas	**	Corpus Uteri	**
Concordia	All Cancers	348	All Cancers	166	All Cancers	182
	Lung	82	Lung	47	Breast	45
	Colon & Rectum	51	Prostate	42	Lung	35
	Breast	45	Colon & Rectum	24	Colon & Rectum	27
	Prostate	42	Pancreas	9	Corpus Uteri	10
	Pancreas	18	Oral Cavity & Pharynx	6	Pancreas	9
Grant	All Cancers	394	All Cancers	215	All Cancers	179
	Lung	83	Prostate	65	Breast	48
	Prostate	65	Lung	53	Lung	30
	Colon & Rectum	52	Colon & Rectum	25	Colon & Rectum	27
	Breast	49	Non-Hodgkin's Lymphoma	12	Corpus Uteri	11
	Non-Hodgkin's Lymphoma	19	Esophagus	8	Ovary	9

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Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
LaSalle	All Cancers	382	All Cancers	218	All Cancers	164
	Lung	68	Prostate	67	Breast	43
	Prostate	67	Lung	43	Lung	25
	Breast	43	Colon & Rectum	21	Colon & Rectum	15
	Colon & Rectum	36	Bladder	17	Non-Hodgkin's Lymphoma	12
	Bladder/ Non-Hodgkin's Lymphoma	20*	Non-Hodgkin's Lymphoma	8	Skin Melanomas	7
Rapides	All Cancers	2,723	All Cancers	1,467	All Cancers	1,256
	Lung	474	Prostate	402	Breast	360
	Prostate	402	Lung	302	Lung	172
	Breast	366	Colon & Rectum	186	Colon & Rectum	158
	Colon & Rectum	344	Bladder	73	Non-Hodgkin's Lymphoma	58
	Bladder	107	Oral Cavity & Pharynx	61	Corpus Uteri	52
Vernon	All Cancers	716	All Cancers	351	All Cancers	365
	Lung	146	Lung	91	Breast	88
	Colon & Rectum	96	Prostate	79	Colon & Rectum	57
	Breast	90	Colon & Rectum	39	Lung	55
	Prostate	79	Bladder	21	Ovary / Non-Hodgkin's Lymphoma	16*
	Bladder	29	Oral Cavity & Pharynx	15	Corpus Uteri	12
Winn	All Cancers	436	All Cancers	236	All Cancers	200
	Lung	84	Prostate	69	Breast	39
	Prostate	69	Lung	55	Lung	29
	Colon & Rectum	45	Colon & Rectum	20	Colon & Rectum	25
	Breast	40	Bladder	14	Non-Hodgkin's Lymphoma	12
	Bladder / Non-Hodgkin's Lymphoma	18*	Leukemias	8	Skin Melanomas	11

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Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
Region 7	All Cancers	12,254	All Cancers	6,614	All Cancers	5,640
	Prostate	2,165	Prostate	2,165	Breast	1,601
	Lung	2,032	Lung	1,294	Colon & Rectum	753
	Breast	1,612	Colon & Rectum	741	Lung	738
	Colon & Rectum	1,494	Bladder	296	Corpus Uteri	274
	Bladder	412	Oral Cavity & Pharynx	204	Ovary	221
Bienville	All Cancers	490	All Cancers	272	All Cancers	218
	Prostate	106	Prostate	106	Breast	60
	Lung	70	Lung	49	Colon & Rectum	29
	Breast	61	Colon & Rectum	29	Lung	21
	Colon & Rectum	58	Bladder	10	Corpus Uteri	13
	Bladder	17	Non-Hodgkin's Lymphoma	9	Cervix Uteri	11
Bossier	All Cancers	1,853	All Cancers	1,005	All Cancers	848
	Lung	340	Prostate	316	Breast	241
	Prostate	316	Lung	221	Lung	119
	Breast	242	Colon & Rectum	102	Colon & Rectum	111
	Colon & Rectum	213	Bladder	50	Ovary	43
	Bladder	72	Kidney & Renal Pelvis / Non-Hodgkin's Lymphoma	34*	Non-Hodgkin's Lymphoma	34
Caddo	All Cancers	5,843	All Cancers	3,060	All Cancers	2,783
	Prostate	1,036	Prostate	1,036	Breast	822
	Lung	918	Lung	551	Colon & Rectum	375
	Breast	828	Colon & Rectum	346	Lung	367
	Colon & Rectum	721	Bladder	142	Corpus Uteri	139
	Bladder Lymphoma	195	Oral Cavity & Pharynx	116	Ovary	109
Claiborne	All Cancers	431	All Cancers	243	All Cancers	188
	Prostate	82	Prostate	82	Breast	60
	Lung	65	Lung	40	Lung	25
	Breast	60	Colon & Rectum	33	Colon & Rectum	24
	Colon & Rectum	57	Bladder	9	Corpus Uteri	11
	Non-Hodgkin's Lymphoma	14	Pancreas / Kidney & Renal Pelvis / Non-Hodgkin's Lymphoma/ Leukemias	7*	Non-Hodgkin's Lymphoma	7

* Number of cases is the same at each site.

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
DeSoto	All Cancers	685	All Cancers	372	All Cancers	313
	Prostate	122	Prostate	122	Breast	87
	Lung	112	Lung	72	Colon & Rectum	43
	Breast	88	Colon & Rectum	36	Lung	40
	Colon & Rectum	79	Bladder	23	Pancreas	15
	Bladder	30	Larynx / Skin Melanomas / Leukemias	11*	Non-Hodgkin's Lymphoma	12
Natchitoches	All Cancers	784	All Cancers	390	All Cancers	394
	Lung	129	Prostate	109	Breast	104
	Colon & Rectum	110	Lung	79	Colon & Rectum	60
	Prostate	109	Colon & Rectum	50	Lung	50
	Breast	104	Bladder	17	Corpus Uteri	24
	Bladder	26	Kidney & Renal Pelvis	13	Ovary	19
Red River	All Cancers	234	All Cancers	126	All Cancers	108
	Lung	38	Prostate	36	Breast	25
	Prostate	36	Lung	27	Colon & Rectum	14
	Colon & Rectum	34	Colon & Rectum	20	Lung	11
	Breast	25	Leukemias	5	Cervix Uteri	7
	Skin Melanomas	9	**	**	Skin Melanomas / Non-Hodgkin's Lymphoma	5*
Sabine	All Cancers	670	All Cancers	402	All Cancers	268
	Lung	140	Prostate	113	Breast	64
	Prostate	113	Lung	106	Colon & Rectum	40
	Colon & Rectum	74	Colon & Rectum	34	Lung	34
	Breast	64	Bladder	15	Corpus Uteri	15
	Kidney & Renal Pelvis	23	Oral Cavity & Pharynx / Skin Melanomas	13*	Non-Hodgkin's Lymphoma	14
Webster	All Cancers	1,264	All Cancers	744	All Cancers	520
	Prostate	245	Prostate	245	Breast	138
	Lung	220	Lung	149	Lung	71
	Colon & Rectum	148	Colon & Rectum	91	Colon & Rectum	57
	Breast	140	Bladder	28	Non-Hodgkin's Lymphoma	26
	Non-Hodgkin's Lymphoma	44	Skin Melanomas	25	Corpus Uteri	25

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Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
Region 8	All Cancers	8,260	All Cancers	4,478	All Cancers	3,782
	Lung	1,499	Prostate	1,331	Breast	1,066
	Prostate	1,331	Lung	992	Lung	507
	Breast	1,082	Colon & Rectum	414	Colon & Rectum	488
	Colon & Rectum	902	Bladder	177	Corpus Uteri	180
	Skin Melanomas	289	Skin Melanomas	167	Non-Hodgkin's Lymphoma	129
Caldwell	All Cancers	274	All Cancers	160	All Cancers	114
	Lung	60	Lung	42	Breast	32
	Colon & Rectum	38	Prostate	26	Colon & Rectum	20
	Breast	33	Colon & Rectum	18	Lung	18
	Prostate	26	Oral Cavity & Pharynx	9	Cervix Uteri / Non-Hodgkin's Lymphoma	6*
	Non-Hodgkin's Lymphoma	12	Bladder	7	Corpus Uteri	5
East Carroll	All Cancers	243	All Cancers	135	All Cancers	108
	Prostate	48	Prostate	48	Breast	33
	Lung	45	Lung	28	Lung	17
	Breast	33	Colon & Rectum	15	Colon & Rectum	12
	Colon & Rectum	27	Skin Melanomas	7	Cervix Uteri	7
	Skin Melanomas	9	Oral Cavity & Pharynx / Bladder	5*	Kidney & Renal Pelvis	6
Franklin	All Cancers	553	All Cancers	290	All Cancers	263
	Lung	100	Prostate	80	Breast	66
	Prostate	80	Lung	67	Lung	33
	Breast	66	Colon & Rectum	28	Colon & Rectum	27
	Colon & Rectum	55	Pancreas	12	Pancreas	19
	Pancreas	31	Bladder	11	Corpus Uteri	13
Jackson	All Cancers	482	All Cancers	275	All Cancers	207
	Prostate	103	Prostate	103	Breast	55
	Lung	75	Lung	54	Colon & Rectum	26
	Breast	56	Colon & Rectum	17	Lung	21
	Colon & Rectum	43	Bladder	14	Cervix Uteri	14
	Bladder	18	Skin Melanomas	12	Corpus Uteri	13

* Number of cases is the same at each site.

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
Lincoln	All Cancers	858	All Cancers	465	All Cancers	393
	Prostate	147	Prostate	147	Breast	124
	Lung	145	Lung	100	Lung	45
	Breast	125	Colon & Rectum	37	Colon & Rectum	41
	Colon & Rectum	78	Skin Melanomas	28	Skin Melanomas	26
	Skin Melanomas	54	Bladder	21	Corpus Uteri	24
Madison	All Cancers	240	All Cancers	124	All Cancers	116
	Lung	44	Prostate	34	Breast	28
	Prostate	34	Lung	25	Colon & Rectum	20
	Colon & Rectum	33	Colon & Rectum	13	Lung	19
	Breast	28	Esophagus	9	Ovary / Pancreas / Kidney & Renal Pelvis / Cervix Uteri	5*
	Esophagus	13	Stomach	8	**	**
Morehouse	All Cancers	771	All Cancers	436	All Cancers	335
	Prostate	139	Prostate	139	Breast	103
	Lung	133	Lung	93	Colon & Rectum	47
	Breast	106	Colon & Rectum	40	Lung	40
	Colon & Rectum	87	Bladder	20	Corpus Uteri	14
	Bladder	27	Skin Melanomas	16	Pancreas	13
Ouachita	All Cancers	3,135	All Cancers	1,628	All Cancers	1,507
	Lung	557	Prostate	469	Breast	452
	Prostate	469	Lung	348	Lung	209
	Breast	458	Colon & Rectum	153	Colon & Rectum	189
	Colon & Rectum	342	Bladder	68	Corpus Uteri	68
	Non-Hodgkin's Lymphoma	112	Skin Melanomas	65	Non-Hodgkin's Lymphoma	54
Richland	All Cancers	599	All Cancers	341	All Cancers	258
	Lung	125	Prostate	90	Breast	62
	Prostate	90	Lung	81	Lung	44
	Colon & Rectum/ Breast	64*	Colon & Rectum	29	Colon & Rectum	35
	Non-Hodgkin's Lymphoma	22	Oral Cavity & Pharynx	16	Corpus Uteri	16
	Skin Melanomas / Leukemias	21*	Leukemias	14	Cervix Uteri / Ovary	12*

* Number of cases is the same at each site.
** Contents of cells with fewer than five cases are suppressed for reasons of confidentiality.

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
Tensas	All Cancers	152	All Cancers	84	All Cancers	68
	Lung	36	Prostate	31	Breast	15
	Prostate	31	Lung	25	Colon & Rectum	13
	Colon & Rectum	23	Colon & Rectum	10	Lung	11
	Breast	15	**	**	Corpus Uteri	5
	Corpus Uteri	5	**	**	**	**
Union	All Cancers	594	All Cancers	324	All Cancers	270
	Lung	116	Prostate	94	Breast	66
	Prostate	94	Lung	83	Colon & Rectum	44
	Colon & Rectum	73	Colon & Rectum	29	Lung	33
	Breast	68	Oral Cavity & Pharynx	21	Skin Melanomas	14
	Oral Cavity & Pharynx	23	Stomach / Larynx	9*	Ovary	13
West Carroll	All Cancers	359	All Cancers	216	All Cancers	143
	Prostate	70	Prostate	70	Breast	30
	Lung	63	Lung	46	Lung	17
	Colon & Rectum	39	Colon & Rectum	25	Colon & Rectum	14
	Breast	30	Oral Cavity & Pharynx	9	Non-Hodgkin's Lymphoma	11
	Non-Hodgkin's Lymphoma	17	Bladder	7	Corpus Uteri	10
Region 9	All Cancers	7,731	All Cancers	4,230	All Cancers	3,501
	Lung	1,444	Prostate	1,229	Breast	1,064
	Prostate	1,229	Lung	937	Lung	507
	Breast	1,080	Colon & Rectum	441	Colon & Rectum	416
	Colon & Rectum	857	Bladder	222	Non-Hodgkin's Lymphoma	159
	Non-Hodgkin's Lymphoma	317	Non-Hodgkin's Lymphoma	158	Corpus Uteri	133
Livingston	All Cancers	1,442	All Cancers	794	All Cancers	648
	Lung	302	Prostate	241	Breast	188
	Prostate	241	Lung	191	Lung	111
	Breast	191	Colon & Rectum	68	Colon & Rectum	79
	Colon & Rectum	147	Bladder	51	Non-Hodgkin's Lymphoma	27
	Bladder	64	Oral Cavity & Pharynx	25	Corpus Uteri	20

*Number of cases is the same at each site.

** Contents of cells with fewer than five cases are suppressed for reasons of confidentiality.

Top Five Cancers and Number of Cases Diagnosed in Louisiana By Region and Parish, 1993-1997						
Region/Parish	**Total**		**Males**		**Females**	
St. Helena	All Cancers	122	All Cancers	79	All Cancers	43
	Prostate	30	Prostate	30	Breast	13
	Lung	27	Lung	20	Lung	7
	Colon & Rectum / Breast	13*	Colon & Rectum	8	Colon & Rectum	5
	**	**	**	**	**	**
	**	**	**	**	**	**
St. Tammany	All Cancers	3,200	All Cancers	1,734	All Cancers	1,466
	Lung	554	Prostate	496	Breast	481
	Prostate	496	Lung	344	Lung	210
	Breast	490	Colon & Rectum	178	Colon & Rectum	160
	Colon & Rectum	338	Bladder	96	Non-Hodgkin's Lymphoma	74
	Non-Hodgkin's Lymphoma	162	Non-Hodgkin's Lymphoma	88	Ovary	62
Tangipahoa	All Cancers	1,873	All Cancers	1,021	All Cancers	852
	Lung	356	Prostate	291	Breast	242
	Prostate	291	Lung	236	Lung	120
	Colon & Rectum	244	Colon & Rectum	133	Colon & Rectum	111
	Breast	243	Bladder	43	Non-Hodgkin's Lymphoma	35
	Non-Hodgkin's Lymphoma	63	Kidney & Renal Pelvis	34	Pancreas / Ovary	32*
Washington	All Cancers	1,094	All Cancers	602	All Cancers	492
	Lung	205	Prostate	171	Breast	140
	Prostate	171	Lung	146	Colon & Rectum	61
	Breast	143	Colon & Rectum	54	Lung	59
	Colon & Rectum	115	Bladder	31	Non-Hodgkin's Lymphoma	23
	Kidney & Renal Pelvis / Non-Hodgkin's Lymphoma	42*	Kidney & Renal Pelvis	24	Pancreas	21

* Number of cases is the same at each site.

** Contents of cells with fewer than five cases are suppressed for reasons of confidentiality.

Source: Louisiana Tumor Registry

F. CHRONIC DISEASE—BEHAVIORAL RISK FACTOR SURVEILLANCE SYSTEM (BRFSS)

Behavior-related illness and injury, such as heart disease, cancer, cerebrovascular disease, and motor vehicle-related injuries result in the premature death or compromised lifestyle of thousands of Louisiana residents each year. Most of the adults in the state report that they engage in at least one health behavior that place them at an increased, but avoidable, risk for these outcomes.

Prevention of illness before it occurs is a central aspect of the public health system. Achievement of this goal requires an understanding of the risk factors that lead to illness and of the behaviors that put an individual at risk of illness. The goal of primary prevention programs is to reduce or prevent initiation of behaviors, such as smoking, alcohol use, sedentary lifestyles, and poor eating habits, known to be associated with chronic disease. The goal of secondary prevention is to reduce or delay chronic illnesses and deaths through the early identification and treatment of persons with early signs/symptoms of diseases, by promoting the use of scientifically validated screening exams for early detection of certain cancers, hypertension, breast cancer, and diabetes.

To collect information needed by its primary and secondary prevention programs, the Louisiana DEPARTMENT OF HEALTH AND HOSPITALS (DHH), OFFICE OF PUBLIC HEALTH, in cooperation with the CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC), began in 1991 to participate in the Behavioral Risk Factor Surveillance System (BRFSS). The purpose of the BRFSS is to provide state-level prevalence data on health-related behaviors and attitudes. Information collected in the survey is being used in the state's ongoing effort to plan, develop, and evaluate health promotion and disease prevention programs. Data from the BRFSS are also used to monitor progress toward achieving the national objectives of the Healthy People 2000 program of the United States Department of Health and Hospitals (USDHHS, 1990).

Adults ages 18 years and older who do not live in institutions such as geriatric centers, hospitals, jail, or prison may be included in the BRFSS. Some survey questions are asked each year and some are asked on alternating years. The following information, representing non-institutionalized Louisiana adult residents ages 18 and older, are from the most recent BRFSS that collected the specified data.

BRFSS: Tobacco Use

Cigarette Smoking

Each year smoking kills more people than alcohol, motor vehicle injuries, suicide, AIDS, homicide, illegal drugs, and fires combined. Cigarette smoking is the leading cause of preventable death and disease in the United States, accounting for more than 400,000 deaths nationally each year.

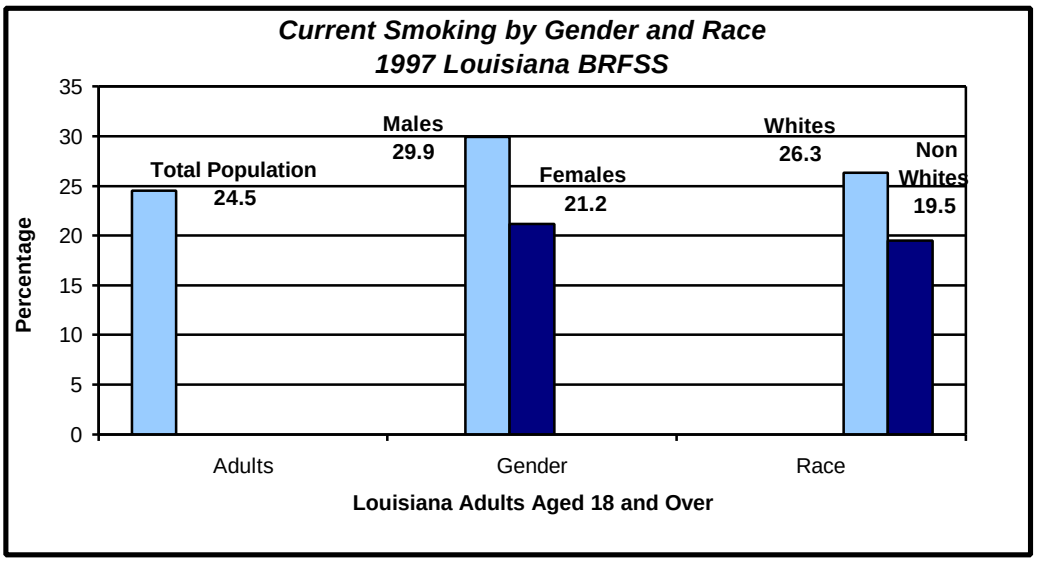
In 1994, 20% (7,951) of all deaths in Louisiana were attributable to cigarette smoking. Almost all (99%) of these deaths occurred as a result of cancer, heart disease, stroke, and vascular and respiratory diseases.

Current Smoking Rates

In 1997, according to BRFSS results, approximately one out of four adult Louisianians was a current smoker. Among current smokers, 47.6% attempted to quit smoking for one or more days during the twelve months preceding the survey.

The prevalence of current smokers was higher in males (29.9%) than females (21.2%). The white population had a higher prevalence of current smoking (26.3%) than the non-white

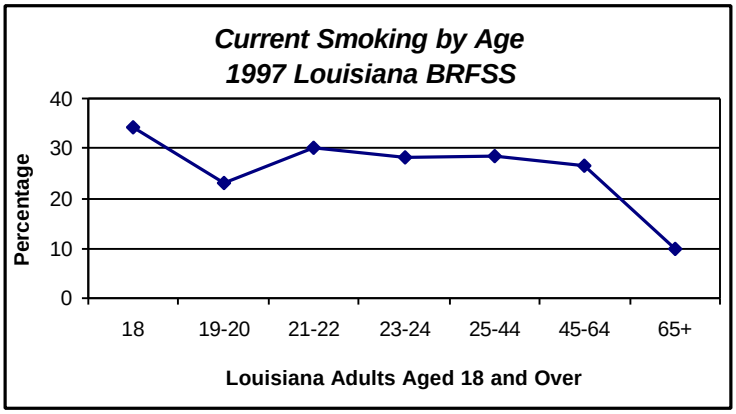
population (19.5%). Prevalence of current smoking remained steady (approximately 28%) during the ages of 21-64 years and dramatically declined after age 65. This decline could be due to tobacco-related deaths and complications from tobacco use.



Source: Louisiana Office of Public Health, Chronic Disease Control Program

Cigarette Smoking and Youth

State and national data show that most current tobacco users actually begin using tobacco during their youth. The 1997 BRFSS data indicated that the highest proportion of current smokers was among the 18-year-old age group (34.3%). This finding clearly justifies continued efforts to prevent tobacco use among youths. Based on research to date, the only proven method for reducing youth addiction is increased taxation. Studies have shown that about 10% fewer kids become addicted with each $0.25 raise in tobacco taxation. The amount of taxation on cigarettes in Louisiana is low compared with other states.



Source: Louisiana Office of Public Health, Chronic Diseases Control Program

Smokeless Tobacco

The link between occurrence of oral cancer and the use of smokeless tobacco, snuff, and chewing tobacco has been clearly documented. The available research shows that snuff use increases the risk of oral cancer among nonsmokers four-fold. Among chronic snuff users the

excess risk of cancer of the gum and buccal mucosa reaches nearly fifty-fold. In the United States, more than 30,000 cases a year of oral cancer are attributed to the use of smokeless tobacco.

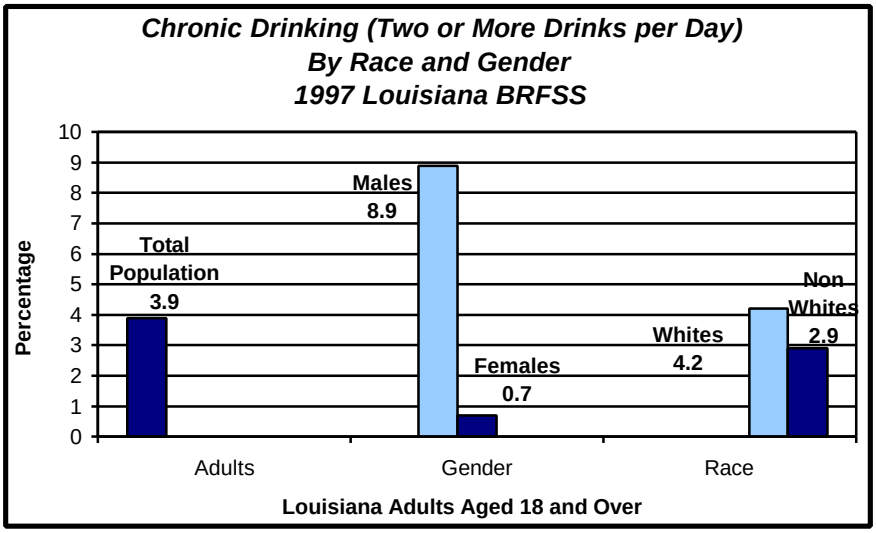
In the 1997 BRFSS, 3% of the adult population reported that they were current users of smokeless tobacco. However, 12.1% of the respondents indicated that they had used or tried smokeless tobacco products at some time. The overwhelming majority of current smokeless tobacco users were young, white, and male.

BRFSS: Alcohol Use

Health and social problems associated with heavy, chronic, and binge drinking are well recognized. Liver diseases are associated with chronic alcohol abuse, and fatal motor vehicle accidents are associated with heavy chronic and binge drinking. Chronic drinking is defined as two or more drinks daily for thirty days or at least sixty drinks per month. Binge drinking is defined as five or more drinks on one or more occasions within thirty days.

Based on the 1997 BRFSS, approximately 15.2% of the Louisiana adult population reported at least one episode of binge drinking in the thirty days prior to the survey. Men (24.2%) were four times more likely to engage in binge drinking than women (7.4%) were. Whites (15.9%) were more likely to report binge drinking than Non-Whites (9.7%). The prevalence of binge drinking decreased with increasing age.

Approximately 3.9% of adult Louisianians reported that they consumed at least two alcoholic drinks each day of the month prior to the survey. Males (8.9%) were more likely than females (0.7%) to report chronic alcohol use. Whites (4.2%) were more likely than Non-Whites (2.9%) to report chronic alcohol use.



Source: Louisiana Office of Public Health, Chronic Diseases Control Program

Drinking and Driving

Many studies suggest that automobile crashes in which alcohol plays a role tend to be much more severe than other crashes. Nationally, alcohol plays a role in about 20% of crashes involving serious injury to driver or passenger, about 50% of all fatal crashes, and about 60% of single-vehicle fatal crashes. Estimates place the number of deaths in the United States attributed to alcohol-related motor vehicle crashes at over 22,000.

Of those who indicated they had consumed alcohol in the month prior to the survey, 6.0% indicated that on at least one occasion they had driven when they had had too much to drink.

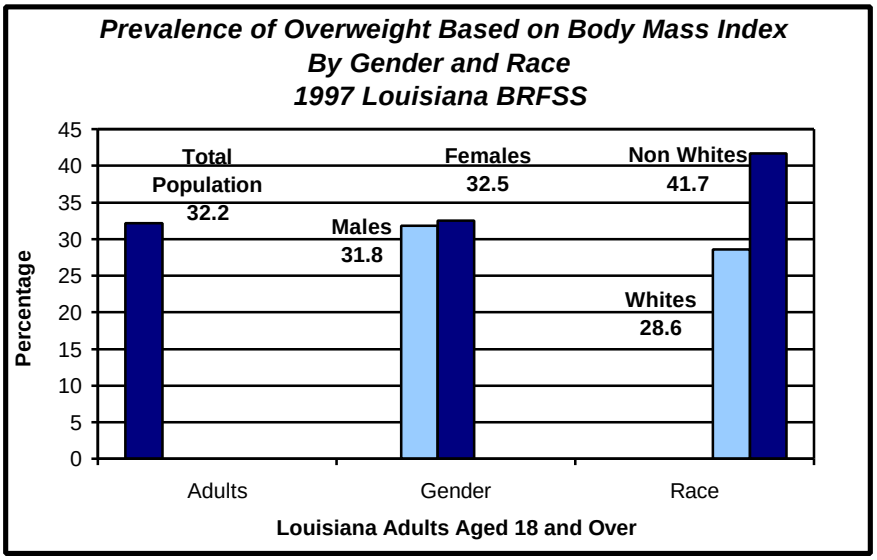
BRFSS: Nutrition and Exercise

Nutrition and exercise are important to good health overall and are related to weight or body fatness. Increases in body fatness are associated with high blood pressure, diabetes, coronary heart disease, and atherosclerosis. Additionally, high fat, low fiber diets are associated with various types of cancer.

Overweight

The Body Mass Index (BMI) is a measure of body fatness derived from height and weight. For males a BMI of 27.8 or greater is considered overweight. For females a BMI of 27.3 or higher is considered overweight.[4]

Nearly one-third (32.2%) of Louisiana adults are overweight. With increasing age, there is a general trend toward increasing prevalence of overweight. There were no significant differences in overweight prevalence between females (32.5%) and males (31.8%). However, Non-Whites (41.7%) were more likely than Whites (28.6%) to be overweight. With age, prevalence increases up to age 65 years. Interestingly, Americans overall are not eating many more calories. The weight increases are tied more directly to a marked decline in physical activity.



Source: Louisiana Office of Public Health, Chronic Diseases Control Program

Fruit and Vegetable Consumption

The National Academy of Sciences, the U.S. Department of Agriculture, the U.S. Department of Health and Human Services, the American Cancer Society and the National Cancer Institute specify in their dietary guidelines for fiber intake that at least five servings of fruit and vegetables per day are consistent with the maintenance of good health and cancer prevention.

The BRFSS-1998 is collecting new data on this topic. According to the 1996 BRFSS data, less than 20% of Louisiana's adults reported consumption of five fruits and vegetables per day. Males (14.4%) were less likely than females (21.2%) to report meeting the dietary fiber guideline.

[4] National Center for Health Statistics. *Healthy People 2000 Review, 1997*. Hyattsville, Maryland: Public Health Service. 1997.

Physical Activity

The Surgeon General's report *Physical Activity and Health*[5] concluded that individuals of all ages who engage in regular physical activity have a lower mortality rate than individuals with sedentary lifestyles. While higher levels of fitness have greater health benefits, studies suggest that even moderate amounts of activity are beneficial. New research indicates that thirty minutes of moderate physical activity, even if broken into three ten-minute episodes, convey significant health benefits. Increases in physical activity are associated with decreases in body fatness, lowering of blood pressure, and increased glucose tolerance.

Persons who report no physical activity outside of work are classified as sedentary. The BRFSS-1998 is collecting new data on this topic. According to the 1996 BRFSS data, one in three Louisiana adults is physically inactive; that is, they had not been involved in leisure time physical activities in the month preceding the survey. Another 27.5% engage in irregular physical activity; that is, less than three times a week or less than twenty minutes per session. Overall, 62.3% were sedentary. The prevalence of sedentary lifestyles was similar for males (60.7%) and females (63.7%). However, a larger proportion of Non-Whites (70.2%) than Whites (59.1%) reported sedentary lifestyles.

BRFSS: Health Status

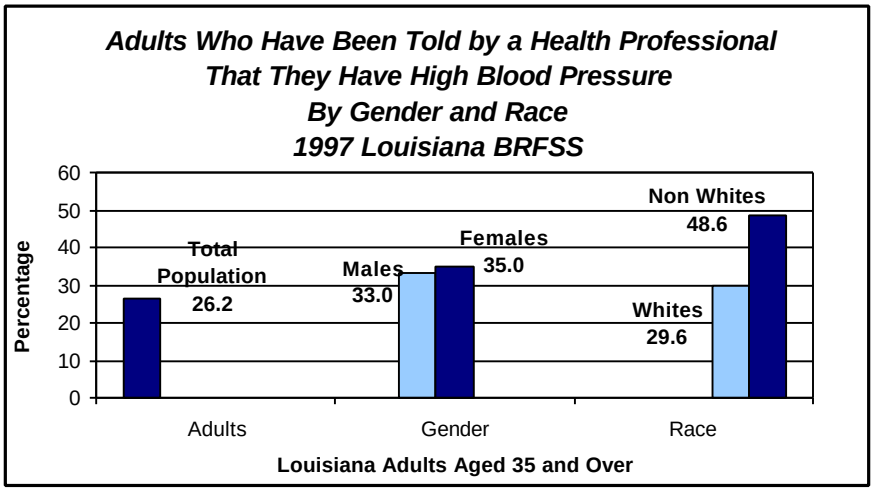
Overall, the health status of the adult population may be reflected in the chronic disease burden. Chronic diseases of public health importance (i.e. diseases that are among the leading causes of death, that have high economic and disability impact, etc.) include hypertension, high cholesterol, and diabetes. The goal of public health with regard to these diseases is early detection through periodic screening and treatment.

High Blood Pressure (Hypertension)

High blood pressure is associated with increased risk for stroke, kidney failure, and coronary heart disease. Blood pressure tends to increase with age and can be affected by weight gain, physical inactivity, and, to a lesser extent, diet. Blood pressure should be checked periodically; individuals with high levels (greater than 140/90 mm Hg) recorded more than once should be referred for treatment.

Approximately one out of every four Louisianians, 35 years of age and older, has been told by a health professional that he has high blood pressure. While there were no significant differences regarding gender, a large differential exists between races; 29.6% of Whites and 48.6% of Non-Whites indicated they were ever told that they had high blood pressure.

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

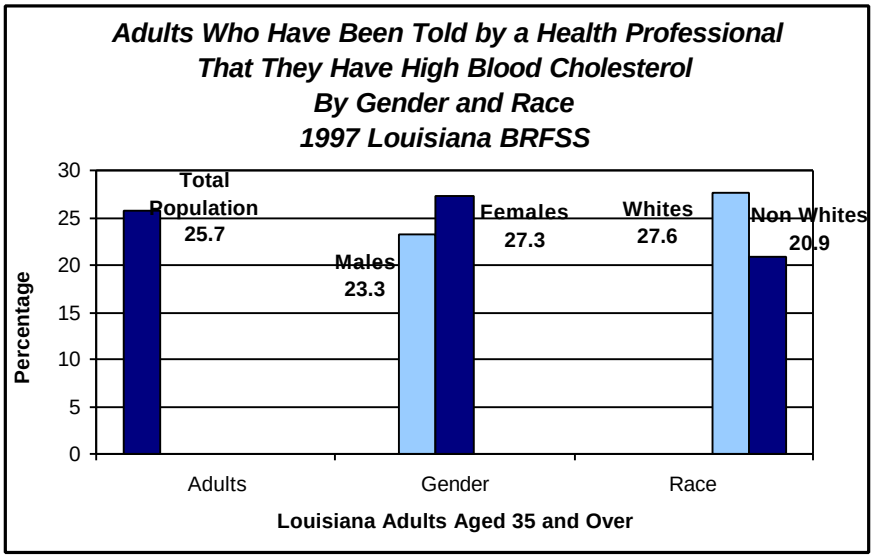


Source: Louisiana Office of Public Health, Chronic Disease Control Program

High Cholesterol

High blood cholesterol is one of the major modifiable risk factors for coronary heart disease. It has been estimated that each 1% reduction in blood cholesterol levels results in a 2% reduction in the risk for heart disease.

One in four (25.7%) Louisiana adults age 35 and above indicated that a physician or nurse had told him that he had high blood cholesterol. Approximately 23.3% of males and 27.3% of females, aged 35 and older, indicated they had been told by a health professional that they had high cholesterol.



Source: Louisiana Office of Public Health, Chronic Disease Control Program

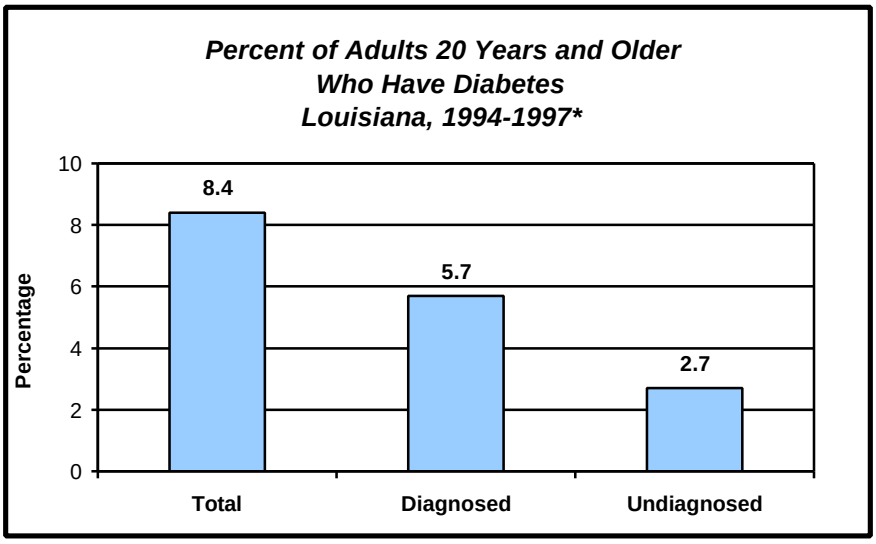
Diabetes

Diabetes is a complex, serious, and increasingly common disease. It is characterized by inappropriate high glucose level in the blood, resulting from inadequate insulin production, inability of the body to use insulin, or both. Insulin is a hormone secreted by the pancreas that allows glucose to enter body cells and to be converted to energy, protein, and fat. Persons who are obese, physically inactive, or members of ethnic minorities (African-Americans, Hispanic/Latino Americans, and American Indians) and those with family history of diabetes or prior gestational diabetes are at a higher risk of acquiring diabetes.

Diabetes is the most common cause of non-traumatic amputations and end-stage renal disease and the leading cause of blindness in adults aged 20 to 74. In 1993, in Louisiana, diabetes caused an estimated 276 new cases of blindness, 1,162 lower extremity amputations, 417 new cases of end-stage kidney disease and 66,965 diabetes-related hospitalizations. The annual direct and indirect costs from diabetes in Louisiana exceed $2 billion dollars.

Diabetes affects about 16 million Americans or 6% of the population of the United States. In 1994, Louisiana ranked second in the United States in self-reported prevalence of diagnosed diabetes.

An estimated 365,000 or 8.4% (5.7% diagnosed and 2.7% undiagnosed diabetes) of Louisiana residents 20 years and older have diabetes. Of the persons with diabetes, 32% or 115,000 are undiagnosed or unaware that they have diabetes and are therefore not receiving recommended treatment to prevent or delay the onset of complications. Over a million additional persons may be at increased risk for diabetes because of the risk factors of age, obesity, and sedentary lifestyle.



*Louisiana BRFSS aggregated for 1994-1997 for diagnosed and NHANES III for undiagnosed diabetes

Source: Louisiana Office of Public Health, Chronic Disease Control Program

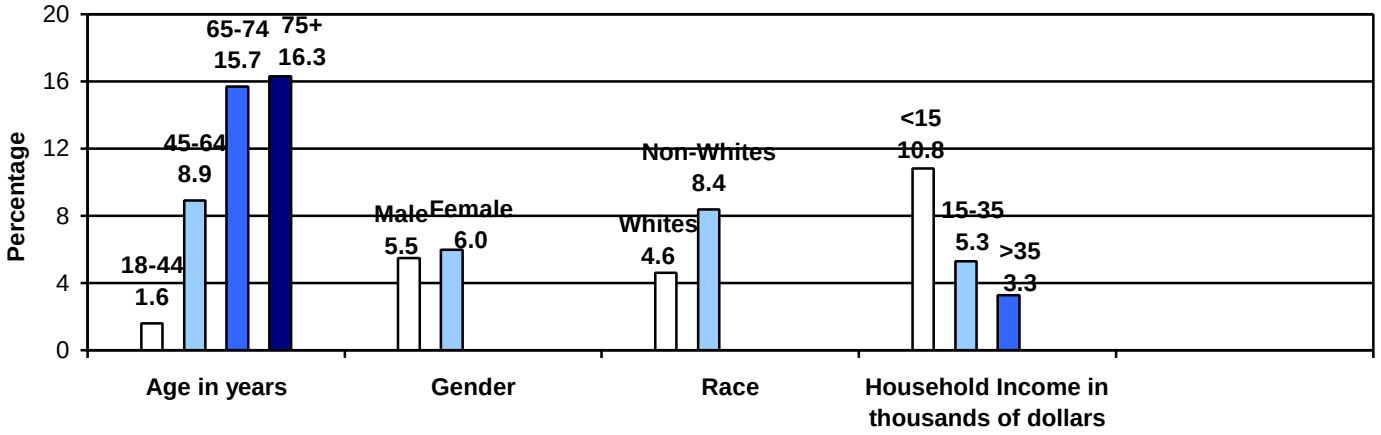
In 1998, in-depth analysis of diabetes in Louisiana was performed using the most current available information. Data were compiled from the Louisiana BRFSS 1994-1997 interviews and the National Health and Nutrition Survey (NHANES III) conducted by the U.S. Centers for Disease Control. Analysis showed no statistically significant difference between females and males or among regions in Louisiana in self-reported risk of being diagnosed with diabetes. The prevalence of diabetes, however, increased as age increased, with the lowest rate of 1.6% in the 18 to 44 age group and the highest rate of 16.3% in 75+ age group. Persons older than 44

years were 7.4 times more likely to be diagnosed with diabetes as compared with persons less than 44 years of age.

Four point six percent of Whites and 8.4% of African-Americans reported having been diagnosed with diabetes. That is, the risk of being diagnosed with diabetes among African-Americans was 1.8 times higher than the risk among Whites. The prevalence of diabetes decreased with increasing household income. Individuals living in households with income less than $15,000 a year had the highest prevalence --10.8% -- while those living in households with annual incomes ranging from $15,000 to $35,000 and those above $35,000 had rates of 5.3% and 3.3% respectively. In other words, the risk of being diagnosed with diabetes among persons with household income of less than or equal to $15,000 was 2.3 times higher compared with the risk among households with an annual income of over $15,000. Of the persons with diabetes, 55% were females, 84% were over 44 years of age (mean age of 61 years), 56% were white, 33% had a household income of less than $15,000, 33% were employed, and 41% were retired.

Diabetes is a risk factor for coronary heart disease and stroke. In fact, of the persons with diabetes in 1997, 13% were told they had coronary artery disease and 10% that they had had a stroke. Persons with diabetes are at even higher risk for cardiovascular disease morbidity and mortality because of the co-existence of other independent risk factors for cardiovascular disease. Fifty-one percent of persons with diabetes were found to be overweight based on body mass index, 29% were self-reported current smokers, 50% were told they have high blood pressure, and 38% were told they have high cholesterol. In addition, 68% reported no leisure time physical activity and 76% reported consuming less than the recommended five servings of fruit and vegetables a day.

Percentage of Adults Aged 18 and Over Who Have Been Told by a Health Professional That They Have Diabetes By Age, Gender, Race, and Household Income Louisiana, 1994-1997*



*Louisiana BRFSS aggregated for 1994-1997

Source: Louisiana Office of Public Health, Chronic Disease Control Program

Diabetes is a common and serious disease in Louisiana. It is a costly disease not only in terms of the economic burden it imposes on the state but also in terms of the human suffering inflicted by the disease and its complications. At least 365,000 or 8.4% of Louisiana residents 20 years and older have diabetes. The prevalence of diabetes will continue to increase if the following trends continue: increase in the prevalence of obesity, aging of the population, growth in minority populations, and persistence of socioeconomic gaps. Persons older than 44 years of

age, African-Americans, and individuals with household incomes of less than $15,000 are at higher risk of having diagnosed diabetes.

Diabetes surveillance should continue in order to identify high-risk groups, to monitor health outcomes and indicators of the quality of health care recommended for people with diabetes, to provide data to formulate health care policy, and to evaluate progress in disease prevention and control.

There is a need to develop effective intervention strategies to reduce the burden of diabetes. Much of the diabetes burden can be prevented with better education for diabetes self-management, early detection and treatment of complications, and improved delivery and quality of care with intensified efforts focused at high risk groups including the elderly, African-Americans, and the poor. Primary prevention through promotion of healthy behaviors that reduce obesity, such as proper nutrition and regular physical activity, and secondary prevention of diabetes complications via better clinical preventive services, including regular foot exams, dilated eye exams, and improved blood glucose control, will go far in reducing the diabetes burden.

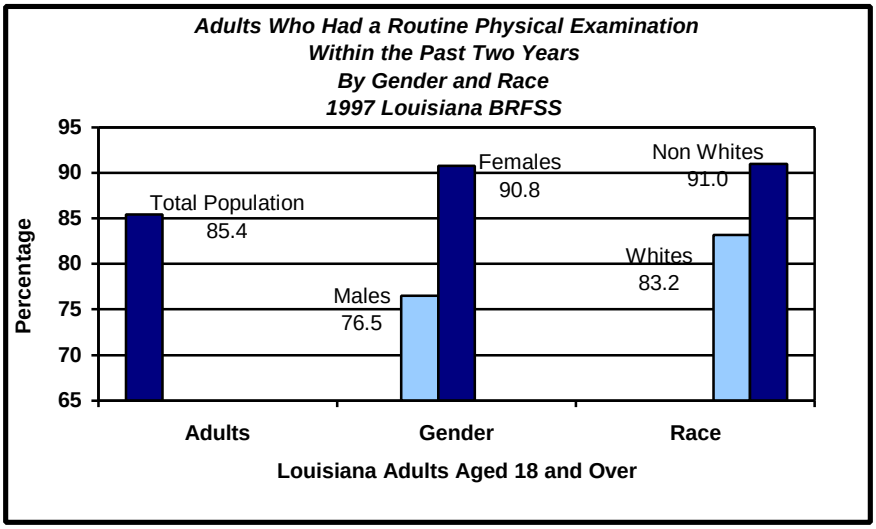
To reduce the burden of diabetes and diabetes complications, there is a need to develop new partnerships and to strengthen existing ones with private health care providers, appropriate governmental, voluntary, professional, and academic institutions and payers including Medicaid, managed care organizations, insurers, and employers. Because of the overlap in risk factors and intervention strategies, and programs for diabetes, cardiovascular and cerebrovascular diseases, and some cancers, prevention and control efforts need to be integrated and coordinated among several of the existing programs in chronic diseases within and outside the OFFICE OF PUBLIC HEALTH.

BRFSS: Preventive Health Care

Routine Medical Examinations

The routine medical examination gives the physician an opportunity to assess the general health status of patients, to assess the need for screening, and to counsel patients regarding perceived issues that affect the patient's health. Thus, it is the prime opportunity to practice preventive care.

In the 1997 BRFSS, 85.4% of the respondents had a routine checkup within the last two years. Women (90.8%) were more likely than men (76.5%) to have had a routine checkup within the past two years. Non-Whites (91.0%) were more likely than Whites (83.2%) to have had a routine checkup within the past two years.

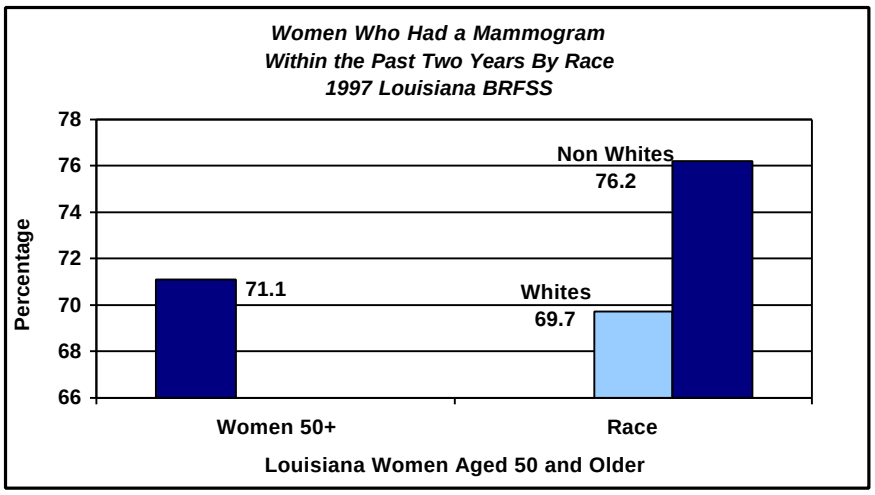


Source: Louisiana Office of Public Health, Chronic Disease Control Program

Mammography

Among women, breast cancer is the most commonly diagnosed cancer. Routine breast examinations by a health professional, or clinical breast examination and mammography are the most effective ways of detecting breast cancer early and improving the chances of survival. The National Cancer Institute, the American Cancer Society, and the United States Department of Health and Human Services recommend that women have a mammogram each year beginning at age 50. There is some controversy about the benefits of screening younger women.

In the 1997 BRFSS, among Louisiana women aged 50 and older, 71.1% reported they had had a mammogram within the two years before the survey. Non-Whites (76.2%) were more likely than Whites (69.7%) to report that they had a mammogram within the last two years.

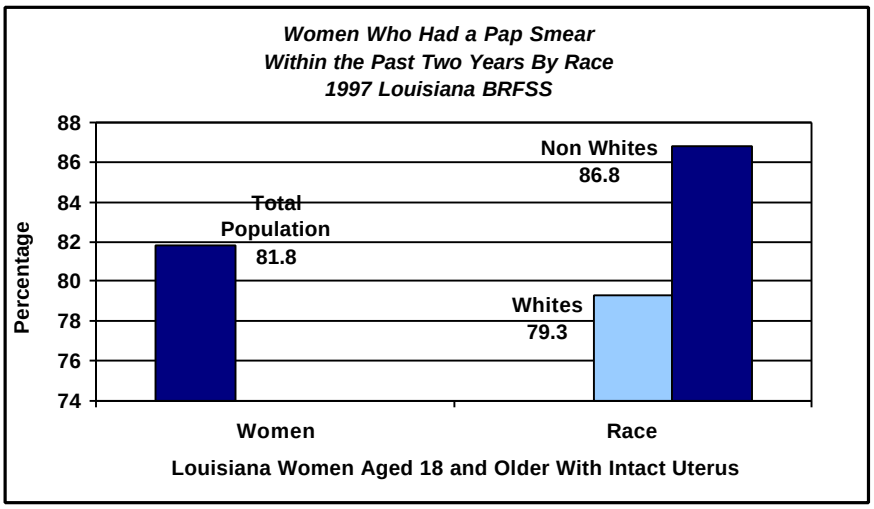


Source: Louisiana Office of Public Health, Chronic Disease Control Program

Pap Smear

A Pap smear is used to obtain a sample of cervical cells to be evaluated for dysplasia or cervical cancer. The American Cancer Society recommends annual Pap tests for all women who are or have been sexually active or who have reached age 18. Once three annual Pap smears have been normal, the test can be done every three years unless a physician recommends more frequent testing.

Among women who had an intact uterus (had not had a hysterectomy), 81.8% had had a Pap smear within the past two years. Non-White women (86.8%) were slightly more likely than White women (79.3%) to have had a Pap smear within the past two years.



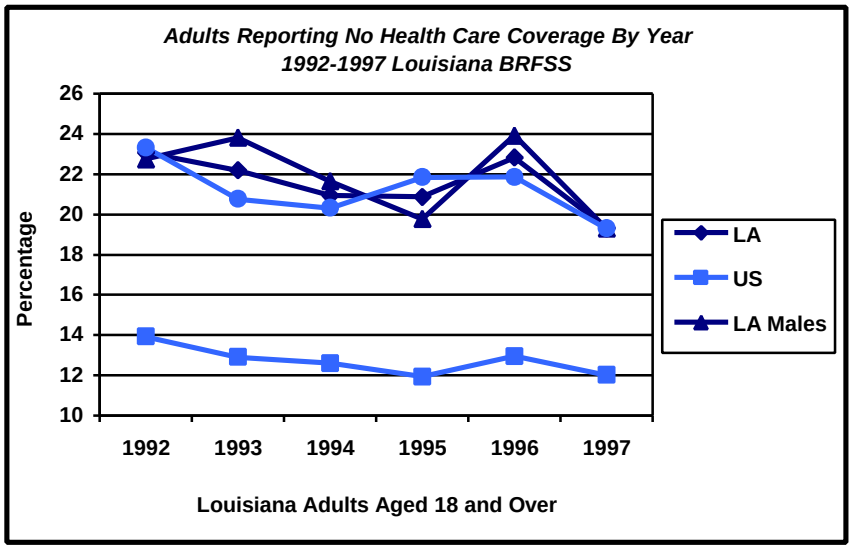
Source: Louisiana Office of Public Health, Chronic Disease Control Program

BRFSS: Medical Care Coverage

Availability of health care coverage is a crucial component in an individual's access to health care. An important Year 2000 Health Objective for the nation is to "improve financing and delivery of clinical preventive services so that virtually no American has a financial barrier to receiving, at a minimum, the screening, counseling, and immunization services recommended by the U.S. Preventive Services Task Force." Individuals without medical coverage, and even some individuals with coverage (underinsured), may not receive health care due to the cost of care. Therefore, measures of utilization of health care, including routine checkups, are dependent on coverage. The BRFSS assesses health care coverage by asking about private insurance, prepaid plans (HMOs), or Medicare.

Louisiana consistently has higher rates of adults with no health care coverage compared with the United States adult population at large.

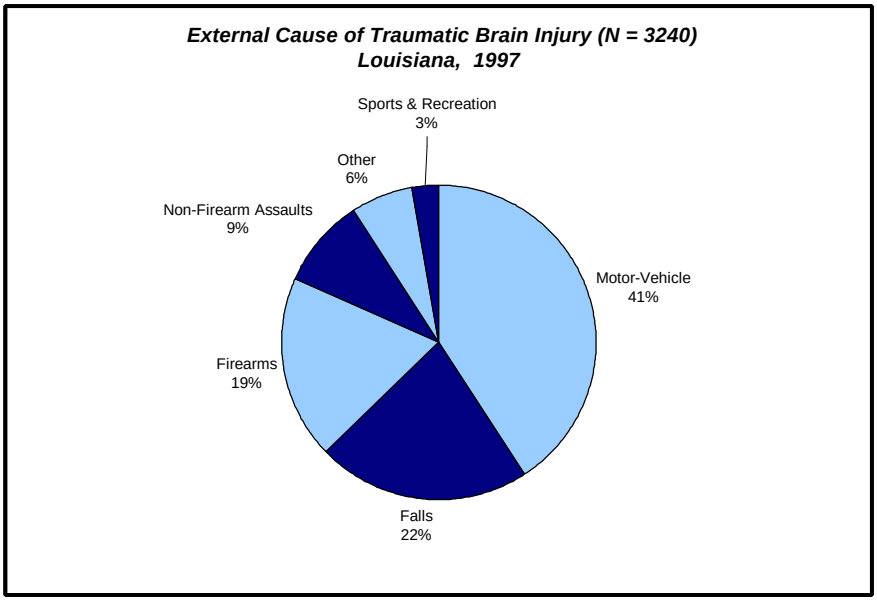
In the 1997 BRFSS, 19.3% of Louisiana adults who were surveyed reported that they had no health care coverage. While there were no disparities between rates of no health care coverage among females (19.3%) and males (19.3%), there was a clear racial difference, with Non-Whites (29.9%) being more likely than Whites (15.4%) to report a lack of health care coverage.



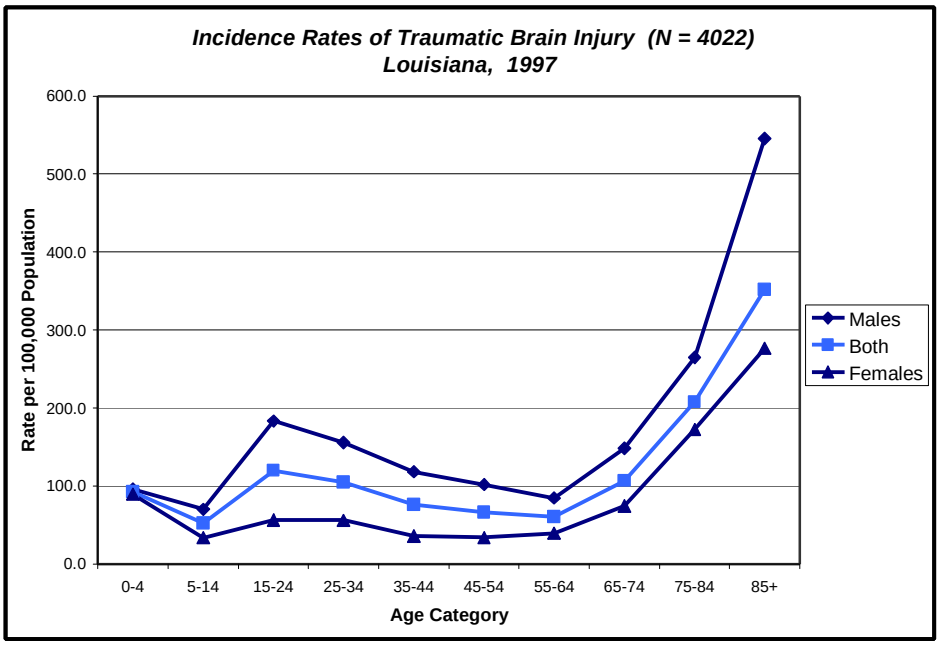
Source: Louisiana Office of Public Health, Chronic Disease Control Program

G. TRAUMATIC BRAIN INJURY

Injuries to the central nervous system are one of the most severe types of injuries in terms of both human suffering and costs to society. They are a major public health problem because of the permanence of the resulting disability, the high costs of acute and long-term treatment, and the fact that they frequently occur to young people. Traumatic brain injury is a reportable condition in Louisiana.



Source: Louisiana Office of Public Health, Injury Research and Prevention Section

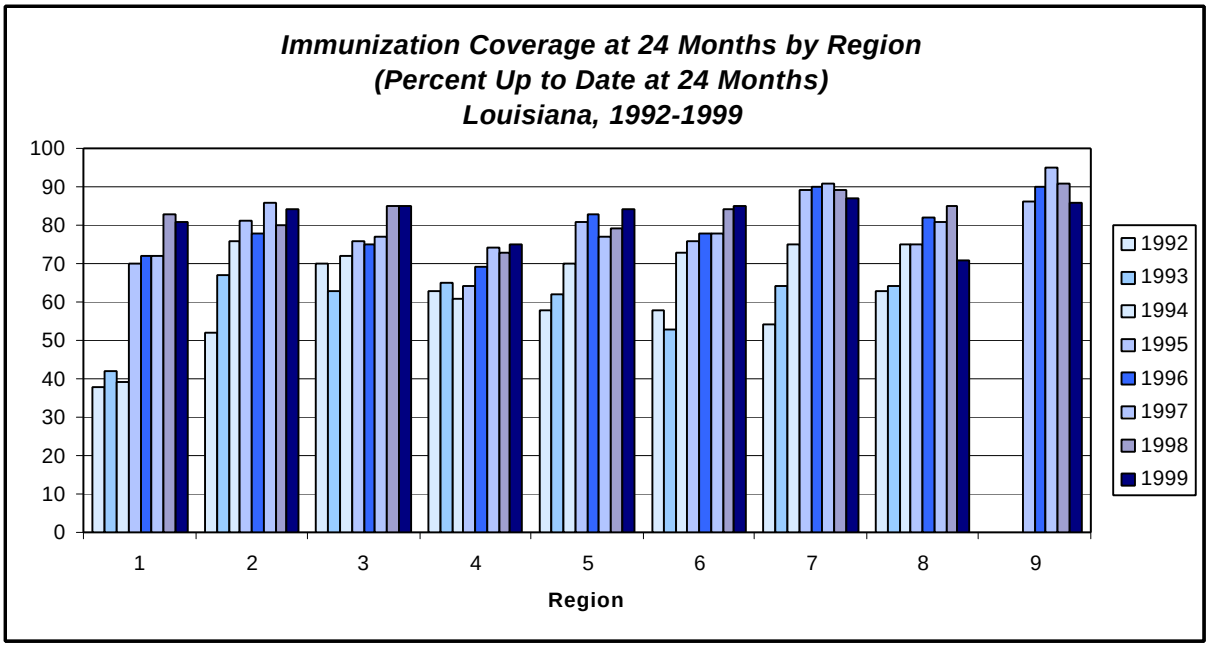


Source: Louisiana Office of Public Health, Injury Research and Prevention Section

III. HEALTH ASSESSMENT PROGRAMS

A. IMMUNIZATION COVERAGE

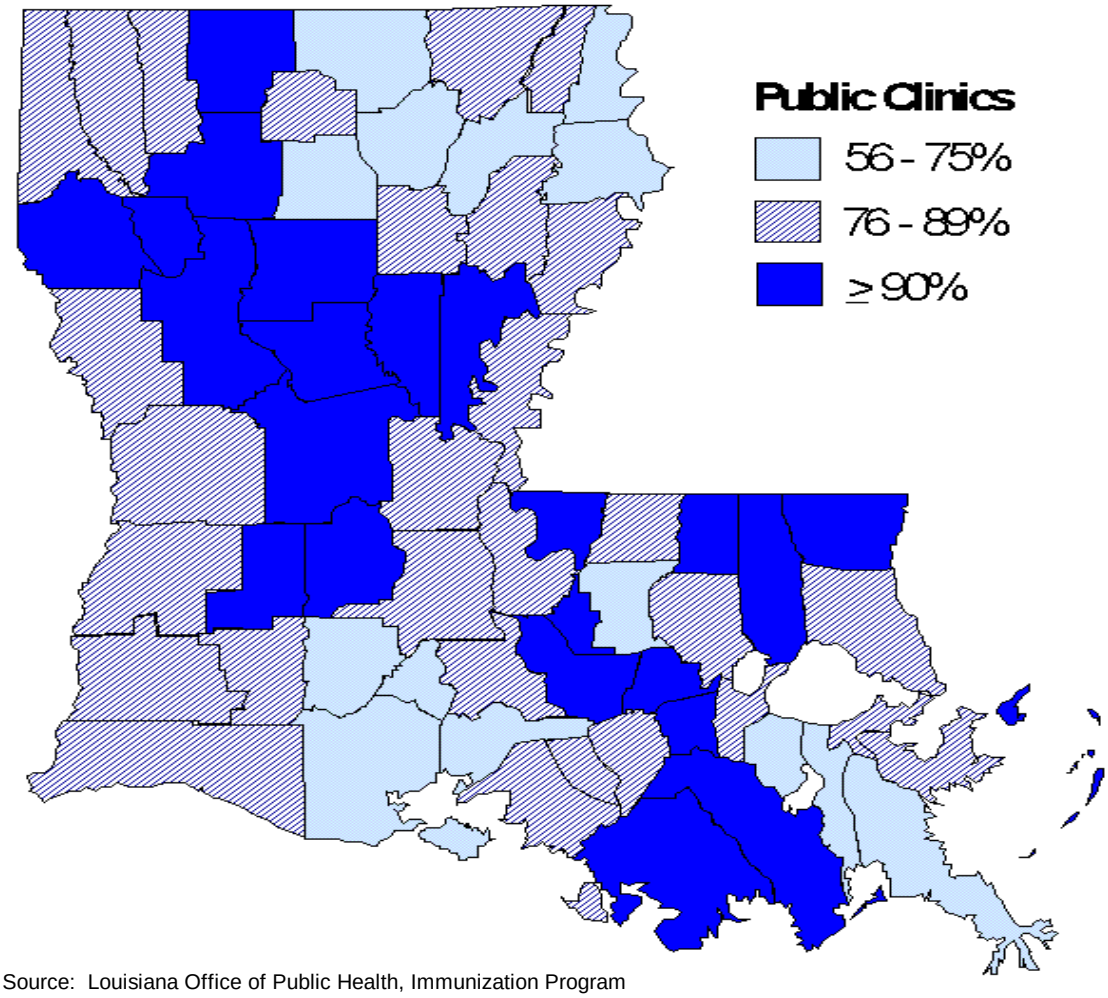
The Immunization Program of the Office of Public Health conducts periodic assessments to determine the immunization coverage rates throughout the state. As the graph below displays, rates of coverage have been steadily increasing since 1992, though there have been year to year variations.



Source: Louisiana Office of Public Health, Immunization Program

The map on the following page displays the percent of immunization coverage at 24 months of age among those served in public clinics. East Carroll and Plaquemines parishes have the lowest immunization coverage rates in the state (see following table).

Percent of Immunization Coverage at 24 Months of Age Among Children Served in Public Clinics Louisiana, 1999



Source: Louisiana Office of Public Health, Immunization Program

Immunizations: Percent Up-To-Date at Age 24 Months* Louisiana, 1999-2000	
Clinic	**%UTD 1999-2000 Results**
Region I	
Orleans-Edna Pilsbury	98.3
Jefferson-Grand Isle	96.0
Orleans-Mandeville Detiege	96.0
Orleans-Mary Buck	94.9
Orleans-Katherine Benson	93.7
Orleans-Helen Levy	92.9
Orleans-St. Bernard Gentilly	87.7
Orleans-Ida Hymel	86.6
St. Bernard	80.3
Jefferson-Marrero	78.9
Plaquemines	70.0
Jefferson-Metairie	64.0
Region II	
Ascension-Gonzales	96.8
Ascension-St. Amant	96.4
Ascension-Donaldsonville	96.3
West Baton Rouge	93.4
West Feliciana	90.7
Iberville	90.0
East Feliciana-Clinton	88.8
Pointe Coupee	87.3
E. Baton Rouge	79.2
E. Baton Rouge-Baker	44.0
Region III	
St. John-Edgard	100.0
St. James-Vacherie	98.2
St. James-Lutcher	97.6
Lafourche-Galliano	96.8
Lafourche-Thibodaux	96.7
Terrebonne	89.9
St. Mary-Franklin	89.8
St. Mary-Morgan City	89.4
St. John-Reserve	89.3
Lafourche-Raceland	88.7
Assumption	75.9
St. Charles	61.4
Region IV	
Evangeline-Mamou	98.3
Evangeline-Ville Platte	96.7
St. Landry-Sunset	91.5
St. Landry-Melville	91.2
St. Landry-Eunice	90.4
St. Martin-St. Martinville	89.8
St. Landry-Opelousas	86.8
Vermillion-Gueydan	86.4
Acadia-Iota	85.1
St. Martin-Cecilia	79.6
Acadia Crowley	79.1
Vermillion-Erath	78.6
Acadia-Church Point	78.3
Vermillion-Abbeville	77.7
St. Martin-Breaux Bridge	76.3
Acadia-Rayne	74.5
Lafayette	72.2
Vermillion-Kaplan	70.2
Iberia-New Iberia	67.4
Iberia-Jeanerette	59.9

*Up-to-date includes 4 DTAP, 3 OPV or IPV, and 1 MMR

Immunizations: Percent Up-To-Date at Age 24 Months* Louisiana, 1999-2000	
Clinic	**%UTD 1999-2000 Results**
Region V	
Allen-Oakdale	94.6
Calcasieu-Sulphur	93.9
Allen-Oberlin	90.4
Calcasieu-Dequincy	88.0
Calcasieu-Lake Charles	85.5
Jefferson Davis	84.4
Beauregard	83.2
Cameron	82.9
Region VI	
Catahoula-Harrisonburg	99.1
LaSalle	96.6
Rapides	92.8
Grant	92.1
Winn	91.9
Catahoula-Joneville	91.0
Concordia-Vidalia	85.4
Vernon	85.2
Avoyelles-Bunkie	82.2
Concordia-Ferriday	81.3
Avoyelles-Marksville	78.1
Region VII	
Bienville-Ringgold	99.7
Red River	94.5
Claiborne	93.7
Webster-Springhill	93.3
DeSoto	92.7
Natchitoches	92.2
Bienville-Arcadia	91.5
Caddo-Vivian	89.2
Sabine	87.7
Webster-Minden	87.0
Bossier-Bossier City	84.2
Caddo-Shreveport	82.8
Region VIII	
Morehouse-Basdrop	84.1
Franklin-Winnsboro	81.5
West Carroll-Oak Grove	81.4
Ouachita-Monroe	78.9
Caldwell	78.6
Tensas-St. Joseph	76.9
Lincoln	75.8
Jackson-Jonesboro	70.4
East Carroll	68.9
Union	66.8
Richland-Rayville	65.7
Ouachita-West Monroe	65.3
Madison	62.8
Region IX	
St. Helena	100.0
Washington-Franklinton	100.0
Washington-Bogalusa	100.0
Tangipahoa-Hammond	97.1
Tangipahoa-Amite	96.6
St. Tammany-Covington	86.3
Livingston-Livingston	84.2
Livingston-Albany	83.8
St. Tammany-Slidell	78.4
Livingston-Denham Springs	78.2

*Up-to-date includes 4 DTAP, 3 OPV or IPV, and 1 MMR

Source: Louisiana 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 the reporting and tracking of diseases that pose a risk to public health in the United States dates back more than a century. 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 Healthy People 2000 Objectives depends in part on our 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 DISEASES EPIDEMIOLOGY PROGRAM, SEXUALLY TRANSMITTED DISEASES CONTROL PROGRAM, TUBERCULOSIS CONTROL PROGRAM, HIV/AIDS PROGRAM, and IMMUNIZATIONS PROGRAM.

Disease surveillance involves the collection of pertinent data, the tabulation and evaluation of the 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. 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 the health department is the backbone of disease surveillance in Louisiana and nationally. The Sanitary Code, State of Louisiana, Chapter II, entitled "The Control of Diseases," charges the BOARD OF HEALTH to promulgate a list of diseases that are required to be reported, who is responsible for reporting, 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 and estimate trends, and identify risk factors for disease acquisition.

The HEALTH DEPARTMENT routinely follows-up selected diseases, either directly or through their physician or other health care provider. This follow-up is done to ensure initiation of appropriate therapy for the individual and prophylactic therapy for contacts of persons with infectious conditions. All reports are confidential.

Confidential disease reporting has been 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 to ensuring that public health resources are used most effectively.

Mandatory reporting is required for a number of infectious diseases, including sexually transmitted diseases, HIV/AIDS, tuberculosis, mumps, and many others. The following description of surveillance procedures for measles and rubella is typical of the procedures followed for all reportable diseases.

Surveillance for Measles and Rubella (German Measles)
All health care providers are required to report suspect cases of measles and rubella by phone immediately to their local public health unit. When a possible case is reported, local and statewide public health personnel are mobilized immediately to evaluate the case and to establish a rapid control effort in order to prevent the spread of the illness. All contacts are interviewed by phone or in person, and children and adults without adequate immunization are immediately vaccinated.

These diseases are very infectious and spread rapidly. One out of every ten measles cases requires hospitalization and one out of every thousand dies. Women who are infected with rubella during pregnancy have a high likelihood of having severely deformed babies. Women of childbearing age are encouraged to receive two doses of MMR vaccine (at least one month apart) at least three months prior to becoming pregnant.

A measles outbreak was identified in Louisiana in 1995, with 17 cases identified before disease spread was stopped. The outbreak lasted 37 days. Control of the outbreak required the examination of 35 suspected cases, a total of 3,252 phone calls, the immunization of 2,527 individuals, and active investigations at 28 sites (including day care centers, hospitals, and physicians' offices).

In Louisiana in 1998, 1 case of rubella and no cases of measles were reported.

Selected 1998 Results of Infectious Disease Surveillance

- During 1998, 30% of newly-detected HIV cases had already progressed to AIDS at the time of HIV detection and 73% of new cases were among African-Americans.
- The number of pertussis cases reported in Louisiana decreased 41% from 1997 and is the lowest reported total since 1984.
- *Salmonella* cases increased by 40% from 1997. A yearlong case-control study was conducted examining risk factors for sporadic *Salmonella*.
- *Vibrio* cases increased from 36 in 1997 to 57 in 1998. Of the 38 cases reporting underlying conditions, the most frequent were heart disease, diabetes, liver disease, and alcoholism.
- Twenty cases of St. Louis encephalitis (SLE) were reported from six parishes. Louisiana reported 77% of all SLE cases in the United States in 1998.
- Fifteen cases of Lyme Disease were reported in 1998, the highest number recorded in Louisiana since Lyme Disease was discovered in the mid-1970s.
- The number of hepatitis C cases reported in Louisiana decreased by 50% since 1997.
- The number of chlamydia cases reported increased 33% from 1997.
- Cases of tuberculosis in children have increased from 4 in 1994 to 20 in 1998, the majority from the New Orleans area.
- Based on aggregate laboratory data collected from 44 sentinel hospitals, 33% of the *Staphylococcus aureus* isolates identified were resistant to methicillin/oxacillin.

- Since 1993, about 50 new cases of HIV/AIDS have been identified in teenage females (ages 13-19) in Louisiana each year.
- *C. perfringens* caused an outbreak of gastroenteritis among persons attending a statewide conference.
- In the summer of 1998, 14 (70%) of a company lunch became ill with neurological and gastrointestinal symptoms. Aldicarb, a cholinesterase inhibitor pesticide, was mistaken for black pepper.
- Also in the summer of 1998, 63 guests who attended a wedding became ill after eating a commercially distributed rice dressing. *Salmonella infantis* was cultured from stool samples, randomly purchased rice dressing mix, and the production plant.
- Forty-seven cases of Shigella infection occurred in an outbreak that began in an elementary school. Eleven stool specimens tested positive for *Shigella sonnei*.

1998 and 1999 Disease Statistics

Please refer to the Vaccine Preventable Diseases, STDs, TB, and HIV/AIDS sections in "Chapter II: Morbidity."

Reports

The bimonthly *Louisiana Morbidity Report* and the *Epidemiology Annual Report* are published by the OFFICE OF PUBLIC HEALTH, INFECTIOUS EPIDEMIOLOGY PROGRAM. Both publications present information and statistics describing the status of reportable diseases in Louisiana.

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

Contracting a sexually transmitted disease can have serious consequences. For example, advanced (tertiary) syphilis can produce neurological, cardiovascular, and other terminal disorders, pelvic inflammatory disease, infertility, ectopic pregnancy, blindness, cancer, fetal and infant death, birth defects, and mental retardation.

The DEPARTMENT OF HEALTH AND HOSPITALS, through the OFFICE OF PUBLIC HEALTH'S STD CONTROL PROGRAM and the HIV/AIDS PROGRAM, conducts surveillance to determine the incidence and prevalence of STDs and HIV/AIDS, monitors STD and HIV/AIDS trends, collects data on the location and referral of persons with or suspected of having a STD for examination and early treatment, and conducts partner notification to limit the spread of the diseases.

1998 National Rankings

Nationally, Louisiana has a high ranking among the 50 states with regard to rates of sexually transmitted diseases (STDs) and HIV/AIDS.

- Primary and secondary syphilis rates in Louisiana fell from 2nd to 7th highest in the nation between 1995 and 1997. In 1998, however, the state ranking rose to 3rd highest.
- Gonorrhea rates rose from 10th highest in the nation in 1995 to 4th highest in 1998; chlamydia rates rose from 11th to 5th highest in the nation during the same time period. The rise in ranking for gonorrhea and chlamydia reflects an increase in the number of labs included in the state's STD surveillance system. This has resulted in the identification of cases that would not have been identified in the past.

- Louisiana's rank increased from 9th highest in 1997 to 7th highest in 1998 among states with the highest AIDS (Acquired Immunodeficiency Syndrome) rates. Among United States cities, New Orleans ranked 11th and Baton Rouge ranked 14th highest.

1998 and 1999 Disease Statistics
Please refer to the STDs and HIV/AIDS sections in "Chapter II: Morbidity."

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

D. TUBERCULOSIS SURVEILLANCE

The Louisiana OFFICE OF PUBLIC HEALTH 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 tuberculosis is contained.

Currently, TB Control in Louisiana is working with CDC to enhance surveillance activities. Improved methodology is being implemented to facilitate reporting and tracking.

1998-1999 Disease Statistics
Please refer to the Tuberculosis section in "Chapter II: Morbidity."

E. ALCOHOL & DRUG ABUSE PROGRAM: INTRAVENOUS DRUG USE TREATMENT AND 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, and $1 of every $5 Medicaid spends on hospital care is attributable to substance abuse (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.

Intravenous Drug Users Treatment
OFFICE FOR ADDICTIVE DISORDERS' 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, and be provided with interim services 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 outreach models. Activities include: education, prevention, condom distribution, clean needle demonstrations, medical evaluations and referrals.

STD, TB, and HIV/AIDS Screening

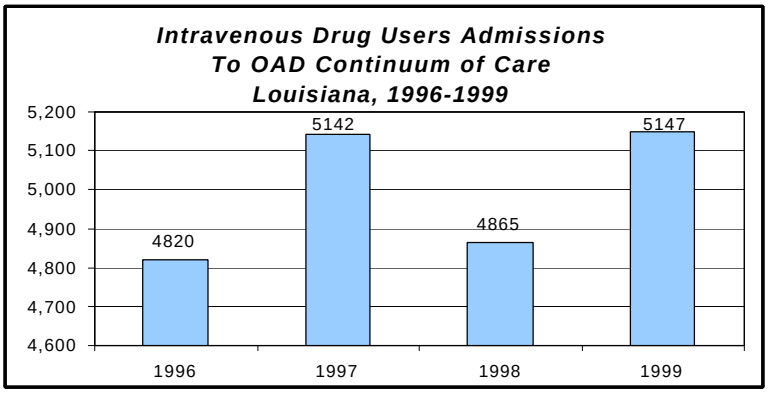
In addition to treatment of addiction problems, OAD makes available sexually transmitted disease (STD), tuberculosis, and HIV testing to each individual receiving treatment. Testing is offered, either directly or through arrangements with other public or nonprofit private entities, through a Qualified Service Organization Agreement (QSOA) and a Memorandum of Understanding (MOU) between the OFFICE OF PUBLIC HEALTH and OAD. This system includes the provision of the necessary supplies by the OFFICE OF PUBLIC HEALTH'S STD CONTROL, TB CONTROL, and HIV/AIDS PROGRAMS for on-site STD, TB, and HIV testing of OAD clients. Early intervention services include screening testing and pre- and post-test counseling. Individuals testing positive are referred to the OFFICE OF PUBLIC HEALTH Outpatient Clinics for further evaluation and appropriate testing. Upon a client being identified as an HIV patient in our system, he or she is referred to the local consortium and/or directly to the Charity Hospitals outpatient clinics, under the auspices of the OFFICE OF PUBLIC HEALTH. 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.

OAD participates on the Statewide HIV Community Planning Group (SCPG) and two subcommittees at the regional level: Nominations and Special Needs. The goal of the statewide group is to develop a comprehensive plan for HIV prevention for the state. The committees include individuals with expertise in education, substance abuse, health, and public health; special populations with representatives from each region (who generally represent at-risk communities); and representatives from the DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS, EDUCATION, and OAD. The SCPG meets four times per year. Epidemiological data are collected, allowing public input via public forums to develop profile, target populations and strategies. Target populations identified by the statewide group for 1999 were African-American males who have sex with males, IDUs, prostitutes, incarcerated populations, and persons with STDs.

1998-1999 Program Statistics

Intravenous Drug Users (IDUs)

OAD Management Information System reports that there were 5,136 intravenous drug user (IDUs) admissions to the OAD continuum of care during SFY 1999, (17% of the total admissions), 4,865 during 1998 (18% of the total admissions), 5,142 admissions during SFY 1997 (20% of the total admissions) and 4,820 admissions for SFY 1996 (19% of the total admissions). These figures indicate that although actual numbers may vary, no significant fluctuations of the IDU's prevalence rate within the last four years are indicated.

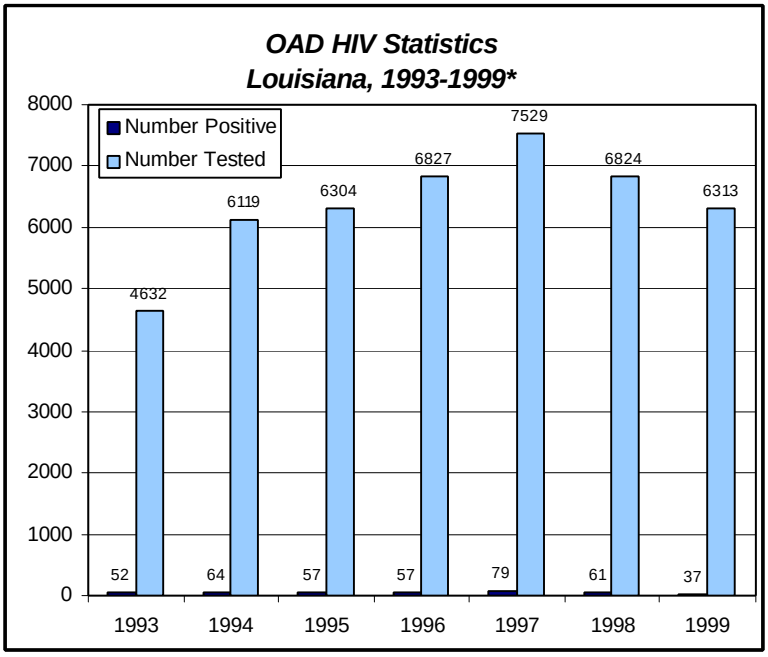


Source: Office for Addictive Disorders

HIV/AIDS

The *Louisiana HIV/AIDS Annual Report* for 1998 ranks New Orleans 11th and Baton Rouge 14th in the nation in the number of documented AIDS cases. New Orleans stills leads the state in the number of HIV cases, but Baton Rouge has the highest number of **new** HIV cases. Louisiana has an incidence of 19.5 cases per 100,000 population and because of this, Louisiana is a designated state for the purposes of block grant expenditure for HIV services (minimum of 5% of the total award).

The OFFICE OF PUBLIC HEALTH'S (OPH) summary of statistics for calendar year 1999 (figures for December 1999 were not available at the time of this report) shows that 6,313 individuals from OAD clinics were tested for HIV. Of this population, 37 (<1%) tested positive for the HIV virus. For the calendar year 1997, OPH tested 7,529 OAD clients for HIV and obtained 79 (1%) positive results. OPH data for the 1998 calendar year indicate that 6,824 OAD clients were tested for HIV, and only 61 (1%) were found to be HIV positive. These data reveal no significant changes in HIV positive findings since 1992.



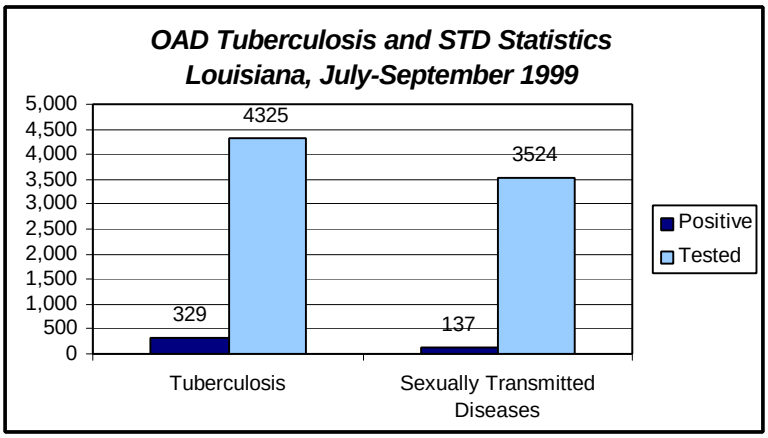
*1999 figures are from January 1999 to November 1999

Source: Office for Addictive Disorders

Tuberculosis

Data generated during the first quarter of SFY 2000 (July-September, 1999) show a total of 4,325 tuberculosis tests conducted during that period with positive results obtained on 329 (8%) of clients tested (OAD Quarterly Report).

STDs
A total of 3,524 sexually transmitted disease tests were conducted during the first quarter of SFY 1999. Positive results were found in 137 (4%) individuals (OAD Quarterly Report).



Source: Office for Addictive Disorders

F. STATEWIDE CHILD DEATH REVIEW PANEL

The OFFICE OF PUBLIC HEALTH'S INJURY RESEARCH AND PREVENTION SECTION maintains a database on cases examined by the multidisciplinary, legislatively-mandated Statewide Child Death Review Panel. The Panel is currently charged with examining records for all unexpected deaths of children under age ten in the state to assure that proper investigation, follow-up, and prevention programs are in place.

Throughout 1999, the coordinator for the Panel worked to establish local death review panels. The purpose of local panels is to ensure the adequacy, completeness, and timeliness of investigations and data collection and to facilitate the translation of investigative findings into preventive actions.

Reports
An annual report of Panel findings is presented to the Legislature and is available to the public through the INJURY RESEARCH AND PREVENTION SECTION.

G. BRAIN AND SPINAL CORD INJURY REGISTRY

Injuries to the central nervous system are one of the most severe types of injury in terms of both human suffering and costs to society. The legislatively-mandated Brain and Spinal Cord Injury Registry collects information from all Louisiana hospitals on the demographics, types, causes, extents, risk factors, and outcomes of central nervous system injuries. This information is then used to generate prevention programs. Examples of prevention programs generated from these data include prevention of falls from deer stands, safe tackling practices for high school football players, and recommendations to make junior rodeo riding safer.

1997 Statistics
Please refer to the Traumatic Brain Injury section in "Chapter II: Morbidity."

Reports
OPH's INJURY RESEARCH AND PREVENTION SECTION produces an annual report, available to the public, based on the data from this registry.

H. INJURY SPECIFIC DEATHS DATABASE

The Injury Specific Deaths Database compiles death certificate information on all injury-related deaths in the state for the years 1986 to the present. This information is used to describe patterns in the occurrence of injuries in Louisiana, for both the education of the public and for guidance in the development of prevention programs.

Reports
The INJURY RESEARCH AND PREVENTION SECTION maintains this database and is able to generate specific reports and analyses by cause, location, and a variety of demographic factors for individuals, communities, or agencies.

I. BURN INJURIES

Hospitals are required by law to report severe burn injuries to the OFFICE OF THE STATE FIRE MARSHAL to assist in the identification of arsonists. In 1997, the INJURY RESEARCH AND PREVENTION SECTION entered into a partnership with the State Fire Marshall to provide a broader analysis of data that describe patterns of burn injuries in Louisiana.

Data on burn injuries in Louisiana are available for the years 1995 through 1998. The Section currently is conducting a case-control study to identify the risk factors for cooking burn injuries.

J. LOUISIANA ADOLESCENT HEALTH INITIATIVE

Begun in September of 1995 by the DHH, OFFICE OF PUBLIC HEALTH, the Louisiana Adolescent Health Initiative facilitates a coordinated, multi-disciplinary approach to adolescent health care, disease prevention and health promotion in the state. It provides an infrastructure to enable local communities to address adolescent health needs more effectively and efficiently.

The collection of data and dissemination of information is an essential part of the Initiative. Providing information on both adolescent health issues and on current adolescent health activities is a priority. The state public health office serves as a synthesizer and central repository for such information. The use of statewide teen health questionnaires and adolescent focus groups, coupled with the collection of adolescent health statistics, provides parents, communities, politicians, and policy makers with a clear picture of adolescent health in Louisiana. With technical assistance from the DHH, OFFICE OF PUBLIC HEALTH, regional and local communities are able to identify and prioritize teen health needs. OPH gives presentations on adolescent health to local communities and provides technical assistance to communities in the design, implementation, and evaluation of their community-based programs.

Currently, there are many state and local projects that emphasize different aspects of adolescent health. Some focus on teenage pregnancy or teen parenting, while others may focus on HIV/AIDS, tobacco control, conflict resolution, cardiovascular health, or on the maintenance of school-based health clinics. The Initiative allows for the planning, development,

implementation, and evaluation of these activities in a coordinated, collaborative fashion. In addition, it broadens the scope of cooperation to include the DHH OFFICES OF MENTAL HEALTH and ADDICTIVE DISORDERS, the DIVISION OF YOUTH DEVELOPMENT, and others. Such team-building efforts are necessary to merge the work of all agencies working with the common goal to ensure health and happiness for Louisiana's youth.

Results
Activities to date include:

- Produced and distributed the first edition of the *Louisiana Adolescent Data Book*, which consists of statistical data in the area of adolescent health, including emotional and social indicators
- Produced and distributed the *Louisiana Teen Pregnancy Prevention Directory* that includes a listing of statewide programs that provide counseling and medical services to help teens prevent pregnancy
- Produced statistical pamphlets for statewide distribution on the current health status of Louisiana adolescents
- Planned and coordinated the 1999 National Campaign to Prevent Teen Pregnancy Workshop in Louisiana
- Administered three quarterly statewide Adolescent Health Initiative Steering Committee Meetings
- Increased coordination with both internal DHH, OPH programs, and external agencies involved in public health and social welfare
- Collaborated with other state and national adolescent projects
- Provided technical assistance to community coalitions that are performing comprehensive adolescent activities
- Gave presentations on the Adolescent Health Initiative to national and statewide organizations
- Administered the Teens Talk 2000 Focus Group Project
- Served as an Adolescent specialist on various statewide adolescent Task Force's
- Placing highlights of the Adolescent Health Initiative in national (ASTHO) and local newsletters.

K. LAPRAMS

Overview
LaPRAMS is an on-going, 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 and the CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC). The CDC, OPH VITAL RECORDS REGISTRY and STATE CENTER FOR HEALTH STATISTICS, and TULANE SCHOOL OF PUBLIC HEALTH AND TROPICAL MEDICINE provide technical assistance to LaPRAMS. The OPH FAMILY PLANNING and MATERNAL AND CHILD HEALTH programs provide all funding for the project.

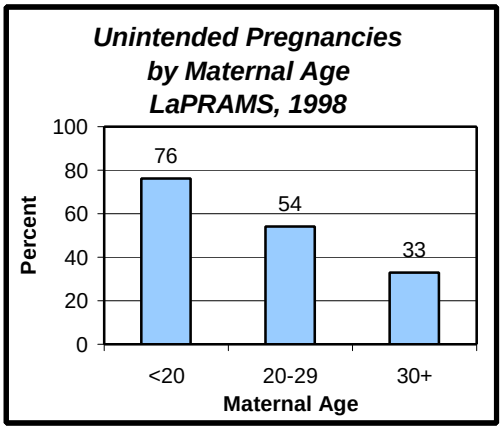
LaPRAMS data are collected by means of mail surveys and telephone interviews. Louisiana women who have had a recent live birth are randomly selected to participate in LaPRAMS. Since data collection was initiated in October of 1997, 7,404 women have been selected to receive the LaPRAMS questionnaire. Sixty-five percent of the women selected in 1997 completed the survey for 1997 births (first six months of data collection). Over 73% of the women selected in 1998 completed the survey for 1998 births (full year data). The average response rate for 1997-1998 was approximately 72%, a response rate that currently is maintained.

Information provided by LaPRAMS includes: medical and physical factors, socioeconomic status, prenatal maternal experiences and behaviors (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.

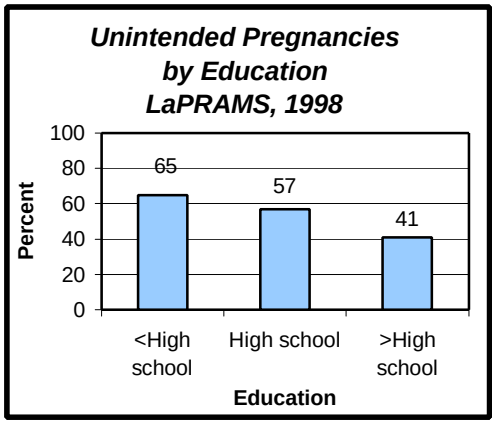
Results

The following findings are based on LaPRAMS 1998 data.

- *Unintended pregnancies*: Fifty-three percent of women reported that their pregnancies were unintended. Unintended refers to the timing of the pregnancy, i.e. whether the woman desired the pregnancy to be at some time in the future or not at all. The Healthy People 2000 target for unintended pregnancies is 30%. Socio-demographic factors associated with unintended pregnancies are shown below:



Source: Office of Public Health, LaPRAMS



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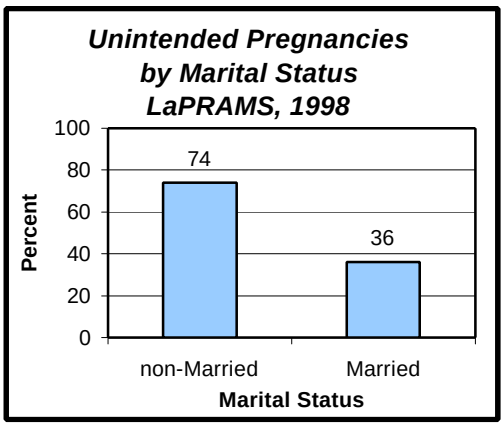
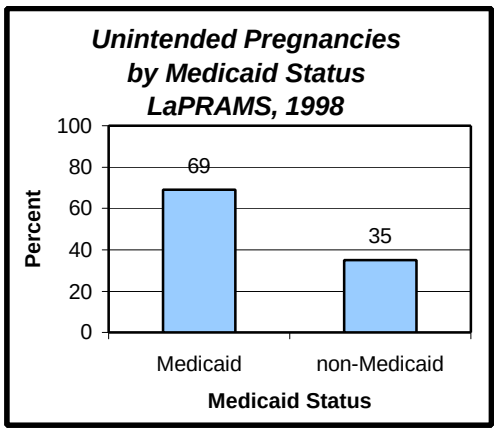
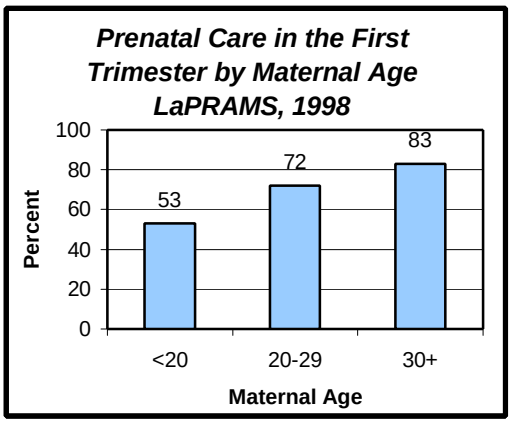


Source: Office of Public Health, LaPRAMS

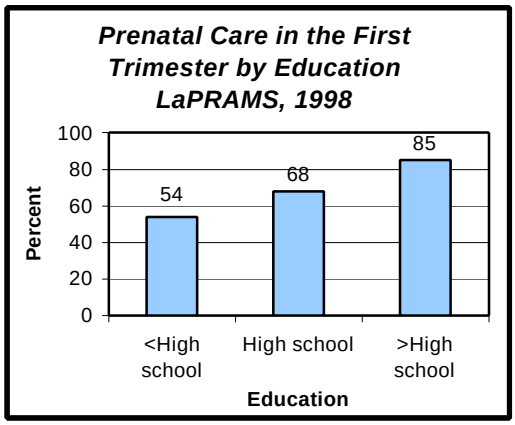


Source: Office of Public Health, LaPRAMS

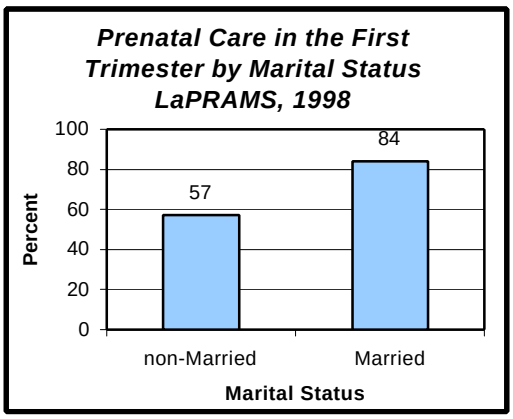
- *Early initiation of prenatal care*: Seventy-two percent of women reported initiation of prenatal care during the first trimester of their pregnancy. The Healthy People 2000 target for initiation of prenatal care in the first trimester is 90%. Socio-demographic factors associated with initiation of prenatal care in the first trimester are shown below:



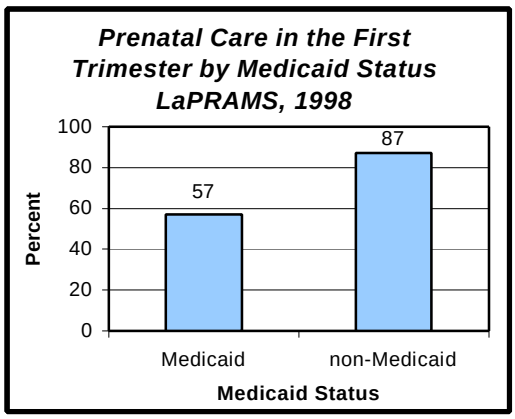
Source: Office of Public Health, LaPRAMS



Source: Office of Public Health, LaPRAMS



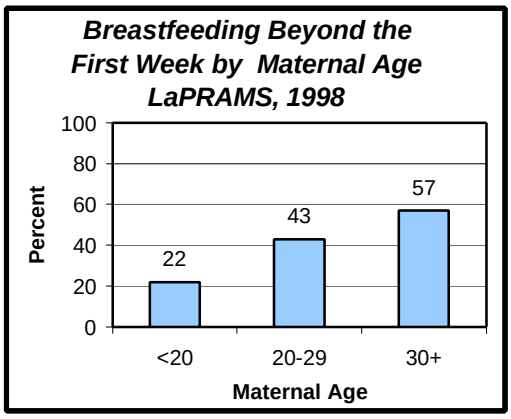
Source: Office of Public Health, LaPRAMS



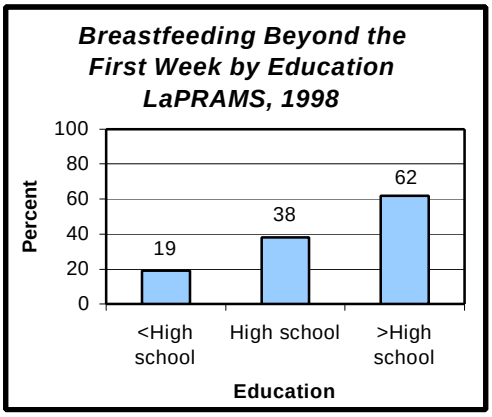
Source: Office of Public Health, LaPRAMS

- *Cigarette smoking before, during, and after pregnancy*: In the three months prior to pregnancy, 35% of women reported that they had smoked. The percentage decreased during pregnancy to 14% but increased to 21% at 3-6 months after delivery, a level slightly lower than the pre-pregnancy rate. The Healthy People 2000 target for women who smoke is 15% and 10% for pregnant women.
- *Alcohol consumption before and during pregnancy*: Forty-three percent of women reported that they drank alcohol during the three months before pregnancy, and 5% reported that they drank alcohol during the last trimester of their pregnancy. The Healthy People 2000 target for pregnant women is 5%.
- *WIC participation*: Fifty-five percent of women reported being on WIC (the Special Supplemental Nutrition Program for Women, Infants, and Children) during their pregnancy.
- *Medicaid Enrollment*: Eleven percent of women reported being on Medicaid at the beginning of their pregnancy. The percentage increased to 51% at delivery.

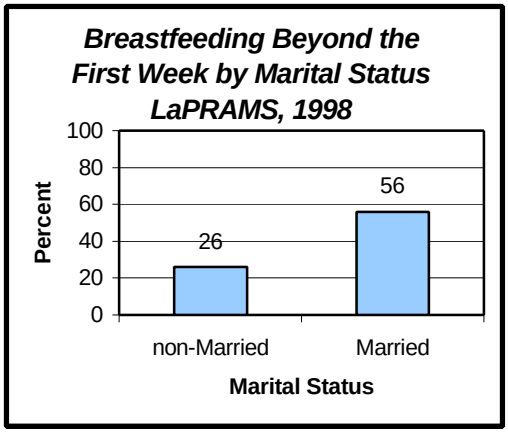
- *Low birth weight and intensive care*: Ten percent of births in Louisiana are low birth weight (below 2500 grams). The Healthy People 2000 target is 5%. Fifty-one percent of low birth weight infants were admitted to an Intensive Care Unit, compared with 9% of normal birth weight infants.
- *Breastfeeding*: Forty-three percent of women breastfed their infants beyond one week. Those who breastfed beyond one month dropped to 31%. The Healthy People 2000 target for breastfeeding during the early postpartum period is 75%. Socio-economic factors associated with breastfeeding beyond the first week are shown below:



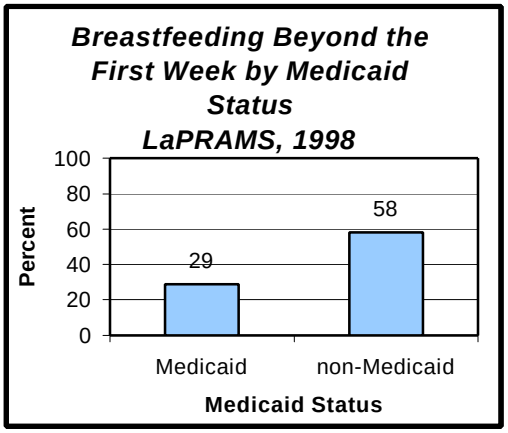
Source: Office of Public Health, LaPRAMS



Source: Office of Public Health, LaPRAMS



Source: Office of Public Health, LaPRAMS



Source: Office of Public Health, LaPRAMS

- *Infant sleep position*: Among women surveyed, 33% placed the baby on its back, 34% placed the baby on its side, and 33% 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).

Data from LaPRAMS will be 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 will also be used to develop programs designed to identify high-risk pregnancies. In addition, LaPRAMS data will enhance the understanding of maternal behaviors and the relationship between these behaviors and adverse pregnancy outcomes, such as low birth weight and infant mortality.

The LaPRAMS 1998 data analysis phase was recently initiated. During 2000, LaPRAMS data will be used to measure federal block grant performance indicators for both MATERNAL AND CHILD HEALTH and FAMILY PLANNING. A 1998 surveillance report will be provided to OPH program staff at the beginning of this year. This report will present OPH program administrators an important fundamental overview of maternal behaviors and experiences in Louisiana. It also will afford OPH programs the opportunity to identify future LaPRAMS analyses tailored to supply more detailed health information.

L. ORAL HEALTH ASSESSMENT

The effects of poor oral health can greatly impact the overall health of an individual. Poor oral health in children can have far-reaching results, including infection, absence from school, and malnutrition. The ORAL HEALTH PROGRAM OF THE OFFICE OF PUBLIC HEALTH, MATERNAL AND CHILD HEALTH PROGRAM, is charged with monitoring the oral health status of Louisiana's children.

Comprehensive Oral Health Needs Assessment

The ORAL HEALTH PROGRAM has several ongoing initiatives, one of which is a Comprehensive Oral Health Needs Assessment among Louisiana's children. This needs assessment uses data for successive years, gathered from two sources: survey data collected by the ORAL HEALTH PROGRAM and dental Medicaid claims data.

In 1997, information on primary oral health status was collected from a dental survey conducted in eight elementary and high schools with school-based health centers. In this survey, only 15.8% of all children examined were caries free, and 5.2% of the 17-18 year old population were caries free. Treatment urgency was determined after the full oral examination was completed: 21.9% of males examined and 18.8% of female students were in need of urgent care. Although a large proportion of the children, 75.2%, could benefit from the application of dental sealants, only 6.2% of all children had any sealants present.

M. ENVIRONMENTAL EPIDEMIOLOGY AND TOXICOLOGY

Louisiana ranks among the top states in the United States in the per capita production of hazardous wastes and in the amount of chemicals released into its water, air, and soil.

The OFFICE OF PUBLIC HEALTH, SECTION OF ENVIRONMENTAL EPIDEMIOLOGY AND TOXICOLOGY (SEET) promotes the reduction in disease morbidity and mortality related to human exposure to chemical contamination within the state of Louisiana. SEET oversees and responds to public health needs with regard 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

- 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 Assessments and Consultations (Toxic Site Assessments)
- Pesticide Exposures
- Disease Cluster Response
- Cancer Mortality Trend Analysis
- Mercury Blood Screening

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

- Mercury in Fish

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

- Methyl Parathion and Other Pesticides
- Mercury in Fish
- Health Professional Education
- Public Health Response for Chemical Spills

The projects described below in more detail are representative of those coordinated by SEET.

Public Health Assessments and Consultations

Health Assessors complete extensive Public Health Assessments or shorter Health Consultations for Superfund and other hazardous waste sites in Louisiana. The Public Health Assessment is an evaluation of all relevant environmental information, health outcome data, and community concerns around a hazardous waste site. It identifies populations potentially at risk and offers recommendations to mitigate exposures. A Health Consultation is a response to a request for information and provides advice on specific public health issues that could occur 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.

There are currently 128 confirmed and 342 potential inactive and abandoned hazardous waste sites in Louisiana, according to the DEPARTMENT OF ENVIRONMENTAL QUALITY'S *1998 Annual Report*. SEET is evaluating the public health impact of 28 of these sites. Details concerning these activities can be obtained from SEET. SEET also (1) develops fact sheets and other handouts to help inform the local community about health issues around hazardous waste sites, (2) responds to individual's request for toxicological and medical information, and (3) makes presentations in public meetings and availability sessions around the state.

Ruston Foundry

Ruston Foundry is a 4.6-acre site located in Rapides Parish, Alexandria, Louisiana. It is an example of a site that SEET currently is evaluating. Ruston Foundry is an inactive and abandoned iron foundry that operated from 1908 until 1985. It engaged in foundry and machine shop activities, in the manufacturing, prefabrication, and repair of articles of steel, iron and other

materials. The site is adjacent to a residential area, and children frequented the site before a fence was installed.

In 1990, the LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY'S INACTIVE AND ABANDONED SITES DIVISION conducted an on-site investigation. Inorganic analysis of the soil samples revealed concentrations of up to 1,350 parts per million of lead on-site. Following additional EPA investigations, the site was proposed to the National Priorities List (NPL) in January 1999.

Heavy metals, especially lead, are the contaminants of concern for this site. Exposure to lead is a major health concern especially for young children, since it is particularly harmful to the developing brain and nervous system of the young child. Some investigators have reported decreases in the intelligence quotient (IQ) in children who have been exposed to lead.

Staff from SEET attended a public meeting in March 1999 to gather information. The initial release of a Public Health Assessment was completed January 19, 2000. A needs assessment was conducted in February 2000. Residents were contacted by door-to-door visits. Working with state and federal environmental agencies, SEET is currently reviewing on and off-site environmental data as they become available and will give public health recommendations based on our evaluation. These documents provide a public health opinion on the sites or concerns presented.

Sites Being Investigated by SEET as of 1/20/00

NPL Sites (Parish)

Agriculture St. Landfill (Orleans)
American Creosote (Winn)
Bayou Bonfouca (St. Tammany)
Bayou Sorrell (Iberville)
Central Wood Preserving (East Feliciana)
Cleve Reber (Ascension)
Combustion Inc. (Livingstion)
D.L. Mudd, Inc. (Vermilion)
Delatte Metals (Tangipahoa)
Dutchtown Treatment (Ascension)
Gulf Coast Vacuum (Vermilion)
Madisonville Creosotes (St. Tammany)
Old Inger Oil (Ascension)
PAB Oil and Chemical (Vermilion)
Petro Processors (East Baton Rouge)
Southern Shipbuilding (St. Tammany)

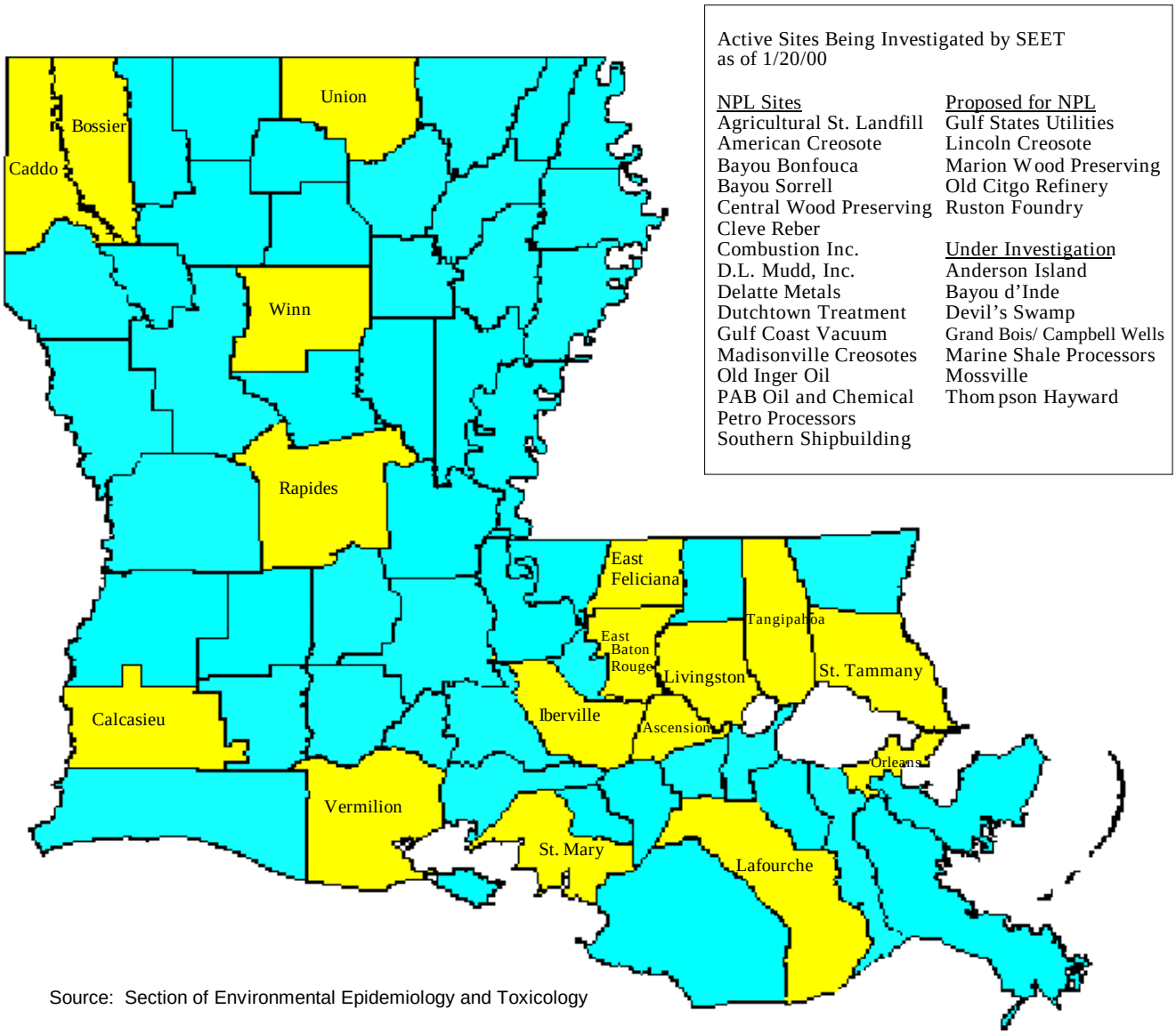
Proposed for NPL

Gulf States Utilities (Calcasieu)
Lincoln Creosote (Bossier)
Marion Wood Preserving (Union)
Old Citgo Refinery (Bossier)
Ruston Foundry (Rapides)

Under Investigation

Anderson Island (Caddo)
Bayou d'Inde (Calcasieu)
Devil's Swamp (East Baton Rouge)
Grand Bois/Campbell Wells (LaFourche)
Marine Shale Processors (St. Mary)
Mossville (Calcasieu)
Thompson Hayward (Orleans)
Calcasieu Estuary (Calcasieu)

Louisiana Parishes with Superfund and Selected Hazardous Waste Sites



Source: Section of Environmental Epidemiology and Toxicology

Pesticide Exposures

SEET receives information on pesticide exposure events and the resulting individual health-related cases reported to the LOUISIANA DEPARTMENT OF AGRICULTURE AND FORESTRY. Staff obtain medical records when available and then review data about each case, including a complainant's statement, investigator's report, and any sample results. SEET also maintains a statewide pesticide hypersensitivity registry. When all data are reviewed, SEET's medical consultant makes a determination about the potential short- and long-term health effects in each case and sends a letter to the complainant with an explanation for this determination and, when appropriate, a recommendation to ameliorate the situation. Each case is classified as one of the following:

- Confirmed—adverse health effects resulting from a reported pesticide exposure are verified
- Likely—adverse health effects resulting from a reported pesticide exposure are likely
- Possible—adverse health effects resulting from a reported pesticide exposure are plausible
- Unlikely—adverse health effects resulting from a reported pesticide exposure are improbable
- Not related—adverse health effects resulting from a reported pesticide exposure are ruled out
- Asymptomatic—no adverse health effects were reported

1998-99 Pesticide Cases
There were 43 cases of reported health-related effects from 20 incidents of pesticide exposure events during the period of 0ctober 1, 1998 through September 30, 1999. Out of the 38 cases for which determinations have been made: 3 (8%) were confirmed, 7 (18%) were likely, 11 (29%) were possible, 8 (21%) were unlikely, 5 (13%) were not pesticide related, and 4 (11%) had no reported health effects. Five cases are currently under evaluation and await determination.

Pesticide complaints were made in 14 parishes. Parishes with two or more exposure incident events were Jefferson (3), Allen (2), St. Tammany (2), and East Baton Rouge (2).

Methyl Parathion
Louisiana's Methyl Parathion Program was part of a national program that involved federal agencies and other states such as Illinois and Mississippi. The program was in effect from November 1996 through July 1999. The Methyl Parathion Program was a statewide program created in response to a large number of homes in Louisiana that had been illegally sprayed with the insecticide methyl parathion. Methyl parathion is an organophosphate pesticide that is not licensed for indoor use; it is toxic to humans and other warm-blooded animals. Methyl parathion was illegally sprayed indoors to kill cockroaches and other pests, resulting in chronic exposure to a harmful pesticide for thousands of Louisiana residents, as well as residents in other states. The potential for human exposure created a statewide public health hazard that required the intervention of the U.S. ENVIRONMENTAL PROTECTION AGENCY, the AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY, the ARMY CORPS OF ENGINEERS, the LOUISIANA DEPARTMENT OF AGRICULTURE AND FORESTRY, and the LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS.

Using a pre-established protocol, indoor and biological sampling was conducted statewide. More than 1,800 homes were environmentally sampled; approximately 35% of these homes had methyl parathion contamination. Levels of methyl parathion ranged from 1 mcg/100cm^2 to 64,000 mcg/100cm^2; the mean was approximately 400 mcg/100cm^2. One hundred seventy-two homes were renovated due to severe methyl parathion contamination.

Urine samples were collected from 1,246 residents and analyzed for para-nitrophenol (p-NP), a methyl parathion metabolite that can be detected in the urine within 24 hours after exposure. Approximately 35% of the individuals who were tested had elevated urinary p-NP levels. Creatinine-adjusted p-NP levels ranged from 1 to 8,600 ppb. Although there were no serious health effects reported, many residents complained of symptoms such as headaches, nausea, diarrhea, and dizziness.

In April 1997, an expert panel convened by ATSDR revised the protocol due to the absence of a site-specific correlation between environmental levels of methyl parathion and urine levels. The panel concluded that the best way to evaluate human exposure was to monitor urinary p-NP

values for one year at quarterly increments. Environmental data also revealed that the half-life of methyl parathion indoors was about 230 days. Based on these findings, ATSDR developed a new urine monitoring protocol basing action levels for renovation on p-NP values and not environmental levels. The new action levels resulted in the renovation of 12 houses. A final report is being prepared.

Methyl Parathion and Other Pesticides - Public Health Survey
In 1998, SEET began working on a health education project to assess the misuse of Methyl Parathion in Louisiana. The final report was completed in August 1999. Since many different types of pesticides are used across the state, SEET developed a questionnaire and administered it over the phone to 200 Louisiana residents to assess pesticide use behaviors that may pose risks to health. Survey results indicate that pesticide use around the home is very common in Louisiana. Several high risk behaviors identified were the use of outdoor pesticides to get rid of roaches or other pests inside the home (19%), not always reading the label before purchasing a new type of roach spray (50%), and receiving a pesticide in an unmarked jar or container from a neighbor, relative, or friend to use in the home (11%). Sixty percent of all respondents indicated that they store pesticides in unlocked cabinets near the floor or in cabinets under the sink, a risk factor for household pesticide poisoning in children.

Disease Cluster Response
SEET investigates citizens' reports of environmentally related disease clusters (such as cancer, and reproductive, neurological, and respiratory diseases) that may require regulatory or health interventions.

Coteau Childhood Leukemia
Public concern about childhood leukemia in the community of Coteau (Iberia Parish) was brought to the attention of SEET in May 1996. SEET has assessed the occurrence of childhood leukemia in the area of Coteau with the assistance of the LOUISIANA TUMOR REGISTRY. It has been determined that the incidence of childhood leukemia in Coteau is unusual, both spatially and temporally.

SEET began a population-based case-control study of childhood leukemia in a four parish area consisting of Iberia, Lafayette, St. Martin, and Vermilion parishes. These four parishes were selected as the study area to provide a larger number of cases and to increase the probability of including children from neighboring areas who may have spent time in Coteau even though they did not live there.

A case in the OPH study is defined as a child who was diagnosed with leukemia between January 1, 1983 and December 31, 1997 while living in Lafayette, Iberia, St. Martin, or Vermilion Parish. The child must have been born in one of the four parishes and must have been less than 15 years old at the time the leukemia was diagnosed. Information on children with leukemia has been obtained from the LOUISIANA TUMOR REGISTRY and the ACADIANA TUMOR REGISTRY. There are 31 known cases being investigated by SEET as of January 2000 in the four-parish area. Currently 22 of the cases have controls and SEET is in the process of identifying controls for the remaining 9 cases.

A detailed survey instrument (questionnaire) has been developed by SEET to identify risk factors associated with childhood leukemia. A qualified interviewer has been hired from the Lafayette area to conduct all interviews with cases and controls.

Cancer Mortality Trend Analysis

There has been concern for some time about whether industries along the Mississippi River between Baton Rouge and the Gulf of Mexico contribute to elevated lung cancer rates in the area. The LOUISIANA OFFICE OF PUBLIC HEALTH'S SECTION OF ENVIRONMENTAL EPIDEMIOLOGY AND TOXICOLOGY (SEET) is completing a trend analysis of the Lower Mississippi River corridor to provide more accurate information to address this concern. Cancer rates, demographic factors, and industrial development have been tracked over 30 years, from the 1960s to the 1990s.

Cancer Mortality

Preliminary analysis of the data reveals that most of the average annual age-adjusted mortality rates (1960-1993) are nearly equal for the urban portion of the study area and the study area as a whole (the Lower Mississippi River corridor). This is expected since the urban area had most of the population base (80%) of the entire eleven parish region. There were no statistically significant excesses or deficits of cancer deaths in the urban area as compared with the entire study area. However, lung cancer death rates for African-American males and Caucasian females in the urban area were higher than, but not significantly different from, the entire region. Most of the average annual age-adjusted mortality rates were nearly equal for the rural region when compared to the entire study area (1960-1993). Also in the rural region, stomach cancer was significantly elevated in African-American males, and lung cancer death rates for Caucasian males were higher than, but not significantly different from, the entire region.

Demographics

According to information obtained for the census years 1960, 1970, 1980, and 1990, more than 80% of the population in the study area has lived in the area since the 1960s, and more than 60% of that population is Caucasian. The African-American population in the study area has declined in rural areas and grown in urban areas. Median family income in the study area increased from $4,720 in 1960 to $29,512 in 1990. Since 1970, median family income increased by more than $10,000.

Industrial Mapping

The industries in the Lower Mississippi River corridor are distributed into twelve clusters (three or more industries in each cluster) spread among seven of the eleven parishes. In the early 1950s there were 15 industries in the corridor; by 1994, there were 92. Manufacturing industries in the area with over ten employees were categorized according to the potential cancer risk they posed. Between 1988 and 1994, the number of industries emitting known human carcinogens dropped from 42 to 36.

Mercury Blood Screening

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

The outcome of this investigation is a health risk assessment to be conducted in 2000, which will assess the exposure status of subsistence fishermen and their families as it relates to blood mercury levels.

N. VITAL STATISTICS

Vital statistics data provide a body of information that serves as the foundation for monitoring the health of Louisiana's 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 the VITAL RECORDS REGISTRY, OFFICE OF PUBLIC HEALTH.

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 injuries, and 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 also are an important component in measuring achievement of CENTERS FOR DISEASE CONTROL Healthy People 2000 and 2010 objectives.

The role of the STATE CENTER FOR HEALTH STATISTICS 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*, and through response to ad hoc requests for data and information. The Center also is responsible for compilation of information from DEPARTMENT OF HEALTH AND HOSPITALS programs to create the legislatively mandated annual *Louisiana Health Report Card*.

1998 Statistics
Please refer to "Chapter I: Population and Vital Statistics".

Reports
Reports and data tables published by the STATE CENTER FOR HEALTH STATISTICS, including the annual *Louisiana Health Report Card, Louisiana Vital Statistics Report,* and the *Louisiana Vital Statistics Overview*, can be viewed and downloaded by the public at our Internet web site (please refer to "Contact Information" at the end of this publication). The STATE CENTER FOR HEALTH STATISTICS 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.

O. STATE HEALTH CARE DATA CLEARINGHOUSE

Act 622 of the 1997 Regular Legislative Session (LA R.S. 40: 1300.111 et seq.) defined the STATE HEALTH CARE DATA CLEARINGHOUSE as the agency responsible for the collection of health care and health industry-related data. In prioritizing the mandates of Act 622, 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 elected to focus its initial data collection efforts on hospital discharge data. For the most part, the targeted data are a natural by-product of hospital billing activity and are already widely available in a reasonably standard electronic format. The collection of these data will place the smallest additional burden on the state's medical care providers, while speaking directly to the legislatively recognized need to understand "patterns and trends in the availability, use, and charges for medical services."

Accordingly, the OFFICE OF PUBLIC HEALTH developed Rule LAC 48:V Chapter 151 in conjunction with an advisory panel composed of representatives of the health care industry,

academia, and state government. The Notice of Intent for Rulemaking was published in the July 1998 issue of the Louisiana State Register and the Final Rule was published in the October 1998 issue. The Rule specified the following guidelines: definition of the core Hospital Discharge Data elements to be reported to the OFFICE OF PUBLIC HEALTH in accordance with existing national and international data standards; development of standards of accuracy, quality, timeliness, economy, and efficiency for the provision of data; identification of the most practical methods of collecting, transmitting, and sharing data; and outlining of appropriate rules and regulations to ensure data confidentiality.

Activities to date include:

- Conducting a three-month telephone survey of approximately 180 Louisiana hospitals regarding their transmittal capacity and data availability.
- Providing information to all hospitals regarding regulations and submittal procedures by newsletter, telephone, and e-mail.
- Developing an Oracle 8 database repository to house the data securely.
- Developing, testing, and implementing a new software, the Hospital Inpatient Discharge Data Quality Assurance Tool (QAT). The primary purpose of the QAT is to improve both data quality and timeliness. The secondary purpose is to provide a simple data capture tool for hospitals that still have paper billing systems.
- Conducting training sessions for hospital staff in the use of the QAT.
- Developing a project management database in Microsoft Access that includes survey and hospital contact information, waiver and extension data, submission log, and error reporting.
- Currently receiving the fifth series of data submissions from hospitals for discharges occurring from July to September 1999. One hundred eighty-two licensed hospitals, housing 26,164 beds, participate in submission of data to the STATE HEALTH CARE DATA CLEARINGHOUSE. In the most recently concluded submission, which contained discharges occurring from April through June 1999, data submissions were received for 68% of the state's hospital beds, while 31% of the beds requested extensions and 1% of the beds invoked general waivers that exclude them from submitting data.
- Checking data for errors through use of the QAT, and providing the first set of error reports to the hospitals. This submission and error checking process helps hospitals to improve the quality of their data, especially with regard to future submissions.

The population-based health care data collection authorized by Act 622 offers Louisiana and its health care providers a first opportunity to plan and operate systematic intervention strategies that address the antecedents of death. The STATE HEALTH CARE DATA CLEARINGHOUSE is also planning to work with hospitals and other facilities across the state to develop a statewide hospital emergency room data system and other data sets to provide an even more complete picture of Louisiana health, and to address the urgent concerns of the increasing threat of bioterrorism.

IV. PREVENTIVE HEALTH OUTREACH AND SERVICE PROGRAMS

The DEPARTMENT OF HEALTH AND HOSPITALS provides Louisianans 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 diseases, substance addictions, and mental impairment. The following programs provide needed health care to thousands of individual Louisiana residents. In doing so, they are essential to the health of the state as a whole.

Programs Targeting Infants, Children, and Adolescents

A. CHILDHOOD IMMUNIZATION INITIATIVE—SHOTS FOR TOTS

The Shots for Tots Program, through the IMMUNIZATION PROGRAM of the OFFICE OF PUBLIC HEALTH, was developed to improve immunization levels among infants and toddlers. The program has four major methods to improve immunization levels: (1) service delivery, (2) information and education, (3) assessment, and (4) coordination and oversight.

- Service delivery is increased by increasing the number of towns and cities where immunizations can be received, by reducing the barriers for families, by providing evening and weekend immunization clinics, and by improving communication among providers.
- Information and education is provided to health care providers and to parents. Health care providers are informed about the correct use of vaccines, and parents are educated about the importance of having their children immunized on time.
- Assessment is used to provide feedback to providers about their immunization practices and about the concerns of families using their services.
- 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, immunization levels among two-year-old children receiving care at public health units have increased by 25%.

Immunization Levels Among Two-Year-Old Children Receiving Care at Public Health Units Louisiana, 1992-1999	
1992	55%
1993	59%
1994	64%
1995	75%
1996	79%
1997	81%
1998	82%
1999	80%

Source: Louisiana Office of Public Health, Immunization Program

B. SUDDEN INFANT DEATH SYNDROME (SIDS)

The DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF PUBLIC HEALTH, SUDDEN INFANT DEATH SYNDROME (SIDS) PREVENTION AND CASE MANAGEMENT PROGRAM is designed to increase public awareness on the topic of SIDS and to provide education to reduce the risk of SIDS deaths. Educational material on SIDS risk-reduction has been developed for populations at risk. Grief counseling is made available to all families who have experienced the death of an infant due to SIDS.

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. 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 death scene investigation in cases of unexpected deaths in infants.

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

Vision problems affect one in twenty preschoolers and one in four school age children. More than one in twenty-five preschoolers suffer from some type of communication disorder, i.e., speech, language, and/or hearing impairment. Four out of every 1,000 babies born have a significant hearing loss.

The goal of the MATERNAL & CHILD HEALTH, HEARING, SPEECH AND VISION PROGRAM is to identify these problems in children as early as possible. A child's vision, hearing, and language development are the most important skills they will need to be able to learn and develop. Research shows that children who have hearing loss identified at birth and who are successfully enrolled in early intervention programs can reach appropriate developmental levels by the time they begin school. Early intervention has profound lifelong benefits for infants and toddlers with hearing impairment and for their families, while containing costs of special education and other services provided by the state.

OFFICE OF PUBLIC HEALTH staff trains volunteers, teachers, and nurses to perform vision and hearing screenings in Headstart centers, preschools, day care centers, and public and private schools. Hearing and vision equipment is available for loan to these facilities.

The Sound Start Program under the HEARING, SPEECH, AND VISION PROGRAM works through each community in the state to assure that every birthing hospital performs hearing screening tests for newborns, as required by law. The program has been implemented without specifically allocated funding, and has enjoyed phenomenal success, with the community involvement of professionals, physicians, hospital staff, education personnel, civic and charity organizations, parents, and the deaf community.

Out of 73 birthing hospitals in Louisiana, all comply with the requirements of the law. In addition, 39 hospitals now voluntarily perform screening on every birth at their facility, going beyond the requirements of the law. Approximately 52% of the children born in Louisiana receive a hearing screening before they are discharged from the hospital. In 1999, the law was amended and by January 2001 all hospitals will be required to provide hearing screening for every baby born.

Louisiana has received national recognition for its newborn hearing screening program. It is among the top ten states in the country in the number of hospitals providing universal hearing screening. The average age of identification of hearing loss across the United States is 30 to 36 months. Since the beginning of the Sound Start Program in 1994, the average age for children identified through this program has remained below 3 months of age.

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 on-going basis.

Some of the products and services provided by the CHILDREN'S SPECIAL HEALTH SERVICES program are medications, durable medical equipment, home health care, physical therapy, hospital care, parent training, and case management to coordinate primary and specialty services. There are nine regional CSHS clinics throughout the State of Louisiana, which together served 9,319 children in 1997 and handled a volume of 23,039 clinic visits.

CSHS provides services to children with special health care needs, many with complex, severe medically disabling conditions such as congenital heart defects, cystic fibrosis, cleft lip and palate, cerebral palsy, neurological disorders and others. These conditions often require complex medical care including numerous surgeries, hospitalization, costly drug therapy, etc., but because of the cost-efficient manner in which CSHS provides these services, the cost of treating these children and providing support to their families is very low. The average cost per patient from CSHS is $879.79 in FY '97 based on annual expenditures, compared to average expenditure per enrollee for children in Medicaid of $1462.00 in FY '96.

E. SAFE KIDS COALITION

The DHH, OFFICE OF PUBLIC HEALTH, INJURY RESEARCH AND PREVENTION SECTION supports ongoing community-based injury prevention programs. One of these is the Louisiana SAFE KIDS Coalition, which conducts prevention activities for unintentional injuries in children.

At the state level, the Louisiana SAFE KIDS Coalition works to inform the public that unintentional injuries are the leading cause of death for children under age fourteen. The Coalition also works to organize and promote policies and programs to prevent childhood injury. At the community level, 8 local chapters and 3 local coalitions sponsor injury prevention education activities for community members.

Examples of these injury prevention education activities include hands-on car seat safety clinics, where trained specialists check for proper car seat installation and educate parents how to use car seats correctly, and promotion of the use of bike helmets through reminder tags that are hung on bicycle handlebars. Other examples of educational programs and materials available through SAFE KIDS include smoke detector use, pedestrian safety, and toy safety.

F. CHILD CARE HEALTH CONSULTANT PROGRAM

The American Academy of Pediatrics/American Public Health Association recommends that each child care facility should utilize the services of a health consultant to provide ongoing assistance in the area of health. Louisiana was one of the first states to institute such a 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 child care, consultants work to support, assist, and problem solve with child care providers in order to improve the safety and quality of child care. Consultants serve as a source of education, guidance, and support to child care facilities; provide technical assistance; act as health resource and referral persons; 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.

To date, there are 150 health professionals who have been trained and are certified by the DHH, OFFICE OF PUBLIC HEALTH and the DEPARTMENT OF SOCIAL SERVICES, BUREAU OF LICENSING. In 1998, 107,620 infants, children, and adolescents were seen in a total of 228,366 visits. More than 17,000 child care providers have received some health and/or safety training.

G. PREVENT ABUSE AND NEGLECT THROUGH DENTAL AWARENESS (P.A.N.D.A.)

The P.A.N.D.A. (Prevent Abuse and Neglect through Dental Awareness) program was formed through the efforts of the ORAL HEALTH PROGRAM in the OFFICE OF PUBLIC HEALTH. The P.A.N.D.A. coalition is maintained by community members and is chaired by the president of the LOUISIANA CHAPTER OF THE ACADEMY OF PEDIATRIC DENTISTRY. This program aims to standardize the level of training and education of dental care professionals, and to provide to dentists and hygienists throughout the state additional information that will assist them in detecting and reporting suspected child abuse and neglect.

H. CHILD HEALTH PROGRAM

The Child Health Program, from the MATERNAL AND CHILD HEALTH PROGRAM of the OFFICE OF PUBLIC HEALTH, is a program that offers preventive health services to infants and children who are unable to access such services because of geographic or financial barriers or lack of providers.

This program provides periodic health appointments, which can involve a history and physical examination; immunizations; assessment of growth; assessment of developmental status; laboratory screening for 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 1999, 101,288 infants, children, and adolescents were seen in a total of 228,109 visits. Approximately 60% of the children seen were insured by Medicaid.

I. 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 Care Program, officially known as the Adolescent School Health Initiative, is directed by the DHH OFFICE OF PUBLIC HEALTH, MATERNAL AND CHILD HEALTH PROGRAM. School Based Health Centers (SBHCs) are an integral part of the State's Comprehensive School Health Program, which also encompasses education, school environment, nutrition, physical fitness, and parent and community involvement.

Sources of funding for the School-Based Health Centers (SBHCs) include OPH State General Fund, Maternal and Child Health Block Grant, Robert Wood Johnson Making the Grade, local in-kind contributions, and Medicaid reimbursement.

School-Based Health Centers 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 or nurse practitioner, 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 physicals, treatment for common simple illnesses, referral and follow-up for serious illnesses and emergencies, mental health counseling, immunizations, and preventive services for high-risk conditions, such as pregnancy, sexually transmitted disease, drug and alcohol abuse, violence, and injuries.

In the 1998-99 academic year, 35 School-Based Health Centers were operational in 14 parishes, providing services to students at 68 schools. By the end of the 1999-00 school year 6 new sites in 6 additional parishes are expected to open and serve an additional 15 schools. Many sites have expanded services to primary and elementary feeder schools. A total of 45 Louisiana parishes in all 9 state regions have thus far participated in SBHC development.

In the 1998-99 school year, 20,949 students received services, and there were 101,762 visits to the centers.

J. WOMEN'S PREVENTIVE HEALTH PROGRAM

The WOMEN'S PREVENTIVE HEALTH PROGRAM (WPHP) exists to improve longevity and quality of life for women in Louisiana by reducing morbidity and mortality due to preventable causes. The mission of the program accomplishes the following activities:

- Screening for medical conditions that can be effectively treated, including breast cancer, cervical cancer, hypertension, diabetes, obesity, and colon cancer
- Health guidance and counseling to influence positively those health behaviors known to be associated with poor health outcomes
- Empowerment of community-based organizations to deliver the message of prevention to female peers and thus to expand the program throughout the state.

The last year has been very effective in the communities throughout many regions of the state. More than 5,000 women were involved in outreach and screening activities with public and private partners in health. Since the program's inception, dozens of abnormalities have been found and successful treatment strategies pursued.

The WPHP provides screening services only; women who have an established disease requiring treatment and those with signs and symptoms of disease are referred to their personal physician or public health care provider. Eligibility for specific screening services is based on age, risk factors, and economic status. An integral component of the program is the collection of data regarding risk factors, screening, and screening results to assure that women who need treatment reach a treatment provider.

Programs Targeting Families

K. HEALTHY FAMILIES—HOME VISITATION PROGRAM

The MATERNAL AND CHILD HEALTH PROGRAM (MCH) of the OFFICE OF PUBLIC HEALTH has undertaken home visitation programs to impact Louisiana's high rates of infant mortality, low birth weight, and child maltreatment. Currently there are four home visiting programs that follow the Healthy Families America Program developed in Hawaii, which utilizes paraprofessional home visitors. This model seeks to prevent child abuse and neglect by focusing interventions on promoting child growth and development, modeling and fostering positive parenting skills and parent-child interactions, assuring provision of needed health care, and developing support systems for families.

During fiscal year 98-99, MCH worked to implement the David Olds Nurse Home Visitation Model in two pilot sites in Louisiana. Known as the BEST (Building Early Strengths Together) Program, services were initiated in four parishes of Region VIII (Franklin, Madison, Morehouse, and Richland) in March 1999, and in three parishes of Region IV (Iberia, St.Martin, and Vermilion) in May 1999. The BEST Program is for first time mothers of low socio-economic status. Nurses follow a very strict program protocol that calls for regular visits to the family from twenty-eight weeks of pregnancy until the infant is two years of age. This model was chosen by MCH because of its proven effectiveness as a preventive intervention. Clinical trials and longitudinal studies have shown that this model of prevention significantly 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. MCH worked closely with the GOVERNOR'S CHILDREN'S CABINET to promote this program for future statewide implementation, and this program was chosen as one of the top program priorities recommended by the CABINET. By the end of fiscal year 98-99, the BEST Program had enrolled 77 active families and had completed 303 home visits. With the program underway, MCH is looking forward to initiating teams in parts of Region V and Region III sometime during fiscal year 99-00, and to statewide implementation in the years to come.

L. PUBLIC CAMPAIGN FOR PARENTING EDUCATION & CHILD ABUSE PREVENTION

PREVENT CHILD ABUSE LOUISIANA (PCAL), in conjunction with the DHH, OFFICE OF PUBLIC HEALTH, is in the third year of a statewide social marketing campaign designed to reach parents with educational messages about parenting and to encourage the use of a toll-fee information, support, and referral services for families: PCAL's HELPLINE (800-348-KIDS). Campaign themes have addressed positive communication, positive discipline, and stress prevention for parents.

To emphasize these educational topics and to conduct training sessions in their communities, a volunteer speakers bureau has been established in major cities throughout the state. The trained volunteers include representatives from the OFFICE OF COMMUNITY SERVICES, law enforcement, the media, and health care. Speakers address parent groups, children, community organizations, and "other caregivers" (teachers, day care staff, etc.) in various settings.

In addition, the MATERNAL AND CHILD HEALTH PROGRAM (MCH) of the OFFICE OF PUBLIC HEALTH is training all public health nurses and public health social workers in Bright Futures. The curriculum of Bright Futures is designed to promote and improve the health, education, and well-being of children, adolescents, families, and communities. Furthermore, MCH has set out to train all nursing and social work staff in Infant Mental Health. This 25-hour training, completed in five separate five-hour sessions, is designed to improve staffs' knowledge and skills in the early recognition of factors and conditions that place the infant and caregiver at risk for immediate, as well as long-term, problems in social, emotional, and cognitive growth and development. The Infant Mental Health training has been completed in Region IV and Region VIII, with Regions III and V set for training in fiscal year 99-00.

Furthermore, in a cooperative effort between the MCH and WOMEN, INFANTS, AND CHILDREN (WIC) NUTRITION PROGRAM, new parenting tools have been produced. As a result of the 1995 MCH Needs Assessment, 5 new "Tips on Parenting" cards were created that covered the topics: "How to Deal with Baby's Crying," "Getting Your Child to Listen and Cooperate," "Boosting Your Child's Self-Esteem," "Potty Training," and "What Works Better than Spanking." The cards offer ideas for parents to deal with these difficult issues by using actual quotes from over 786 parents who were surveyed. These cards will be available to all parents in the public health units and through private community resources who request that the cards be available in their offices.

These public education and outreach efforts are being done in collaboration with groups like the OFFICE OF COMMUNITY SERVICES, the MATERNAL AND CHILD HEALTH COALITION, COOPERATIVE EXTENSION, the CHILDREN'S TRUST FUND, and HEAD START.

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

The LOUISIANA DEPARTMENT OF HEALTH AND HOSPITALS' (DHH) OFFICE FOR CITIZENS WITH DEVELOPMENTAL DISABILITIES (OCDD) was established under Act 659 of the 1983 Regular Session. OCDD provides a broad range of services including case management, diagnosis and evaluation, early intervention/infant habilitation, family support, respite, vocational and habilitative services, and supported living services. Many of these services are provided by private provider agencies through contractual agreements and/or Medicaid funding. OCDD's eight Community Services Regional Offices and nine Developmental Centers are located across the state in or near major cities. The Community Services Regional Offices serve as the point of entry into the OCDD service system. The Developmental Centers provide a variety of residential services including 24-hour care and active treatment services. Some centers also operate community homes and provide extended family living services.

OCDD serves eligible individuals who have a severe, chronic disability that is attributable to mental retardation, cerebral palsy, epilepsy, or autism or to any other condition (except mental illness) found to be closely related to mental retardation. Related conditions are included because these conditions result in impairment of general intellectual functioning or adaptive behavior similar to that of persons with mental retardation or require similar treatment and services. The disability must have occurred prior to age 22, be likely to continue indefinitely, and result in substantial limitations in three or more areas of major life activity, such as self-care, language, learning, mobility, self-direction, and capacity for independent living.

OCDD provides a range of services and supports that plan for, prevent, or lessen the impact of adverse outcomes. Infant intervention services, designed for infants and toddlers from birth to 36 months of age, strive to prevent additional developmental delays through a range of therapeutic, instructional, and behavioral and social services. Through the Family Support Program, crisis intervention services are provided to stabilize life-threatening situations or to plan for behavioral contingencies, and supported living services are provided to assist people to live independently in the community. The Cash Subsidy Program provides financial assistance to allow families of children with severe disabilities to care for their children at home. OCDD is also implementing procedures to allow people with developmental disabilities and their families to be more involved in planning their future. This process, which is based on informed choice, empowers people with developmental disabilities to choose the services and supports they need in order to improve their quality of life and achieve the greatest degree of independence in all life areas.

Programs Targeting Infectious Diseases

N. TUBERCULOSIS (TB) PREVENTION AND OUTREACH

During a recent National Tuberculosis (TB) Controllers Workshop, Kenneth Castro, M.D., Director of the Division of TB Elimination at CDC, stated, "the United States is back on track towards the elimination of TB. However, the national trend masks areas of ongoing concern, in particular sporadic outbreaks of drug resistant disease, high incidence 'pockets of infection,' the introduction of disease among foreign-born persons, and disturbing signs of possible renewed complacency on the part of the public, the body politic, and some segments of the health community."

The DEPARTMENT OF HEALTH AND HOSPITALS, through THE OFFICE OF PUBLIC HEALTH'S TB CONTROL SECTION, addresses these areas of concern by monitoring the treatment of reported cases of TB. Disease Intervention Specialist (DIS) staff routinely support this effort through the provision of Directly Observed Therapy (DOT)—a service provided to ensure compliance with and completion of treatment for all patients, public or private. DIS staff also investigate each case of TB to assure timely identification and evaluation of contacts to TB.

Of those patients who have been designated "closed," 96% completed therapy in 1998 as compared with the 97% completing therapy among the "closed" cases in 1997. The high therapy completion was due, in part, to both the intense DOT efforts of DIS staff and to the utilization of incentives and enablers.

O. SEXUALLY TRANSMITTED DISEASE (STD) AND HIV/AIDS PREVENTION PROGRAMS

The DEPARTMENT OF HEALTH & HOSPITALS, OFFICE OF PUBLIC HEALTH, aims to prevent the spread of STDs and HIV/AIDS through a variety of methods, including prevention education; HIV counseling, testing, referral, and partner notification; STD treatment and control, including syphilis partner notification; peer programs; street and community outreach in selected zip code areas; and statewide condom distribution via businesses in communities with high rates of sexually transmitted diseases and HIV/AIDS.

Sexually Transmitted Diseases (STDs)
STD control is a labor-intensive task, relying on the rapid location of a person's sexual partners in the community to halt further spread of the disease. To prevent the spread of disease, the STD CONTROL PROGRAM conducts four basic activities:

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

In order 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, FAMILY PLANNING, correctional institutions, substance abuse centers, and other facilities where STDs may be prevalent. Collaboration with these programs and efforts of STD field personnel resulted in the administering of over 240,000 STD screening tests in 1999.

HIV/AIDS

HIV/AIDS prevention activities and target populations are determined by the statewide HIV COMMUNITY PLANNING GROUP, whose membership ranges from public health and social service professionals to HIV-infected individuals and those at risk for acquiring HIV.

Currently, the OFFICE OF PUBLIC HEALTH HIV/AIDS PROGRAM provides support and technical assistance to 22 community-based organizations (CBOs) that target high-risk populations across the state. HIV antibody testing and counseling take place in over 360 sites statewide, including public health units, drug treatment centers, and CBOs. Outreach contacts by CBOs reportedly reached 300,000 high-risk individuals.

In 1999, the Statewide HIV/AIDS Hotline received over 7,500 calls requesting information regarding HIV/AIDS, STDs, and referrals. Furthermore, the OFFICE OF PUBLIC HEALTH distributed nearly 500,000 HIV/AIDS and STD prevention education materials to parish health units, CBOs, and other agencies.

P. ALCOHOL, DRUG, TOBACCO, AND PREVENTION ADDICTION SERVICES

The Impact of Substance Abuse: OAD Services

Substance abuse has been called the nation's number one health problem[1]. Research indicates that substance abuse is associated with poor health, disruptive social relations, decreased work productivity, violence, crime, and child abuse. A report on chronic diseases and causes of deaths explains that chronic diseases are often complicated by lifestyles and environment[2]. The actual leading causes of death in the United States are tobacco, poor diet/physical inactivity, and alcohol use (McGinnies & Forge, 1993). Since 1989, more individuals have been incarcerated for drug offenses than for all violent crimes, and most violent crime is committed by drug and alcohol abusers. Alcohol and drug abuse is implicated in three-quarters of all spouse abuse, rapes, child molestation, suicides, and homicides (THE NATIONAL CENTER ON ADDICTION AND SUBSTANCE ABUSE, Columbia University, 1996). From Boston to Baton Rouge and New Orleans, hospital emergency rooms overflow with victims of gunshot wounds and other violence caused by alcohol abuse and drug addiction. AIDS and tuberculosis spread rapidly, and intravenous drug users and crack addicts are among the primary carriers of these diseases. Exchanging sex for drugs, practicing unsafe sex, and sharing dirty needles are high-risk behaviors contributing to increasing prevalence and incidence rates of morbidity. President Clinton has declared HIV an emergency in the black and Hispanic communities because of the alarming rate of infection. He recently added 170 million to the budget for AIDS.

A November 1999 report outlined in CESAR's (a weekly fax from the CENTER FOR SUBSTANCE ABUSE RESEARCH, supported by the GOVERNOR'S OFFICE ON CRIME CONTROL AND PREVENTION) cites the finding of a recent Gallup Poll, indicating 36% of adults in the United States report that drinking has ever been a cause of trouble in their family. This rate is the highest ever, and it is

[1] *Using Social Indicators to Estimate Substance Abuse Treatment Needs in Louisiana.* July 1998.

[2] *Chronic Diseases and Their Risk Factors: The Nation's Leading Causes of Death 1999.* U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion.

twice the rate found since the question was first asked in 1947. This finding supports an increased perception of alcohol-related problems in the United States population. Nationwide, crack babies, a phenomenon of the 90s, fill neonatal wards, at a cost of $2,000 a day. Each survivor can cost one million dollars to bring to adulthood (THE NATIONAL CENTER ON ADDICTION AND SUBSTANCE ABUSE, Columbia University, 1996). Fetal Alcohol Syndrome is a top cause of birth defects. Each pregnancy and delivery uncomplicated by alcohol or substance abuse translates into $43,000 to $145,000 in savings (U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES, 1997). Underage use of alcohol, at the national level, costs approximately $58 million per year. More than $36 million of these costs are incurred addressing alcohol-involved violent crimes, and $18 million are for alcohol-related traffic crashes (CESAR, Oct. 27, 1999). Cigarette smoking cost the United States over $72 billion in medical expenses attributable to cigarette smoking in 1993. The majority of expenses (49%) were for hospital care (CESAR, March 8, 1999). In 1995, health care costs triggered by drugs, alcohol, and tobacco reached over $200 billion.

Louisiana's substance abuse health care picture resembles that of the nation. Tobacco use was cited as a leading actual cause of death (played a significant role in cancer, heart disease, stroke, vascular, and respiratory disease) in 1994 in Louisiana (CHRONIC DISEASE CONTROL PROGRAM, 1998). 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. A cumulative report from the DEPARTMENT OF SOCIAL SERVICES (DDS) indicates that 6,561 recipients have been screened under the Family Independence Temporary Assistance Program (FITAP) Drug Testing Program. OAD records show 1,688 total referrals from July 21, 1998 through December 31, 1999 (2.79% of the total screened by DDS). The DEPARTMENT OF PUBLIC SAFETY AND CORRECTIONS reports that approximately 75% of incarcerated adults have substance abuse problems.

Because of the high prevalence and devastating social, health, and economic impact/cost of substance abuse, the state and the federal government give high priority to prevention and treatment efforts. The OFFICE FOR ADDICTIVE DISORDERS is the single state authority for substance abuse. OAD operates through a regionalized Community Service District (C.S.D.)/Regions substructure. There are 10 administrative regions (or CSD's) of approximately 450,000 to 500,000 inhabitants each. There is an independent district (Region X), under the jurisdiction of the Jefferson Parish Authority, and effective July 1, 1997, the Capital Area Human Services District (C.A.H.S.D.) assumed responsibility for the community-based substance abuse, mental health, and developmental disabilities services previously provided by DHH in the parishes comprising Region 2. Region 1 and Regions 3-9 are directly operated by the State.

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 three of the following six strategies: Information Dissemination, Education, Alternatives, Problem Identification and Referral, Community-Based Process, and Environment. Prevention services have the additional responsibility of the Synar Initiative. The Synar Initiative is a community development and educational program developed to comply with the Federal and State laws regarding tobacco sales to individuals under the age of 18. The baseline was set December 1996, with 75% of retailers found to be in non-compliance. The OFFICE FOR ADDICTIVE DISORDERS implemented programs to educate tobacco vendors regarding tobacco sales to minors. Enforcement efforts via compliance checks are conducted by the OFFICE OF ALCOHOL TOBACCO CONTROL through a contract agreement with the OFFICE OF ADDICTIVE DISORDERS. The federal guideline was to reduce the illegal sales of tobacco to minors from

75% to 20% over a five-year period. The current rate of non-compliance stands at 6.68%. Louisiana met the federal goal in 18 months.

Prevention specialists coordinate prevention services in each of the Regions and implement community-based primary prevention strategies. Research indicates that alcohol, tobacco, and other drug (ATOD) use, delinquency, school achievement, and other important outcomes in adolescence are associated with specific characteristics in the students' communities, schools, family environments, and individual characteristics. These characteristics are called risk or protective factors. There is evidence to indicate that exposure of adolescents to a greater number of risk factors, irrespective of what the specific risk factors are, is associated with more substance use and delinquency, while exposure to more protective factors is associated with lower prevalence of these behaviors.

The analysis of risk and protective factors is the most powerful paradigm available for understanding the genesis of both positive and negative adolescent behavioral outcomes and how the most successful adolescent prevention programs can be designed[3]. Under the sponsorship of the CENTER OF SUBSTANCE ABUSE PREVENTION (CSAP), the DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE FOR ADDICTIVE DISORDERS contracted with DEVELOPMENTAL RESEARCH AND PROGRAMS, INC., of Seattle, Washington to conduct a survey of sixth, eighth, tenth, and twelfth grade students. Students were surveyed using the *Communities that Care ® Youth Survey (CTC Survey)*. The CTC survey was developed to provide scientifically sound information to communities on the prevalence of risk and protective factors among youth. The survey data were collected November 1998 through January 1999 in Louisiana public and private schools. A risk and protective factor profile was developed for Louisiana students. Results showed Louisiana students to be above the national average for all but two of the protective factors. There was only one protective factor, Opportunities for Positive Involvement in the Community, for which Louisiana students scored significantly lower than both the National Comparison average and the CTC matched comparison. The next lowest protective factor was School Rewards for Prosocial Involvement. The most elevated risk factor was in the school domain, Academic Failure, which measures students' self-reports of their academic performance. Other risk factors that were significantly higher than the national average were Friends, Delinquent Behavior and Impulsiveness, and Poor Family Discipline. Results of the survey are posted on the office's web page. It is important to note, the survey points out, that both risk and protective factors must be addressed for a program to be successful. OAD prevention future goals include using the results of this survey to implement strategies that minimize the identified risk factors and enhance and promote protective factors.

The DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE FOR ADDICTIVE DISORDERS was awarded a second block grant from the U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention to enforce the underage drinking laws. The grant funds were used for development of a central collection center for alcohol violations, alcohol judicial education, and alcohol compliance.

The OFFICE FOR ADDICTIVE DISORDERS (OAD) provides a continuum of treatment services: detoxification, inpatient, community-based, 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 five special programs: Methadone, Pre-Release Criminal Justice Program (Blue Walters), Drug Courts, Compulsive Gambling, and DWI treatment. Federal funding mandates require that the Office provide specialized services to pregnant women, women with dependent children, intravenous drug users, and those infected with HIV.

[3] *Communities that Care® Youth Survey.* May 1999.

OAD continues to participate in a collaborative project between the OFFICE OF PUBLIC HEALTH and the OFFICE OF MENTAL HEALTH to provide services to the school-based health centers in the State. The project, initiated last fiscal year to fund a Board Certified Social Worker jointly, has ended and plans are in the making for a different role for collaboration. OAD will continue to provide funding to support school-based health center efforts. The three partners are currently developing a strategic plan for providing services to include more of the school-based health centers in the state. Preliminary meetings have occurred to discuss possible approaches and tentative deadlines. The final draft and implementation of the collaborative is expected for completion as funding becomes available.

Q. VIOLENCE PREVENTION

The INJURY RESEARCH AND PREVENTION SECTION'S Violence Prevention Program applies public health tools to the prevention of violence—using epidemiology to define risk factors and risk groups to target with prevention interventions, evaluating those interventions, and disseminating the interventions that work.

R. SUICIDE ASSESSMENT

Mental Health professionals conduct a suicide assessment of any consumer who presents to the system with emotional or behavioral problems, or with symptoms of severe mental illness. Additionally, all paraprofessionals who work with the mentally ill client 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 consumer has the means to harm him/herself. Immediate steps are taken to protect that individual when indicated by the mental health assessment of suicide potential. 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.

The OFFICE OF MENTAL HEALTH 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 phone lines with 1-800 numbers, a Single Point of Entry system for those who need face-to-face evaluation, hospital diversionary programs (such as respite), or acute hospitalization.

S. PROGRAMS OF THE OFFICE OF MENTAL HEALTH

The mission of the OFFICE OF MENTAL HEALTH (OMH) is to perform the functions of the state that provide or lead to treatment, rehabilitation, and follow-up care for individuals in Louisiana with mental and emotional disorders. OMH administers and/or monitors community-based services, public or private, to assure active quality care in the most cost-effective manner in the least restrictive environment for all persons with mental and emotional disorders. OMH operates an effective, efficient, comprehensive, integrated, and culturally competent system of mental health services guaranteeing consumer and family involvement, so as to meet the needs of adults with serious mental illness and of children with serious emotional disturbance and to reduce the need for out-of-home placement.

The Children's Assertive Community Treatment– Region III
This program selects children with at least two previous psychiatric hospitalizations as its top priority. The purpose is to break the cycle of psychiatric institutionalization through an aggressive, skill-based, wrap-around approach to child and family. The program also serves children who have not yet been hospitalized but who are at imminent risk of out-of-home care. Fifty-four children remained out of the hospital last year as a result of their participation in this program.

School-Based Mental Health Services
The OFFICE OF MENTAL HEALTH is actively engaged in the direct support of mental health services in over 160 schools in the state through local mental health centers and in 37 full time School-Based Health Centers. The OFFICE OF MENTAL HEALTH funds mental health staff at the Tallulah and Baton Rouge SBHCs. A collaborative pilot with the OFFICE OF PUBLIC HEALTH and the OFFICE OF ADDICTIVE DISORDERS for funding school-based mental health staff in a New Orleans SBHCs shows promise for future, jointly funded expansion. The three offices are preparing a strategic plan to expand the collaboration to new SBHCs as they are funded.

Provision of mental health services at the school is proving to be an effective method of intervening in children's lives and preventing the need for more acute outpatient or inpatient services. Over 14,700 children and adolescents received mental health services at School-Based Health Centers and 8,035 children and adolescents received mental health services through the local mental health center programs.

Evolutions
Greenwell Springs Hospital operates Evolutions, a partial hospitalization program for children and adolescents who are experiencing emotional and behavioral problems and do not require inpatient hospitalization. The program serves as an alternative to inpatient treatment and also facilitates the transition from inpatient to outpatient care. Intensive therapeutic interventions assist the children and adolescents to find more effective ways of functioning in the home, school, and community. This program is a collaborative effort with local school systems. Southeast Louisiana Hospital operates Challenges, partial hospitalization program for K-12 that provides services similar to those at Greenwell Springs Hospital. In addition, the programs provide transition services to children and adolescents being discharged from inpatient treatment.

St. Charles Assertive Treatment (SCAT) Clinic with No Walls
The St. Charles Assertive Treatment Program is a community-based mental health treatment initiative, enhancing service delivery in rural communities and improving the overall quality of life for individuals with severe and persistent mental illnesses. The goal is to prevent hospital recidivism and to allow the consumer to sustain a high quality of life in the community.

The program is accessible to consumers and their families 24 hours a day for crisis intervention. A multi-disciplinary team of professionals and paraprofessionals provides treatment and rehabilitation. This program is specifically designed to assist consumers with flexible services in their home environment. It is very effective as an intervention for consumers with complex needs.

Project Life
The supported living program, Project Life, utilizes an assertive community treatment model to assist persons with very severe mental health disabilities to live in the community. All persons have been hospitalized at least once in the nine months prior to acceptance into the program, or have experienced multiple hospitalizations within the year preceding admission into the program. Services include housing supports, case management, vocational services, and

psychiatric rehabilitation services. Consumers, called community trainers, provide skills training and case management.

Acute Psychiatric Unit – Washington St. Tammany Parish
Continuity of Care
The Acute Psychiatric Unit provides for consumers recently discharged from the hospital to return to their home environment and to continue to recover from illness. Consumers who have histories of multiple hospitalizations and complex treatment needs are the primary recipients of these services. Assessments focusing on the patient's general adjustment back to the community are made during home visits. Hospital treatment staff involved in the program are available to the consumer and/or family should the need arise.

Medical Center of Louisiana New Orleans (MCLNO) Mental Health Services
Partial Hospitalization Program
The Partial Hospitalization Program provides a comprehensive range of integrated clinical, rehabilitative, and related services to individuals with severe and persistent psychiatric disabilities who live in the Greater New Orleans area. Family participation is encouraged. If a program member presents to the Psychiatric Triage Unit with a crisis, the Partial Hospitalization Program staff members are notified and often are able to intervene with the patient to prevent hospitalization.

Assertive Outreach – Rapid Response Team
The Rapid Response Team works with the chronically mentally ill population, using non-traditional methods to reach those who have not been able to benefit from traditional mental health centers and hospitals. The team has pager coverage to provide 24-hour service for their patients. If a participant presents to the Psychiatric Triage Unit at MCLNO, the team member attempts to intervene and avoid further hospitalization. The close contact with the consumers allows the team to monitor medication compliance, observe for early signs of decompensation, and intervene as appropriate.

Programs Targeting Environmental Health

T. Community Water Fluoridation

Currently, 54.9% of the population served by public water systems are serviced by optimally fluoridated water systems. Renewed effort has been undertaken toward reaching the Centers for Disease Control 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 Fluoridation Program. The program will oversee monitoring and evaluation of current systems, provide training and assist in promotional activities, together with the Oral Health and Environmental Health Programs of the Office of Public Health 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.

Thus far, the parish of Plaquemines and the town of Amite, Louisiana have recently passed council ordinance to implement community water fluoridation with the potential to reach an additional 31,000 Louisiana residents.

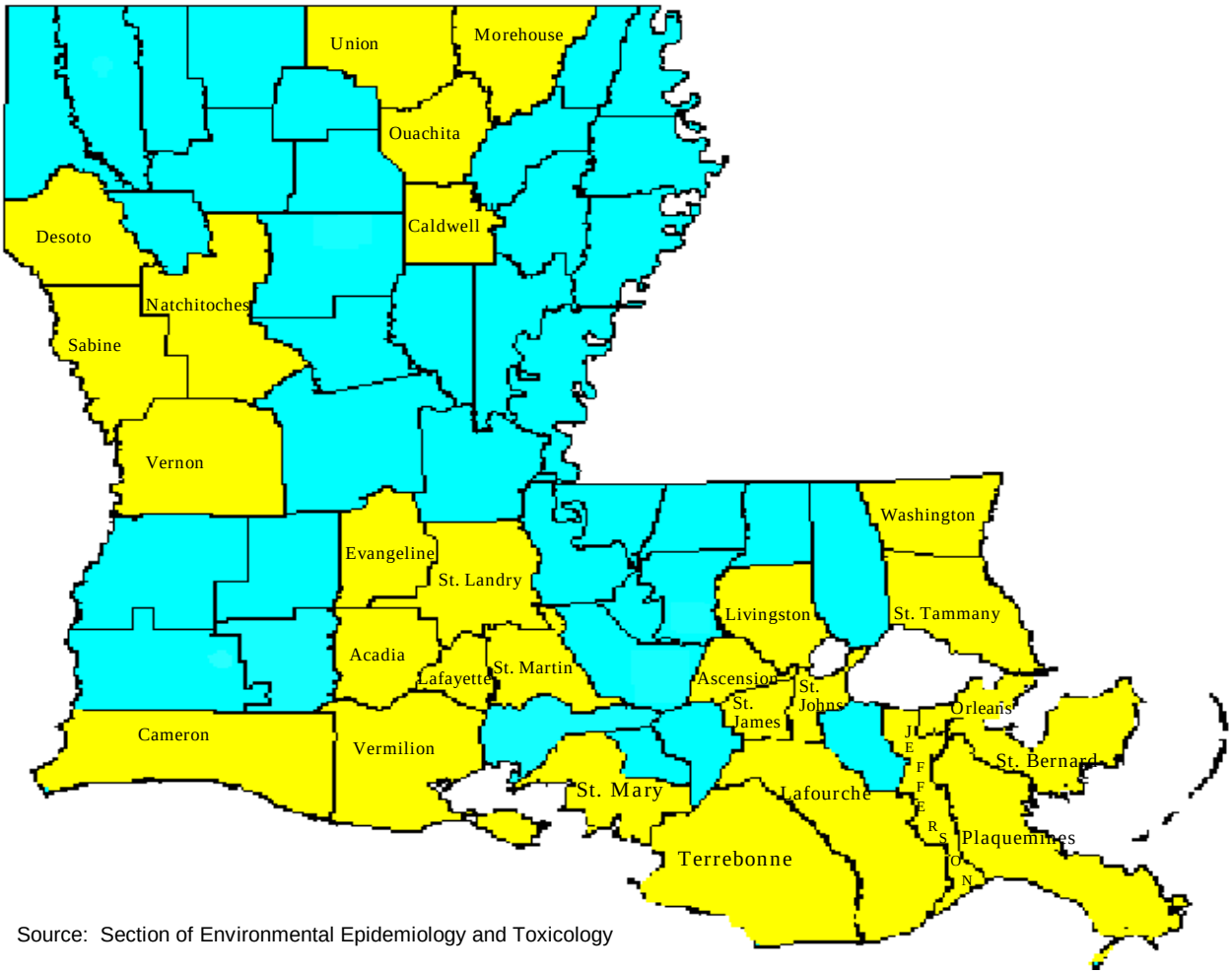
U. Environmental Health Advisories

The Louisiana Department of Health and Hospitals 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

SEET works with the Louisiana Department of Environmental Quality (LDEQ) to assess the extent of mercury contamination in fish. Methyl mercury, a metal compound sometimes found in fish, can cause birth defects and neurological problems when present at high levels. LDEQ collects and samples fish from water bodies that are selected based on their pH, usage, and SEET recommendations. SEET's Health Advisor then coordinates a risk analysis, and, if warranted, the State Health Officer issues a fish consumption advisory for specific species of fish. Of over 100 water bodies tested to date, 17 health advisories for fish containing mercury have been issued. These advisories cover 14 freshwater bodies in or traversing 19 parishes (see map below). An advisory on king mackerel in the Gulf of Mexico also exists.

Louisiana Parishes with Mercury-Related Fish Advisories in 1999



Source: Section of Environmental Epidemiology and Toxicology

V. ENVIRONMENTAL HEALTH EDUCATION

Methyl Parathion and Other Pesticides

In the fall of 1998, the SECTION OF ENVIRONMENTAL EPIDEMIOLOGY AND TOXICOLOGY began developing a plan for a statewide public health education project on Methyl Parathion and other pesticides in order to educate people in Louisiana about safe pest prevention control and the safe use of pesticides.

The plan involved compiling available health education material on pesticides and revising material to make brief and easy to read fact sheets, and developing pesticide education resource manuals and distributing the manuals to each parish health unit across the state of Louisiana. One manual was delivered to sanitarians at each of the 68 parish health units and to nurses at 108 parish health units. Additional manuals were produced and distributed to staff with LOPH, ATSDR, LDAF, the LOUISIANA COOPERATIVE EXTENSION SERVICE, and the LOUISIANA POISON CONTROL CENTERS, so that these organizations can use them to educate the public on pesticides. The manual includes easy to read reproducible health information (fact sheets) that staff at local parish health units can photocopy and use to educate people in their parishes. It also contains information about what to do if someone is exposed to pesticides (for the public), and pesticide emergency response, including reporting procedures and forms (for OPH staff).

Mercury in Fish

SEET, ENVIRONMENTAL QUALITY, WILDLIFE AND FISHERIES and AGRICULTURE AND FORESTRY entered into an interagency agreement in 1997 to determine jointly which water bodies in the state needed health advisories based on levels of environmental contamination.

Also, 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.

The agencies, working with representatives of the SIERRA CLUB and the AUDUBON SOCIETY, produced two informative brochures, one for the general public and the other directed specifically toward pregnant women and mothers of small children. The publications were widely distributed throughout Louisiana, including distribution through OB/GYN and pediatricians' offices and parish health units.

The environmental organizations continue to work closely with the legislature and the state departments to inform the public about the potentially deleterious effects of mercury and other contaminants on people's health.

Health Professional Education

SEET conducts Health Professional Education as part of its educational activities. SEET targets physicians and other health professionals located near Superfund and proposed Superfund sites to receive case studies from the AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY (ATSDR). Information provided focuses on site contaminants, health effects from exposure, and clinical descriptions of the diagnosis and management of cases of chemical exposure.

Since 1996, SEET has disseminated ATSDR (AGENCY FOR TOXIC SUBSTANCES AND DISEASE REGISTRY) Case Studies to over 4,000 Louisiana physicians in 20 parishes. The most recent mail-out occurred in February of 1998 when SEET distributed ATSDR Case Studies entitled "Mercury Toxicity" and "Taking Exposure History" to 750 physicians in 10 parishes.

Public Health Response for Chemical Spills
Thousands of accidental releases, explosions, and other chemical releases occur each year in Louisiana. SEET evaluates the public health threat of selected events and provides needed information and recommendations to the affected communities, hospitals, and physicians treating exposed individuals.

Medical Assessment Team (MAT)
Repeated occurrences of spills and other accidental hazardous substance releases in Louisiana have underscored the need for timely public health response in these events. THE DEPARTMENT OF HEALTH AND HOSPITALS is addressing this need by piloting a Medical Assessment Team (MAT) for hazardous substance emergencies. Currently in its formative stages, the MAT will support state and local response efforts on an as-needed basis. Exposure assessment, risk assessment, risk communication, and epidemiologic surveillance comprise the MAT's core functions. The MAT will assess the nature and severity of toxic exposures based on available environmental and medical data. MAT members will obtain and provide information about the hazardous substance(s) to local emergency departments at the time of the event. MAT experts will determine and recommend appropriate tests for exposure to treating physicians and hospitals. Collections and analysis of these data will allow subsequent health risk assessment and communication to the affected public. The MAT will devise and coordinate medical follow-up, when indicated. Local government officials will be briefed, and the team will attend public meetings to address the community's concerns.

V. LOUISIANA STATE HEALTH CARE SYSTEM

A. ANALYSIS OF HEALTH CARE IN LOUISIANA

A 1999 national report by ReliaStar Financial, formerly Northwestern National Life, shows Louisiana at the bottom of the list of healthiest states. Louisiana's 50th ranking is similar to its ranking of 48th and 49th the last two years. The report is based on 17 criteria, including disease rate, access to health care, occupational safety and disability, crime rate, motor vehicle death rate, and other mortality rates and data from 1998. Louisiana's ranking as the most unhealthy state stems from its high violent crime rate, high unemployment, poor access to primary care, high number of limited activity days, high rate of heart disease, high total mortality and high premature death. Louisiana ranks in the bottom 10 on 10 of the 17 measures. Support for public health care has increased from 35 percent to 12 percent below the national average but still lags behind other states. Since 1990, Louisiana has failed to match national improvements in prevalence of smoking and has seen an increased risk of heart disease, the report says.

A major explanation for Louisiana's poor health status is the lack of access to routine and preventive health care. In *Health Care State Rankings for 1999*[1], Louisiana ranked 50th, worst in the nation in health indicators. According to this report, Louisiana ranked 1st in the nation in diabetes death rate (37.4 deaths per 100,000 population) and 2nd in the percent of births by cesarean section (26.4% of live births). Louisiana's performance related to prenatal care is dismal, with Louisiana ranking 1st in the percentage of low birth weight babies (10.1% of live births), 9th in the rate of neonatal deaths (5.6 neonatal deaths per 1,000 live births), and 6th in the rate of infant mortality (9.1 infant deaths per 1,000 live births). Louisiana ranks 12th in the percent of women receiving late or no prenatal care and 30th in the percent of African-American women receiving prenatal care in the first trimester. Similarly, Louisiana's breast cancer and cervical cancer rates for African-American women exceed the national rates. The rate for white women is generally below the national norm.

Accessibility and availability of primary care practitioners (family practice, general practice, internal medicine, pediatrics, and obstetrics/gynecology) also pose a significant problem in the delivery of health care in the state. As of January 2000, the BUREAU OF HEALTH CARE DELIVERY AND ASSISTANCE recognizes 77 primary care shortage areas in the state: 28 geographic areas, 21 population groups, 19 sub-areas, and 9 facilities. Of the 28 whole-parish designations, 26 are non-metropolitan parishes.

In lieu of a primary care physician, many people seek care at hospital emergency rooms. In 1997 Louisiana ranked 14th highest nationally in the number of emergency outpatient visits to community hospitals. There were 2,198,306 emergency outpatient visits to hospitals in Louisiana, as compared with the national average of 92,819,892 visits.

In addition to confirming the shortage among physicians and nurses, other occupations identified as posing a general supply problem in the state include dentists (in *Health Care State Ranking 1999*, American Dental Association statistics report 44 dentists per 100,000 population in Louisiana in 1998 - lower than the national rate of 60), hygienists, physician assistants, pharmacists, nutritionists, audiologists, social workers, public health personnel, physical therapists, and medical technologists.

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 have been mandated to cooperate, in collaboration with the Louisiana Area

[1] Morgan, K.O. and Morgan, S. (Eds.) 1999. *Health Care State Rankings 1999: Health Care in the 50 United States*. (7th Ed.) Lawrence, KS: Morgan Quitno Press.

Health Education Centers, to improve and expand programs for non-metropolitan and other health professional shortage areas. Hundreds of thousands of dollars of state funds have in the past been allocated to capture federal dollars for professional development initiatives, including scholarship programs for students who will return to health professional shortage areas, and loan repayment programs for medical professionals to practice in shortage areas in exchange for payment of professional education loans. However, during FY 98/99 only continuation funding was appropriated to continue the contracts with the health care providers through the State Loan Repayment Program (SLRP). The SLRP is a program with federal dollars that match the state investment in recruitment and retention of health care providers to serve underserved people.

Louisiana **must continue** aggressively to attack the health professional shortage problem to meet the existing health needs of its residents. Lack of access to appropriate care in their communities is resulting in many ill persons becoming patients at state hospitals. These same individuals could be served better if there were more outpatient primary care facilities available and accessible in their own areas. Ensuring appropriate and adequate primary care facilities can take place only if there are available physicians, nurses, and other health care professional to staff the facilities, and state financing to support these providers.

B. LOUISIANA HEALTH CARE STATISTICS[2]

Percent of State Population Receiving Medicaid in 1997	
Alabama	12.6%
Arkansas	14.7%
Louisiana	17.1%
Mississippi	18.5%
Texas	13.1%
United States	12.5%
Percent of State Population Not Covered by Health Insurance in 1997	
Alabama	15.5%
Arkansas	24.4%
Louisiana	14.9%
Mississippi	20.1%
Texas	24.5%
United States	16.1%
Number of Emergency Outpatient Visits to Hospitals in 1997	
Alabama	1,987,378
Arkansas	996,491
Louisiana	2,198,306
Mississippi	1,442,454
Texas	6,296,427
United States	92,819,892
Percent of State Population Enrolled in Medicare in 1998	
Alabama	15.2%
Arkansas	17.0%
Louisiana	13.6%
Mississippi	14.8%
Texas	10.9%
United States	13.9%
Number of Health Maintenance Organizations (HMOs), Louisiana 1995/1997[3]	14 / 26
Percent of Population Enrolled in HMOs, Louisiana 1997	16.6%
Number of Preferred Provider Organizations (PPOs), Louisiana 1994/1995	30 / 26
Percent of Population Enrolled in a PPO, Louisiana 1993/1994	15.5% / 44.2%
Number of Nurses, Louisiana 1997[4]	40,484
Number of Nurse Practitioners, Louisiana 1997[5]	465

[2] Morgan, K.O. Morgan, S. and Uhlig, M. (Eds.). 1999. *Health Care State Rankings 1999: Health Care in the 50 United States*. (7th Ed.) Lawrence, KS: Morgan Quitno Press.

[3] Health Resources Management, Office of Public Health.

[4,5] Louisiana Board of Nursing

C. Louisiana Health Care Access

Number of Hospitals and Beds Louisiana, 1998		
Type of Hospital	**Hospitals**	**Beds**
Acute	117	20,333
Children's	2	246
Critical Access	1	25
Long Term	21	1,622
Psychiatric	18	2,408
Rehabilitation	15	542

Source: Health Resource Management, Office of Public Health

Health Facilities Louisiana, 1998	
Type of Facility	**Number**
Alcohol/Drug Abuse Facilities	72
Community Health Centers	23
State Developmental Centers	9
Hospitals	174
Mental Health Clinics	43
Rural Health Clinics	61
Public Health Units	109

Source: Health Resource Management, Office of Public Health

Nursing Home Statistics Louisiana, 1998	
Number of Nursing Homes	352
Number of Beds	
Licensed Beds	40,953
Medicaid	37,697
Average Occupancy (Medicaid)	80.9%

Source: Louisiana Board of Nursing

Lack of Access to Primary Care* Louisiana, Neighboring States, and United States, 1998		
State	**Percent**	**Rank****
Alabama	19.5	6
Arkansas	12.4	18
Louisiana	24.1	1
Mississippi	22.1	2
Texas	11.1	21
United States	9.6	-

*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.). 1999. Health Care State Rankings 1999: Health Care in the 50 United States. (7th Ed.) Lawrence, KS: Morgan Quitno Press.

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 health care programs: inpatient and outpatient hospital services; laboratory and X-ray services; skilled nursing and home health services; doctors' services; family planning; and periodic health checkups, diagnoses, and treatments for children.

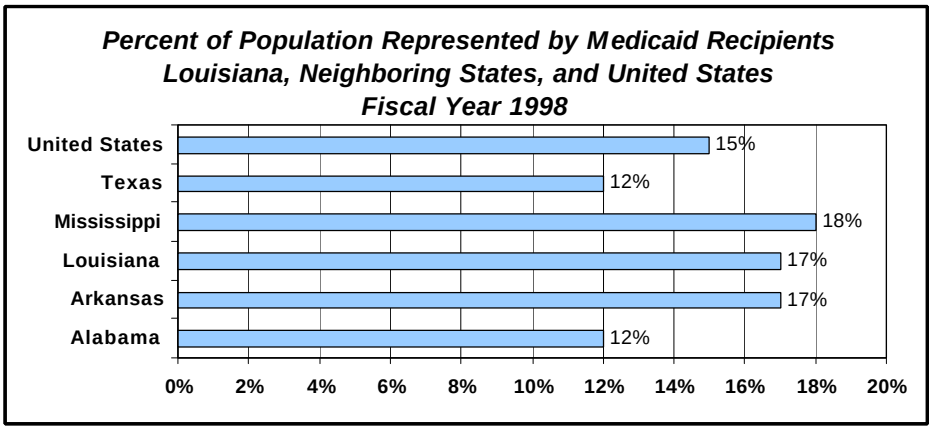
Medicaid recipients fall into several categories of eligibility: the aged, blind and disabled people on Supplemental Security Income, certain low-income pregnant women and children, and people who have very high medical bills. In fiscal year 1998, over 720,000 Louisianians benefited from services provided through Medicaid funding.

Number of Medicaid Recipients by Basis of Eligibility
Louisiana, Neighboring States, and United States, Fiscal Year 1998

State	Total Number of Recipients	Age 65 and Older	Blind/ Disabled	Children	Adults	Other/ Unknown
Alabama	527,078	64,651	145,892	262,547	48,049	5,939
Arkansas	424,727	50,746	96,507	179,405	85,023	13,046
Louisiana	720,615	93,838	160,544	345,723	120,369	141
Mississippi	485,767	60,567	131,439	218,491	61,217	14,053
Texas	2,324,810	301,368	288,293	1,327,276	391,786	16,087
United States	40,649,482	3,964,223	6,637,980	18,309,145	7,907,935	3,830,199

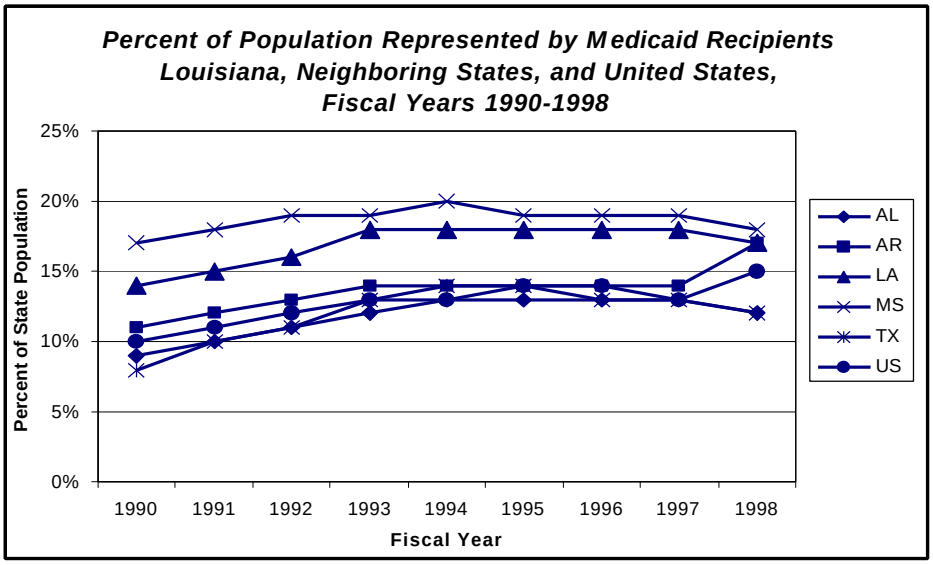
Source: U.S.Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

The total number of Medicaid recipients in Louisiana in fiscal year 1998 is the equivalent of 17% of the state's population, a figure approximately 2% higher than that seen in most other south-central states and in the nation as a whole.



Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998.

The percentage of Louisiana's population represented by Medicaid beneficiaries has decreased slightly from a plateau of 18% from 1993 to 1997. Among the south-central states, only Mississippi has had a higher percentage of its population represented by Medicaid beneficiaries.



Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998.

Of Louisiana Medicaid medical care recipients in fiscal year 1998, 61.4% were female and 38.6% were male. These figures are similar to those seen in other south-central states. For the United States as a whole, 60.3% of recipients were female and 39.7% were male.

Number and Percent of Medicaid Recipients of Medical Care by Se Louisiana, Neighboring States, and United States, Fiscal Year 199

State	Male		Female	
	Number	Percent*	Number	Percent*
Alabama	196,812	37.9	322,644	62.1
Arkansas	157,095	37.1	266,608	62.9
Louisiana	278,337	38.6	442,067	61.4
Mississippi	176,349	36.7	304,322	63.3
Texas	910,233	39.2	1,414,555	60.8
United States	14,733,230	39.7	22,376,441	60.3

*Percent of all Medicaid recipients in the state. Unknown sex not included in table.

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998.

Like Alabama and Mississippi, the majority of Medicaid beneficiaries who received medical care in Louisiana were black (59.9%). In Louisiana, 33.2% were white, and 7.0% were of other race/ethnic groups. The race/ethnic group differences seen among the south-central states and between Louisiana and the nation as a whole reflect state-level differences in race/ethnic populations.

Number and Percent of Medicaid Recipients of Medical Care by Rac Louisiana, Neighboring States, and United States, Fiscal Year 199						
	White*		Black*		Other**	
State	Number	Percent	Number	Percent	Number	Percent
Alabama	238,107	45.2	260,790	49.5	28,181	5.3
Arkansas	257,363	60.6	141,972	33.4	25,392	6.0
Louisiana	238,916	33.2	431,382	59.9	50,317	7.0
Mississippi	151,798	31.2	298,883	61.5	35,086	7.2
Texas	645,978	27.8	458,055	19.7	1,220,777	52.5
United States	16,771,976	41.3	9,847,580	24.2	14,029,926	34.5

*Non-Hispanic

**Other includes Native American, Asian or Pacific Islander, Hispanic, and Unknown

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

The two tables below present the number and percent of total Medicaid medical care recipients divided into age groups. Fifty percent of Medicaid medical care recipients in fiscal year 1998 were below 15 years of age, reflecting the importance placed on provision of health services to children. The age-group distribution of services in Louisiana was similar to that seen in surrounding states and in the nation as a whole.

Number of Medicaid Recipients of Medical Care by Age Group Louisiana, Neighboring States, and United States, Fiscal Year 1998										
	Age Group									
State	Under 1	1-5	6-14	15-20	21-44	45-64	65-74	75-84	85+	Unknown
Alabama	27,969	111,576	111,380	43,098	93,433	51,573	31,817	30,249	25,309	674
Arkansas	16,248	77,228	93,906	48,658	88,600	34,820	21,708	22,996	19,644	919
Louisiana	57,639	144,132	158,730	64,869	139,767	59,953	36,578	33,406	25,404	137
Mississippi	26,367	90,526	96,034	42,668	95,579	47,702	30,780	28,555	22,461	5,095
Texas	144,065	558,876	574,293	179,470	417,767	148,914	122,019	103,321	76,084	1
United States	1,558,643	6,933,058	8,552,786	3,770,295	8,835,632	3,329,608	1,806,516	1,577,798	1,271,386	3,013,760

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

Percent of Medicaid Recipients of Medical Care by Age Grou Louisiana, Neighboring States, and United States, Fiscal Year 1998										
	Age Group									
State	Under 1	1-5	6-14	15-20	21-44	45-64	65-74	75-84	85+	Unknown
Alabama	5.3	21.2	21.1	8.2	17.7	9.8	6.0	5.7	4.8	0.1
Arkansas	3.8	18.2	22.1	11.5	20.9	8.2	5.1	5.4	4.6	0.2
Louisiana	8.0	20.0	22.0	9.0	19.4	8.3	5.1	4.6	3.5	0.0
Mississippi	5.4	18.6	19.8	8.8	19.7	9.8	6.3	5.9	4.6	1.0
Texas	6.2	24.0	24.7	7.7	18.0	6.4	5.2	4.4	3.3	0.0
United States	3.8	17.1	21.0	9.3	21.7	8.2	4.4	3.9	3.1	7.4

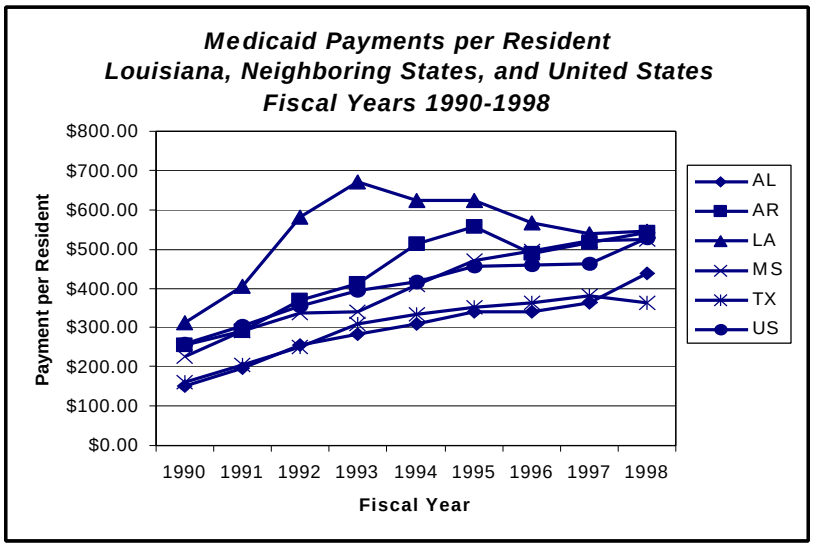
Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

The total of payments made to Medicaid vendors for eligible recipients in Louisiana in fiscal year 1998 was over $2.3 billion. More than 74% of Medicaid funding went to persons who were disabled or were age 65 or over, even though half of all eligible recipients are children.

Medicaid Vendor Payments by Basis of Eligibility of Recipient Louisiana, Neighboring States, Fiscal Year 1998						
State	Total Payment	Age 65 and Older	Blind/ Disabled	Children	Adults	Other
Alabama	$1,902,300,047	$550,365,257	$597,810,766	$186,782,542	$33,684,838	$533,656,644
Arkansas	$1,375,797,421	$430,018,281	$791,182,772	$262,322,716	$99,324,540	($207,050,888)
Louisiana	$2,383,508,985	$672,322,724	$1,101,257,511	$371,500,804	$238,273,512	$154,433
Mississippi	$1,442,373,276	$415,324,517	$665,398,149	$225,920,481	$119,880,832	$15,849,297
Texas	$7,139,928,843	$2,341,889,852	$2,484,970,969	$1,397,377,640	$871,515,674	$44,174,708

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

In fiscal year 1998, Medicaid funding per state resident was higher in Louisiana than in any of the other south-central states. Medicaid payments averaged $546.00 per state resident, approximately 3.6% more than the national average of $527.00 per United States resident. This figure has declined, however, from its 1993 peak of $670.00 per state resident.



Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998.

As part of the cost-saving measures available through the Medicaid program, states are making increased use of enrollment of Medicaid beneficiaries in managed care programs. The following table shows the number of enrollees in Medicaid managed care programs from 1996 through 1998. These numbers include individuals enrolled in state health care reform programs that expand eligibility beyond traditional Medicaid eligibility standards.

Number and Percent of Medicaid Managed Care Enrollees Louisiana, Neighboring States, and United States, 1996-1998						
	1996		1997		1998	
State	Number of Enrollees	Percent in Managed Care	Number of Enrollees	Percent in Managed Care	Number of Enrollees	Percent in Managed Care
Alabama	56,929	11.4%	407,643	82.0%	362,272	70.9%
Arkansas	143,232	38.6%	159,458	80.9%	186,215	56.0%
Louisiana	44,772	5.6%	40,469	6.4%	40,729	5.4%
Mississippi	35,137	6.9%	81,255	15.0%	153,562	40.0%
Texas	75,776	3.8%	275,951	13.3%	437,898	25.5%
United States	13,330,119	40.1%	15,345,502	47.8%	16,573,996	53.6%

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for FY 1998

E. MEDICARE

Medicare is the nation's largest health insurance program, covering over 38 million Americans at a cost of just under $200 billion. 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 office.

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 doctor 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. They can get both Part A and Part B benefits in most managed care plans.

As of March 1, 1998, Louisianans enrolled in the Medicare program numbered 592,543. This number constitutes 14% of the state's population, a percentage similar to that of surrounding states and the nation as a whole.

Percent of State Population Enrolled in Medicar
Louisiana, Neighboring States, and United States, 1998

State	Percent Enrolled
Alabama	15.4
Arkansas	17.1
Louisiana	13.7
Mississippi	14.9
Texas	11.1
United States	14.1

Source: U.S. Department of Health and Human Services, Health Care Financing Administration, HCFA-2082 Report for 1998

F. PROVIDER SITES

The following pages describe the various health care facilities available to the public throughout the state of Louisiana. These facilities include the state Charity hospital system, small rural and community hospitals, public health clinics, 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 currently is being operated by the LOUISIANA STATE UNIVERSITY MEDICAL CENTER. 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 the Louisiana State University (LSU) Schools of Medicine and Nursing, as well as other professional educational institutions.

Small Rural and Community Hospitals

Louisiana has a number of very small rural and community hospitals, some publicly and some privately owned. Eight of the State's sixty-four parishes do not have a hospital. As part of the move toward managed care, some of the small rural hospitals and the Charity Hospitals have begun to formalize their long-standing links with the primary care clinics in their regions.

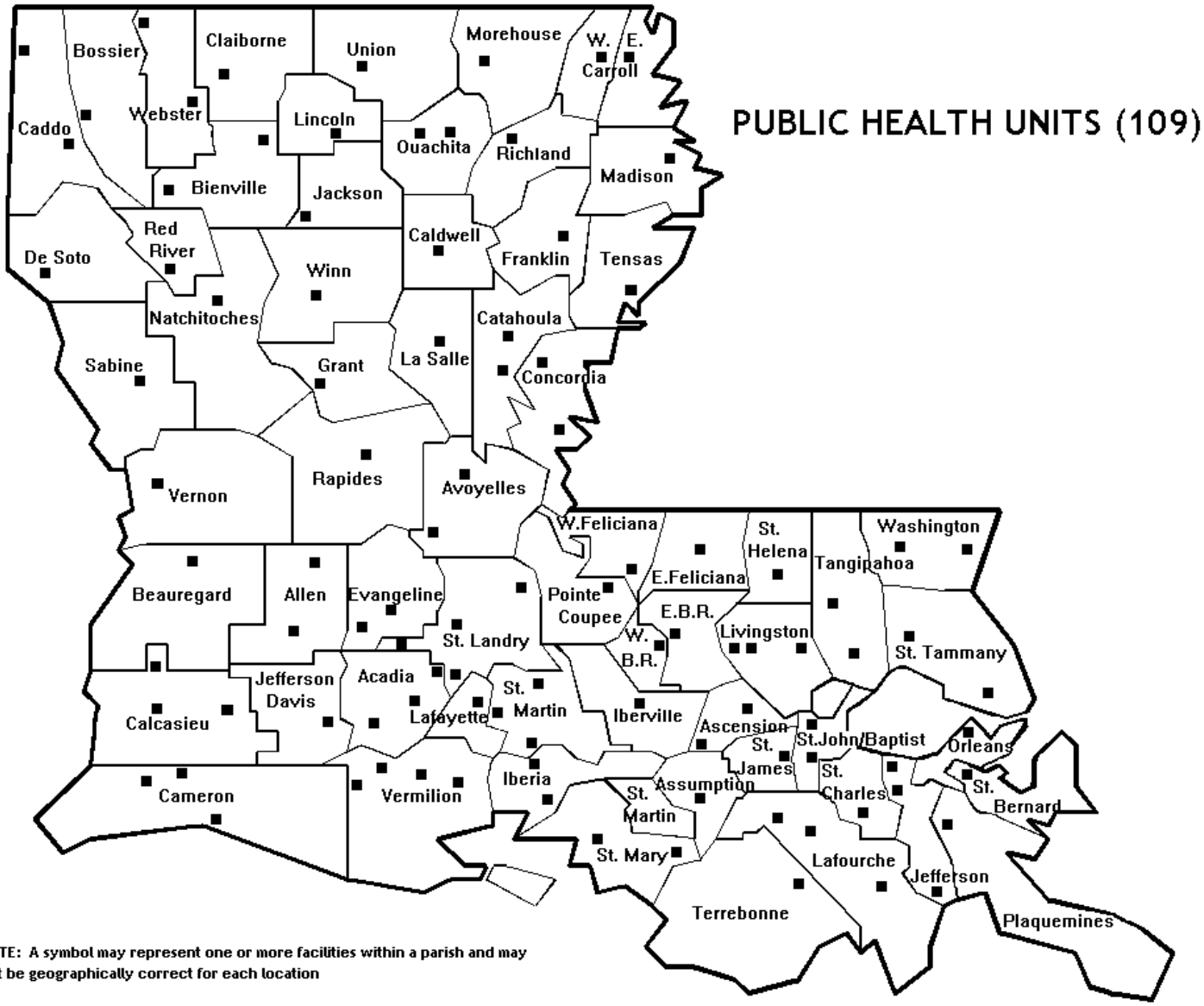
In its Rural Health Care Initiative, the State has appropriated money to support small rural hospitals suffering financial distress. This support has taken the form of grants provided to 34 small rural hospitals (less than 60 beds) for a variety of projects. For example, last year the State awarded grants to a number of these hospitals for the purchase of updated emergency room equipment and physician coverage for the emergency room. Without such support, some of these hospitals would have had to close their emergency rooms.

Source: Louisiana Office of Primary Care and Rural Health

Public Health Clinics

LOUISIANA'S DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF PUBLIC HEALTH, currently operates 109 parish health units (see map below). These units provide services in the following areas: immunization, family planning, prenatal care, newborn screening for genetic disorders, well-baby care, nutrition therapy, individual nutrition counseling, genetic evaluation and counseling, early intervention services for individuals infected with HIV, health education, and testing and monitoring of infectious diseases (e.g., tuberculosis, sexually transmitted diseases/HIV/AIDS).

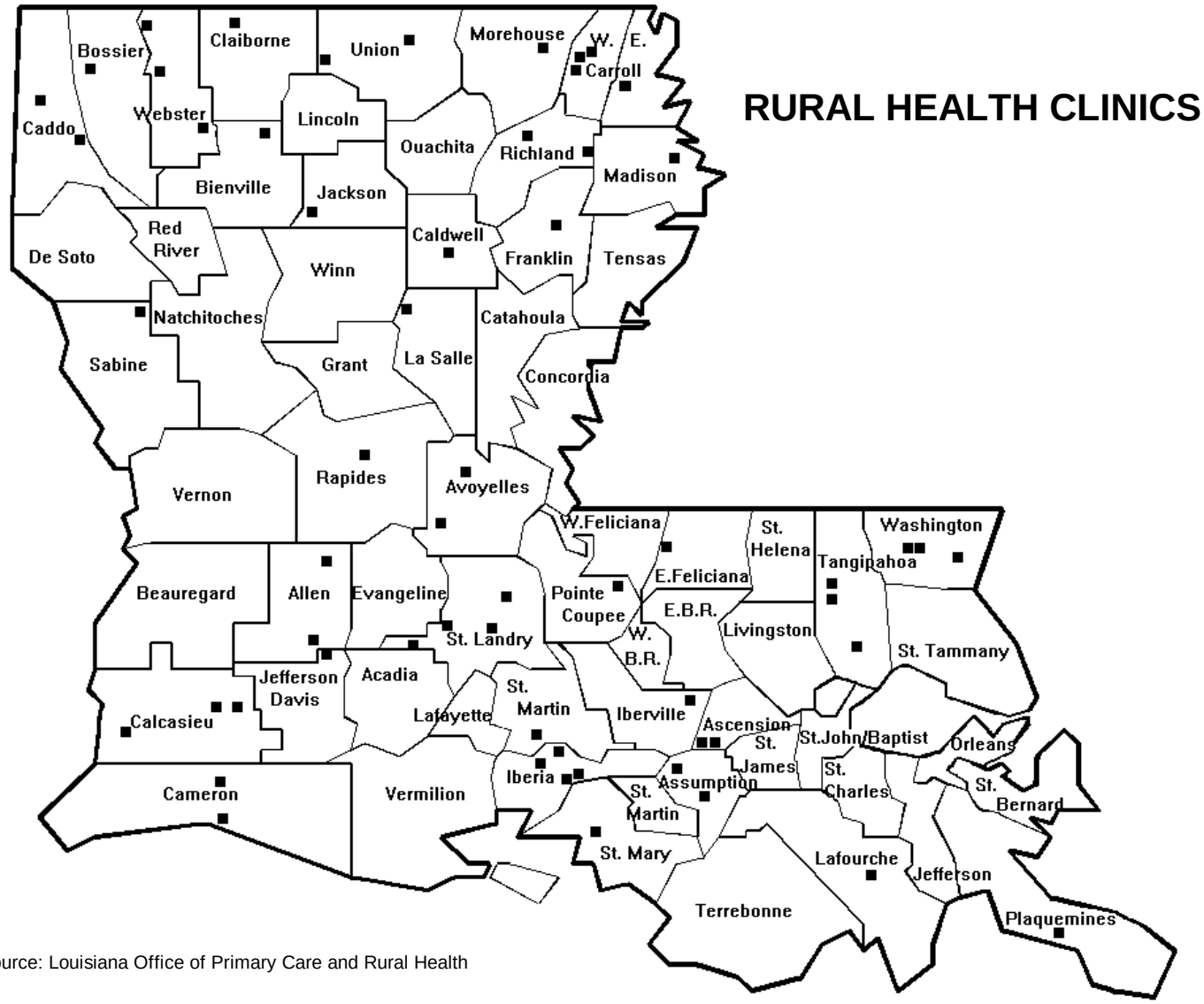
There are 9 Children's Special Health Services Clinics, 1 Family Planning Clinic, 5 Sexually Transmitted Disease Clinics, and 1 Tuberculosis Clinic. In addition, sanitarians working out of the public health units perform inspections and monitoring of the environment as it relates to health risks.



Source: Louisiana Office of Primary Care and Rural Health

Rural Health Clinics

Louisiana has 86 federally designated rural health clinics. These are clinics operating in a rural area designated as "medically underserved" or as a "Health Professional Shortage Area (HPSA)." Rural health clinics must be staffed by one or more physicians and one or more mid-level practitioners, such as physician assistants, nurse practitioners, or certified nurse midwives. Clinics must 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.



Source: Louisiana Office of Primary Care and Rural Health

Community Care

Community Care is a system of comprehensive health care based on primary care case management (PCCM). Operating in twenty parishes (see map on following page) under a Medicaid 1915 (b) waiver from the federal government, the program is designed to meet the needs of the rural population. It is a freedom of choice waiver program that must demonstrate cost effectiveness. The program links Medicaid recipients in designated parishes with a physician, clinic, Federally Qualified Health Center (FQHC), or rural health clinic that serves as the primary care physician (PCP).

The PCP may be a family practice doctor, internist, pediatrician, rural health clinic, or federally qualified health center. The PCP has total responsibility for managing all facets of the recipient's health care, including education, prevention, maintenance, and acute care. Referral for specialty services is an integral component of Community Care.

The program is operational in twenty rural parishes in Louisiana, with a total of 47,944 enrolled recipients. There are 142 enrolled providers employing a total of 238 physicians. PCPs are paid a primary care management fee of $3.00 each month for each Community Care recipient for whom they manage care, in addition to the normal fee-for-service reimbursement from Medicaid for services rendered. Without prior authorization or post-emergency authorization from the PCP, Medicaid will not reimburse for services beyond the PCP.

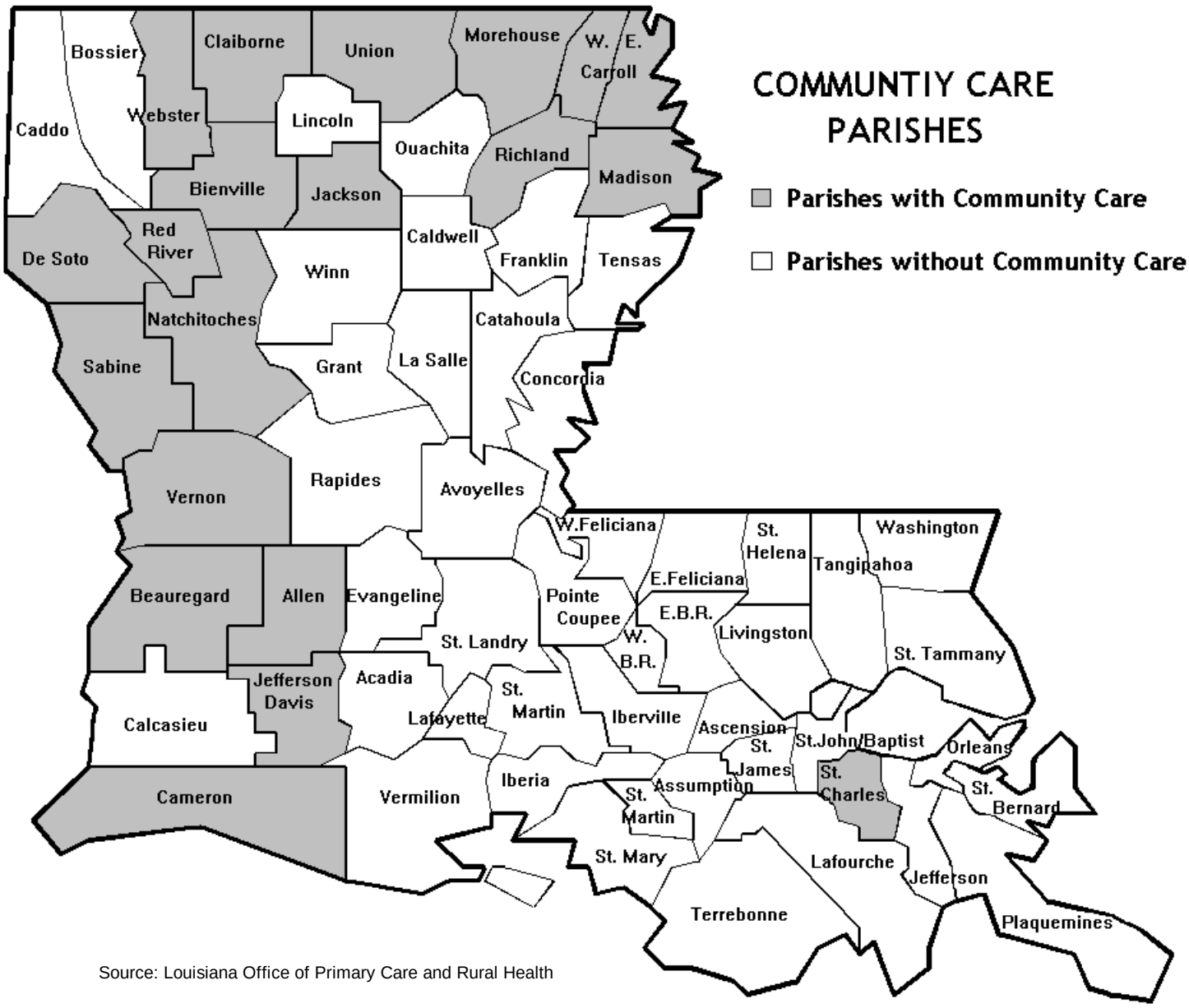
Federally Qualified Health Centers (FQHC)

Louisiana has 12 grantees for community health centers delivering service to 22 sites that are federally supported through grants from the U.S. Public Health Service.

An FQHC (also known as a Community Health Center) is a freestanding health clinic that provides comprehensive preventive and primary care services. In addition to primary care physicians and support staff, FQHC staff may include advanced nurse practitioners, physician assistants, and dentists. Centers also may have social workers or counselors, and there is a growing trend to include psychologists and other mental health and substance abuse services. Services most commonly provided at these centers include preventive health services, well-child services, acute care, perinatal care, family planning, diagnostic laboratory and radiological services, emergency medical services, transportation services, preventive and restorative dental services, and pharmaceutical services.

Several of the FQHCs have formed innovative clinic-based health care networks of both publicly and privately owned entities. The clinic itself offers comprehensive primary care services through private physicians and other providers on a contractual basis. The FQHC shares staff with the OFFICE OF PUBLIC HEALTH'S parish health units and receives referrals from them. The staff at the clinics have formal admitting privileges with private hospitals in the network and informal admitting privileges at some of the Charity Hospitals in their respective areas. The FQHCs also refer patients to the hospital for sub-specialty clinic or inpatient services.

Major health professional education institutions have formal relationships with some of the FQHCs. The relationship involves staffing residents and interns at the clinic for training purposes. Clinic training also is provided to students of a local nursing school and LPN school. Some training also is provided to high school students to encourage them to enter health care professions.

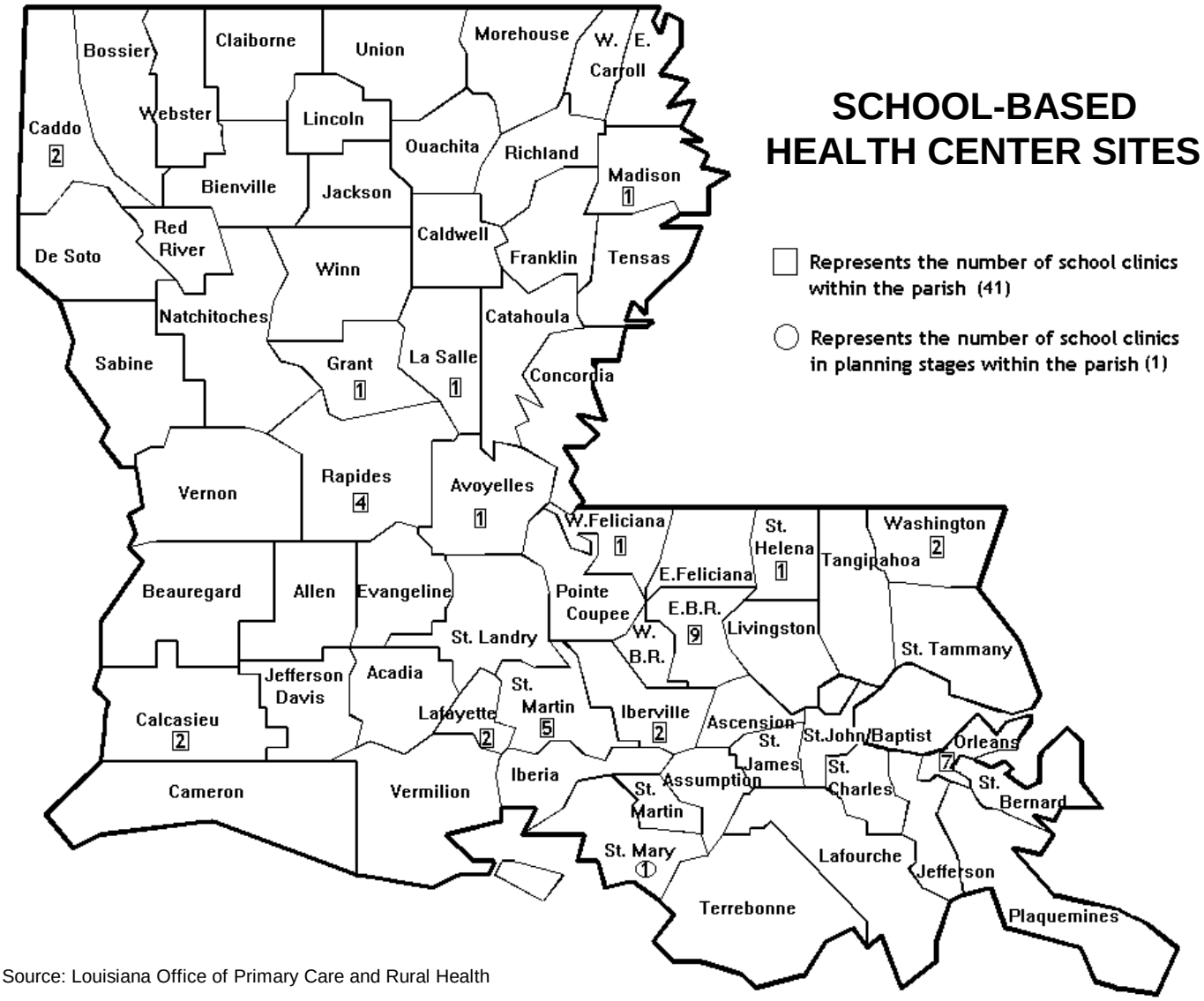


Source: Louisiana Office of Primary Care and Rural Health

School-Based Health Centers

In response to the Adolescent School Health Initiative authorized by the Louisiana State Legislature in 1991, the DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF PUBLIC HEALTH has funded and provides technical assistance to localities for the establishment and operation of full-service health centers in middle and secondary schools (see map below). Currently there are 41 full time sites and 1 planning site. These programs are operated at the local level by a health or education sponsoring agency under contract with the OFFICE OF PUBLIC HEALTH. The State will continue to pay these centers a portion of their cost.

The centers primarily serve low-income adolescents in rural and medically underserved urban areas. The centers offer primary and preventive physical and mental health care, including health education and counseling services. Each center is staffed at a minimum by a part-time physician, a full-time nurse practitioner or registered nurse with adolescent experience, and a master's level mental health counselor. These centers have been immensely popular with the high-risk adolescent population.



Source: Louisiana Office of Primary Care and Rural Health

Developmental Centers

Services and supports for individuals with mental retardation and developmental disabilities are provided by private provider agencies through contractual agreements, as well as through Louisiana's 9 Developmental Centers, which provide 24-hour care and active treatment (see map below). The broad range of services provided includes case management, diagnosis and evaluation, early intervention/infant habilitation, respite, family support, vocational and habilitative services, and residential services (community homes, supervised apartments, and supportive living).

Source: Louisiana Office of Primary Care and Rural Health

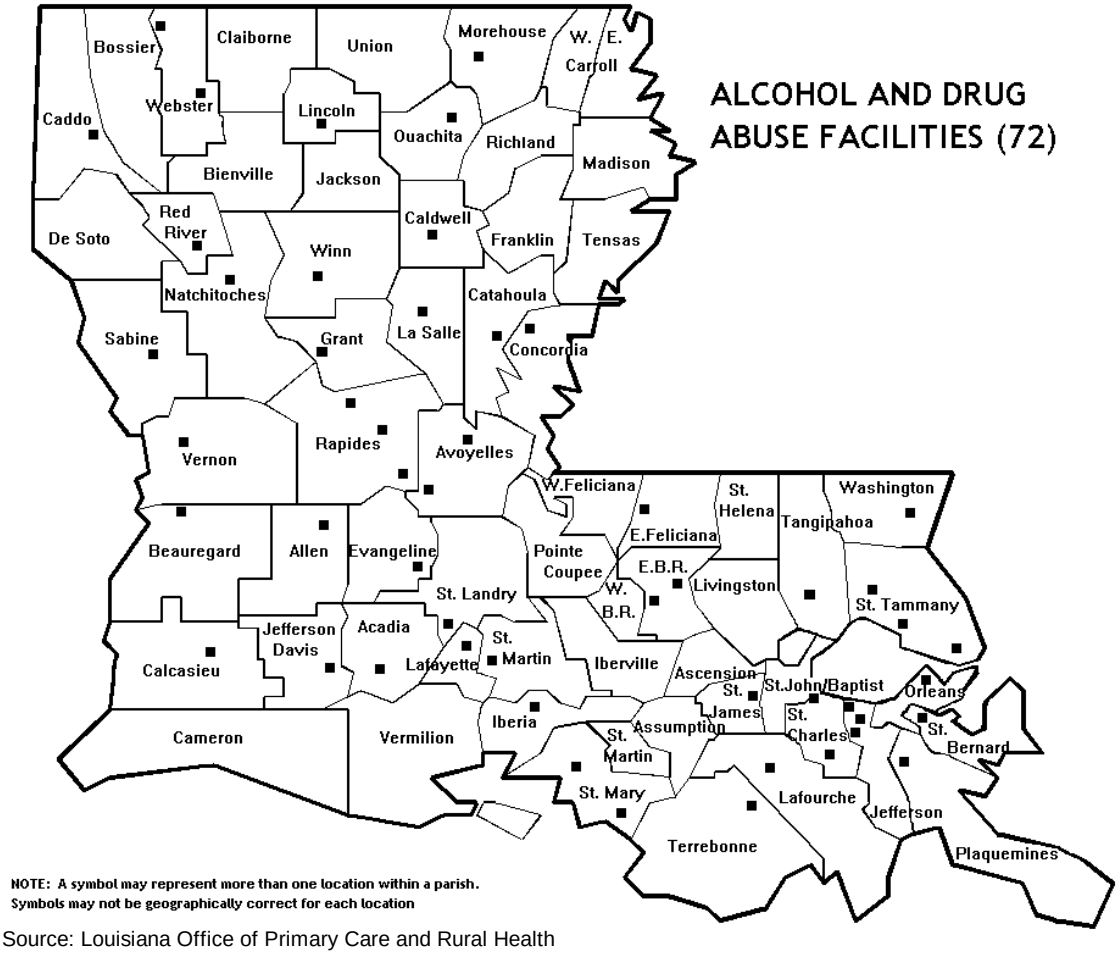
Mental Health Clinics

LOUISIANA'S DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE OF MENTAL HEALTH, 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 currently are 43 community mental health centers, 33 outreach sites, 7 acute treatment units, 5 Intermediate/Long-term Care Hospitals, and 1 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 Office of Primary Care and Rural Health

Substance Abuse Prevention Clinics

LOUISIANA'S DEPARTMENT OF HEALTH AND HOSPITALS, OFFICE FOR ADDICTIVE DISORDERS, through contracts or through an array of community-based and residential programs, provides services and continuity of care for the prevention, diagnosis, treatment, rehabilitation, and follow-up care of alcohol and other drug abuse diseases (see map below). This system is composed of 9 treatment delivery regions, 27 outpatient clinics, 23 satellite clinics, 4 detoxification centers, 8 residential facilities, and 1 pre-release program for adult incarcerated substance abusers.



Source: Louisiana Office of Primary Care and Rural Health

Existing Health Maintenance Organizations

Louisiana currently has 14 licensed health maintenance organizations 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. According to *Health Care State Rankings 1999*[6], as of 1998, approximately 723,280 (16%) Louisianans were enrolled in health maintenance organizations.

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.

[6]Morgan, K.O. and Morgan, S. (Eds.) 1999. Health Care State Rankings 1999: Health Care in the 50 United States. (6th Ed.) Lawrence, KS: Morgan Quitno Press.

G. Inventory of Providers

Number of Primary Care Physicians by Specialty and Parish Louisiana, 2000							
Parish	Family Practice	General Practice	Infectious Disease	Internal Medicine	Obstetrics & Gynecology	Pediatrics	Total
Acadia	12	5	0	6	3	3	29
Allen	5	1	0	4	0	3	13
Ascension	11	4	0	6	0	4	25
Assumption	5	2	0	0	0	0	7
Avoyelles	7	6	0	3	0	0	16
Beauregard	8	0	0	3	3	1	15
Bienville	1	0	0	1	0	0	2
Bossier	19	3	0	30	9	10	71
Caddo	72	8	2	225	57	71	435
Calcasieu	45	8	0	65	28	24	170
Caldwell	3	1	0	3	0	0	7
Cameron	1	0	0	1	0	0	2
Catahoula	2	1	0	2	0	0	5
Claiborne	8	1	0	0	0	1	10
Concordia	4	2	0	5	2	0	13
DeSoto	1	3	0	1	1	1	7
East Baton Rouge	87	48	1	207	80	87	510
East Carroll	2	1	0	2	0	0	5
East Feliciana	5	7	0	1	0	0	13
Evangeline	4	8	0	7	3	3	25
Franklin	3	0	0	1	0	1	5
Grant	2	1	0	0	1	0	4
Iberia	18	10	0	11	8	9	56
Iberville	8	3	0	7	1	3	22
Jackson	0	0	0	1	0	1	2
Jefferson	49	28	5	345	99	126	652
Jefferson Davis	4	5	0	5	2	2	18
Lafayette	0	19	0	88	39	38	184
Lafourche	23	8	0	22	12	5	70
LaSalle	2	2	0	3	0	0	7
Lincoln	7	3	0	8	3	4	25
Livingston	7	1	0	0	1	1	10
Madison	1	0	0	1	0	1	3
Morehouse	6	5	0	5	2	3	21
Natchitoches	5	3	0	7	1	5	21
Orleans	60	25	3	416	107	193	804
Ouachita	40	18	1	70	16	26	171
Plaquemines	2	2	0	2	0	0	6
Pointe Coupee	7	3	0	3	1	0	14
Rapides	31	3	0	66	17	29	146
Red River	2	1	0	1	0	1	5
Richland	6	2	0	4	1	0	13
Sabine	4	2	0	4	0	1	11
St. Bernard	1	3	0	15	2	5	26
St. Charles	4	1	0	4	1	5	15
St. Helena	2	2	0	1	0	0	5
St. James	6	2	0	2	1	1	12
St. John	6	1	0	5	4	3	19

Number of Primary Care Physicians by Specialty and Parish Louisiana, 2000							
Parish	Family Practice	General Practice	Infectious Disease	Internal Medicine	Obstetrics & Gynecology	Pediatrics	Total
St. Landry	19	8	0	18	10	10	65
St. Martin	6	2	0	1	0	0	9
St. Mary	12	3	0	6	6	4	31
St. Tammany	32	10	1	108	33	55	239
Tangipahoa	19	5	0	20	9	10	63
Tensas	2	0	0	0	0	0	2
Terrebonne	8	7	0	32	11	16	74
Union	1	3	0	6	0	0	10
Vermilion	2	2	0	12	1	1	18
Vernon	6	5	0	6	3	5	25
Washington	12	7	0	11	3	2	35
Webster	2	0	0	1	0	0	3
West Baton Rouge	1	1	0	4	0	1	7
West Carroll	11	4	0	4	3	2	24
West Feliciana	3	1	0	0	0	0	4
Winn	2	3	0	2	0	1	8
Total	746	323	13	1900	584	778	4344

Source: Louisiana Board of Medical Examiners, January 2000

Selected Mental Health Professionals by Parish Louisiana, 2000		
Parish	Psychiatrists	Social Workers*
Acadia	2	7
Allen	0	5
Ascension	0	18
Assumption	0	1
Avoyelles	0	10
Beauregard	0	6
Bienville	0	2
Bossier	2	30
Caddo	41	151
Calcasieu	14	86
Caldwell	0	2
Cameron	0	0
Catahoula	0	0
Claiborne	0	2
Concordia	0	4
DeSoto	1	4
East Baton Rouge	51	541
East Carroll	0	1
East Feliciana	6	12
Evangeline	0	2
Franklin	0	0
Grant	0	4
Iberia	1	15
Iberville	1	10
Jackson	0	3
Jefferson	72	357

*Licensed and residing in Louisiana. Social workers are not required to have a license to work in Louisiana through contract or in private practice.

Selected Mental Health Professionals by Parish Louisiana, 2000		
Parish	***Psychiatrists***	***Social Workers****
Jefferson Davis	1	4
Lafayette	20	165
Lafourche	2	23
LaSalle	0	1
Lincoln	1	14
Livingston	0	24
Madison	0	2
Morehouse	0	2
Natchitoches	0	14
Orleans	180	719
Ouachita	18	94
Plaquemines	1	3
Pointe Coupee	0	2
Rapides	23	115
Red River	0	2
Richland	0	4
Sabine	0	1
St. Bernard	0	13
St. Charles	2	15
St. Helena	0	1
St. James	1	4
St. John	0	11
St. Landry	2	22
St. Martin	0	3
St. Mary	2	8
St. Tammany	31	186
Tangipahoa	3	58
Tensas	0	0
Terrebonne	7	32
Union	0	9
Vermilion	1	14
Vernon	2	6
Washington	1	13
Webster	0	8
West Baton Rouge	0	2
West Carroll	0	1
West Feliciana	1	9
Winn	0	2
Total	490	2879

*Licensed and residing in Louisiana. Social workers are not required to have a license to work in Louisiana through contract or in private practice.

Sources: Louisiana Board of Medical Examiners, January 2000
Louisiana Board of Certified Social Work Examiners, 1998-1999

H. HEALTH PROFESSIONAL SHORTAGE AREAS (HPSA)

Health Professional Shortage Area (HPSA) designations identify areas, populations, or facilities where a lack of providers poses serious barriers to adequate health care. The equitable geographic distribution of health care resources has long been recognized as a problem in the United States, and particularly in the state of Louisiana. Adequate access to health services for all citizens 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 health care services, regardless of ability to pay. The redistribution of the supply of health professionals, particularly primary care providers, through the designation of health professional shortage areas (HPSAs) is one method used to attain this goal.

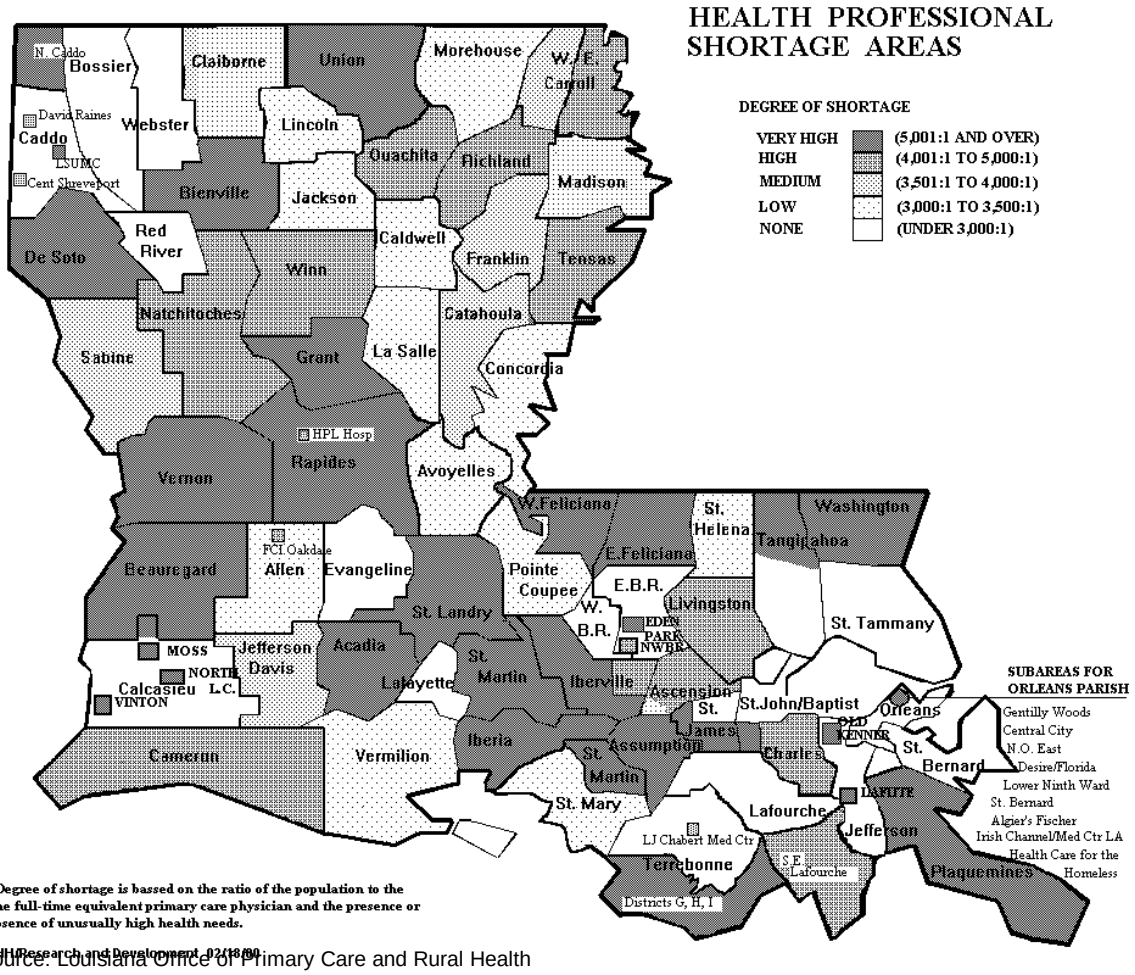
HPSA designations are used to create incentives to improve the distribution and the number of primary care providers in the most critical shortage areas. The HPSA designation methodology was developed to determine exactly where shortages exist, in order to define those areas eligible for participation in the incentive programs. There are approximately 40 federal programs utilizing HPSA designations, some of which are listed below.

Designation requests and reviews are the responsibility of the DHH, OPH, HEALTH RESOURCE MANAGEMENT staff. After review and analysis, the designation studies and recommendations are forwarded to the DIVISION OF SHORTAGE DESIGNATION in the FEDERAL BUREAU OF PRIMARY HEALTH CARE for determination. Designations of Medically Underserved Areas (MUA) or Medically Underserved Populations (MUP) also provide opportunities for improved distribution of health care resources and improved access. The designation process is similar to the HPSA process described previously.

The following are examples of federal programs utilizing HPSA designations:

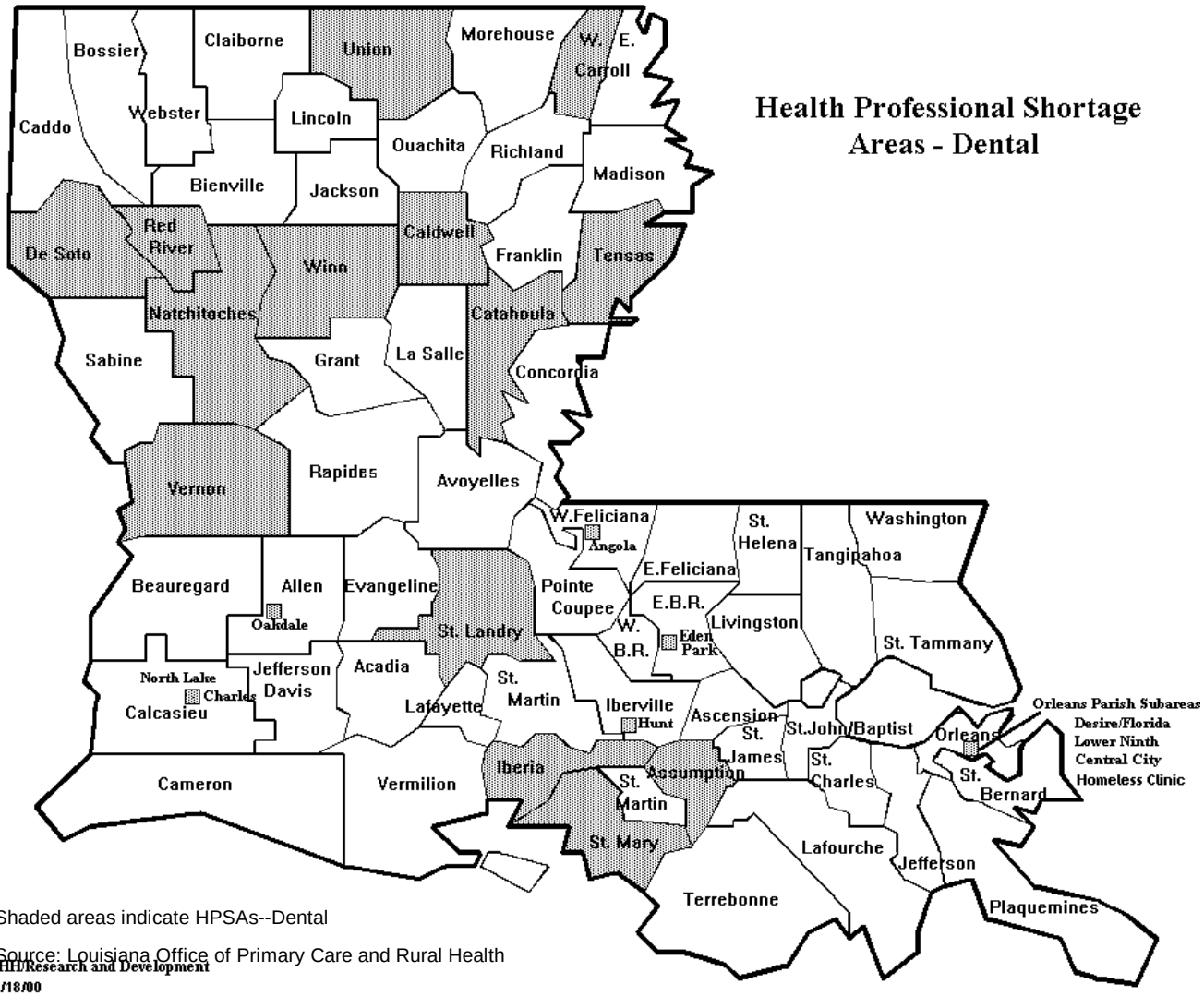
- Department of Family Medicine
- Grants to Predoctoral Training in Family Medicine
- Grants for Residency Training in General Internal Medicine/General Pediatrics
- Grants for Physician Assistant Training Program
- Grants for Preventive Medicine Training
- Nurse Practitioner and Nurse-Midwifery Programs
- Nurse Anesthetist Traineeships
- J-1 Visa Waiver Program
- Community and Migrant Health Program
- Grants for Graduate Training in Family Medicine
- Grants for Predoctoral Training in General Internal Medicine/General Pediatrics
- Rural Health Programs
- State Health Programs
- Allied Health Traineeships
- Allied Health Project Grants
- Professional Nurse Traineeships

- Grants for Nurse Anesthetist Faculty Fellowships
- 10% Medicare Bonus Program National Health Service Corps
- Grants for Faculty Development in Family Medicine
- Grants for Faculty Development in General Medicine/General Pediatrics
- Grants for Physician Assistant Faculty Development
- Podiatric Primary Care Residency Training
- Advanced Nurse Education
- Nurse Anesthetist Education Program
- Residency Training and Advanced Education in the General Practice of Denistry



Source: Louisiana Office of Primary Care and Rural Health

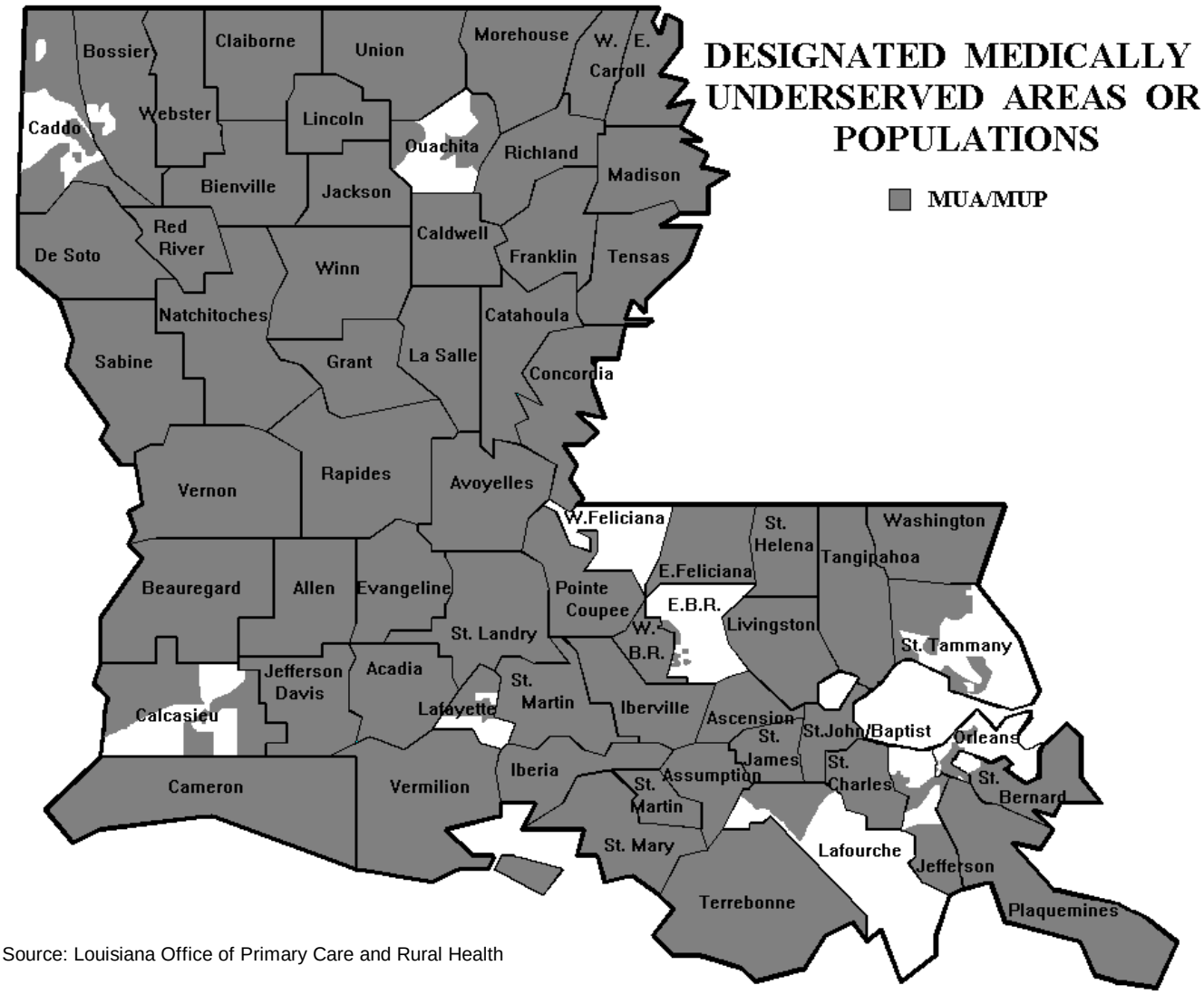
Health Professional Shortage Areas - Mental
Bossier
Claiborne
Union
Morehouse
W.
E.
Carroll
Caddo
Webster
Lincoln
Ouachita
Richland
Madison
Bienville
Jackson
Red River
Caldwell
De Soto
Winn
Franklin
Tensas
Natchitoches
Catahoula
Sabine
Grant
La Salle
Concordia
Vernon
Rapides
Avoyelles
W.Feliciana
East LA St Hosp
St. Helena
Washington
Tangipahoa
E.Feliciana
Beauregard
Allen
Evangeline
Pointe Coupee
E.B.R.
Livingston
St. Landry
W. B.R.
St. Tammany
Jefferson Davis
Acadia
St. Martin
Desire/Florida Lower Ninth
Calcasieu
Lafayette
Iberville
Ascension
St.John/Baptist
Orleans
St. James
St. Charles
Iberia
Assumption
St. Bernard
Cameron
Vermilion
St. Martin
St. Mary
Lafourche
Jefferson
Terrebonne
Plaquemines
Shaded areas indicate HPSAs--Mental
Source: Bureau of Primary Care and Rural Health
01/13/99



Shaded areas indicate HPSAs--Dental

Source: Louisiana Office of Primary Care and Rural Health

DHH/Research and Development
02/18/00



Source: Louisiana Office of Primary Care and Rural Health

VI. RECOMMENDATIONS FOR IMPROVING HEALTH STATUS

A. INFANT & CHILD HEALTH

Infant Mortality

- Implement the recommendations to reduce low birth weight rates (see opposite page), since this is a leading cause of infant mortality
- Establish a systematic review of all fetal and infant deaths 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
- Monitor status of pregnancy risk factors with the LOUISIANA PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (LAPRAMS) and employ this information in policy development and implementation of appropriate, effective interventions

Child Health

- Provide access to preventive health services, including health screening, immunizations, and parental education, to low income infants and children or others who lack access to such services due to geographic or financial barriers or lack of providers
- Expand health system development efforts to all areas of the state to insure that all children have access to comprehensive health (primary and specialty), mental health, social and education services

Child Abuse and Neglect

- Increase public awareness of child abuse prevention and positive parenting and promote parenting education in communities through the public health units
- Expand home visiting services to families at high risk for child abuse and neglect, utilizing the Healthy Families America Program and the Nurse Home Visiting Model

Health & Safety in Day Care Centers

- Provide expertise and leadership in the development and enhancement of child care standards
- Initiate the development of a coalition of state and local health professionals, government and community agencies, child care providers, and concerned citizens to address health and safety child care issues
- Serve as an advocate for children and child care providers
- Promote appropriate health and safety measures in child care settings
- Utilize a multi-disciplinary community approach to improve quality of these facilities
- Encourage use of child care health consultants
- Encourage health care providers to become child care health consultants
- Initiate pilot projects to incorporate on-site health services in child care settings
- Encourage/assist child care centers to integrate children with special health care needs into these facilities

Low Birthweight Rates

- Ensure access to prenatal care for all pregnant women, especially those with low incomes, teenagers, and those living in medically underserved areas
- Improve access to prenatal care by promoting and removing barriers to non-traditional obstetrical practitioners in Louisiana (i.e. nurse midwives, nurse practitioners, etc.)
- Reduce substance abuse (including use of drugs, alcohol, and tobacco) among pregnant women through increased funding for public education
- Increase counseling and treatment services for substance-abusing pregnant women
- Increase personnel needed to utilize the federally-funded nutrition programs fully, including the WOMEN, INFANTS, AND CHILDREN program, for pregnant women
- Improve surveillance systems to gather information on risk factors on low birth weight 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 health providers
- Initiate educational programs for health providers and pregnant women on identifying the signs of premature labor
- Analyze data collected in the LOUISIANA PREGNANCY RISK ASSESSMENT MONITORING SYSTEM (LAPRAMS) database to assess preventable risk factors associated with low birth weight and to help identify effective and ineffective elements of existing efforts

Teenage Birth Rates

Facilitate the community's capacity to address teenage pregnancy through provision of information and resources. Various programs successful in reducing teenage pregnancy have accomplished some or all of the following:

- Provide educational enrichment and economic opportunities and strengthen the family
- Involve both the public and the private sectors in developing community-centered, sustainable, collaborative, and adolescent-focused programs
- Encourage age-appropriate sex and family life education at home by parents
- Provide age-appropriate sex and family life education in schools, focusing on abstinence and the delay of sexual activity
- Ensure access to information on safe sex practices and contraceptives
- Provide culturally appropriate, intensive, long-term programs that recognize family and community values
- Utilize a variety of approaches, including adult mentors, peers, and community members with similar backgrounds and experiences
- Utilize multi-disciplinary approaches: involve teachers, health professionals, social workers, and community leaders
- Develop multi-message programs addressing school drop-out, real life options, job exploration, training, placement, and individual and family counseling when necessary

- Provide comprehensive adolescent health clinics that are community-based, school-based, and/or school linked
- Ensure youth involvement in program design, implementation, and evaluation

B. INFECTIOUS DISEASES

Emerging Infections

- Encourage appropriate and judicious use of antibiotics
- Conduct surveillance activities to identify disease trends, drug resistance patterns, and risk factors for acquiring infections
- Develop appropriate statewide guidelines for the prevention, surveillance, diagnosis, treatment, and transfer of patients between health care facilities, for infection control, and for outbreak management
- Provide education and information to the public regarding newly emerging, re-emerging, and drug resistant infections, including the importance of limiting inappropriate antibiotic use

Hepatitis A

- Continue to inspect food establishments for proper sanitary procedures, including food handling, storage, preparation, and personal hygiene
- Continue to search for active cases of hepatitis A in order to identify outbreaks and provide preventive treatment
- Encourage the use of hepatitis A vaccine in specific high-risk groups, such as overseas travelers
- Provide health consultation and education to child care providers in out-of-home child care settings regarding hepatitis A, its mode of transmission, and its prevention
- Provide education and information to the public regarding hepatitis A

Hepatitis B

- Vaccinate all newborns and early adolescents to prevent hepatitis B infection
- Vaccinate high-risk group, including household contacts of hepatitis B carriers, to prevent hepatitis B infection
- Continue to search for active cases of hepatitis B to identify contacts at risk
- Provide education and information to the public concerning hepatitis B

Influenza

- Increase immunization with influenza vaccine among the high-risk groups, especially individuals over age 65 years, by increased education of health care providers and the public
- 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
- Work with community groups who already reach poorly-immunized groups to increase awareness of the benefits of influenza prevention

Tuberculosis

- Continue the practice of directly observed therapy (DOT) to ensure completion of therapy
- Expand surveillance for TB through liaisons with hospital infection control practitioners and private medical groups in high-incidence areas
- Enhance the capacity to provide field-based outreach and ensure thorough case and contact follow-up
- Ensure that the in-patient treatment facility at Villa Feliciana remains a treatment option for drug-resistant, recalcitrant, or other TB patients who require close supervision of therapy
- Assure prompt medical assessment of those foreign-born persons entering the state with evidence of TB

Sexually Transmitted Diseases and HIV/AIDS

- Encourage condom use among persons with more than one sexual partner
- Provide STD and HIV testing and counseling, group educational sessions, and outreach to persons at high risk for STDs and HIV/AIDS
- Increase access to clinical services for STDs to ensure rapid treatment and thereby reduce spread of STDs and vulnerability to HIV
- Increase distribution of and accessibility to condoms and needles
- Enhance partner notification activities for syphilis and HIV/AIDS
- Continue support for public awareness and professional education regarding HIV/AIDS in pregnant women and the effective use of AZT in preventing perinatal transmission

C. ORAL HEALTH

- Continue to strengthen the fluoridation program infrastructure within the OFFICE OF PUBLIC HEALTH
- Continue to promote expansion of community water systems that adjust water fluoride level to optimal range for reduction of dental caries
- Ensure continuous proper monitoring of all public water systems that fluoridate, and provide technical assistance for all public water systems operators
- Assess utilization of dental pit and fissure sealants among third grade school children attending Louisiana public schools
- Provide education to the public and dental profession regarding current pit and fissure sealant utilization rates among populations at high risk for dental caries
- Increase access to pit and fissure dental sealants among school children in Louisiana

D. Chronic Disease

Cancer

- Advocate cessation of tobacco use
- Encourage avoidance of second-hand smoke exposure
- Promote increased consumption of fruits, vegetables, and grains and reduction of fat in diet
- Promote increased regular physical activity and maintenance of optimal weight
- Advocate routine Pap smears for women 18 and older
- Advocate mammograms at least every two years for women over 50, and for women 40-49 with a mother, sister, or child who had breast cancer
- Encourage yearly colon cancer screening tests for women and men over 50

Heart Disease/Stroke

- Advocate cessation of tobacco use
- Encourage avoidance of second-hand smoke exposure
- Promote increases in fruit, vegetable, and grain intake and reductions in fat in diet
- Promote increased regular physical activity
- Encourage maintenance of optimal weight levels
- Advocate blood pressure checks every two years
- Advocate blood cholesterol level tests every five years (if over 35)
- Support discussion of estrogen replacement therapy with a physician for post-menopausal women

Diabetes

- Advocate maintenance of optimal weight levels and physical activity
- Increase intake of fruit, vegetables, and grains while reducing fat in diet
- Promote working continuously with a physician to control blood sugar levels and monitor hemoglobin A1c through regular testing
- Encourage adoption of healthy lifestyles
- Advocate maintenance of normal blood pressure and cholesterol levels
- Encourage annual retinal exams
- Promote daily inspection of feet

E. Alcohol, Drug, and Other Addictions

- Develop statewide, research-based prevention programs
- Maintain the sale of tobacco products to minors, through the Synar Program, at a 10% or lower non-compliance rate

- Enhance medical detoxification services
- Improve delivery system for adolescent services
- Improve Drug Court Program by integrating CRIMINAL JUSTICE and OAD resources into the delivery system
- Provide a comprehensive array of prevention and treatment services to meet the needs of problem and compulsive gamblers
- Develop recovery homes and therapeutic community models as part of the community-based treatment continuum

F. UNINTENTIONAL INJURIES

- Provide funding to expand the surveillance of non-fatal injuries through mechanisms such as Emergency Department surveillance or Emergency Medical Services data collection
- Make smoke detectors readily available to high risk populations such as the elderly and low income households
- Support the amendment to the primary seat belt enforcement law during the 1999 Louisiana legislative session
- Enact mandatory bicycle helmet legislation
- Provide support for injury prevention programs commensurate with the cost of injury – hospital care, permanent disability, and potential years of life lost

G. VIOLENT DEATHS

Violence

- Mandate systematic reporting of weapons-related injury in the state
- Finance data collection and analysis of weapons-related injury
- Educate the public regarding the need for safe firearm storage
- Educate youth regarding non-violent ways to settle disputes

Child Death

- Assist local communities throughout the state to establish child death review panels
- Provide training, consultation, and support to local panels
- Conduct training conferences for investigating agencies
- Reimburse coroners for autopsies of children
- Enhance prevention by a broader dissemination of the Child Death Review Panel's findings and the development of activities to prevent child abuse and to promote supervision of children around roadways and water, use of car safety seats and smoke detectors, and provision of safe sleeping environments for children, including putting infants to sleep on their backs

H. MENTAL HEALTH

- 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 education efforts on the depressed consumer, impulsive adolescent, student populations, elderly, homeless, and the chronically mentally or physically ill consumer
- 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 can be taken.

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For more information, please contact
the Louisiana Department of Health & Hospitals
or visit our site on the World Wide Web

Home page address:

www.dhh.state.la.us

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Office for Addictive Disorders	(225)342-6717	www.dhh.state.la.us/OADA/index.htm
Office for Citizens with Developmental Disabilities	(504)342-0095	www.dhh.state.la.us/OCDD/index.htm
Office for Community Services	(225)342-2297	www.dss.state.la.us/offocs/index.htm
Office of Mental Health	(504)342-9238	www.dhh.state.la.us/OMH/index.htm
Office of Public Health	(504)342-8093	www.dhh.state.la.us/OPH/index.htm
Children's Special Health Services	(504)568-5330	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Services*
Chronic Disease Control	(504)568-7210	www.dhh.state.la.us/OPH/chrondis/default.htm
Environmental Epidemiology & Toxicology	(504)568-8537	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Protection & Promotion*
Family Planning	(504)568-5330	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Services*
Health Resources Management	(504)342-4764	www.dhh.state.la.us/OPH/progsvc.htm then select *Community Health*
HIV/AIDS	(504)568-7524	www.dhh.state.la.us/OPH/hivstd/default.htm
Immunizations	(504)483-1900	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Protection & Promotion*
Infectious Epidemiology	(504)568-5005	www.dhh.state.la.us/OPH/infectepi/default.htm
Injury Research & Prevention	(504)568-2509	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Protection & Promotion*
Maternal & Child Health	(504)568-5073	www.dhh.state.la.us/OPH/mch/default.htm
Oral Health	(504)568-7706	www.tulane.edu/~oralhlth/oral.htm
Sexually Transmitted Diseases	(504)568-5275	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Protection & Promotion*
State Center for Health Statistics	(504)568-5458	www.dhh.state.la.us/OPH/statctr/default.htm
Tuberculosis	(504)568-5015	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Protection & Promotion*
Vital Records Registry	(504)568-8353	www.dhh.state.la.us/OPH/vital/index.htm
Women's Preventive Health Program	(504)599-1091	-----
Women, Infants, & Children (WIC) Nutrition Program	(504)568-5065	www.dhh.state.la.us/OPH/progsvc.htm then select *Health Services*

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