

## A PUBLICATION OF THE

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August 2009

## **2008 Vital Statistics**

Missouri resident deaths reached a record high of 56,278 in 2008, more than 4 percent greater than the number in 2007 (See Table 1). As a result, the state life expectancy decreased from 77.4 years in 2007 to 77.1 years in 2008, the first decrease since 2002. Life expectancies for both males and females decreased by 0.3 years in 2008, putting the female life expectancy at 79.7 years, 5.4 years more than the 74.3 years for males.

A flu epidemic in early 2008 is probably the primary reason for the overall mortality increase. Pneumonia and influenza deaths increased by 9 percent in 2008, and flu frequently leads to deaths from other chronic conditions, such as heart disease, Alzheimer's disease and chronic lung disease. As Table 2 shows, eight of the ten leading causes of death increased in 2008, with only unintentional injuries (#5) and diabetes (#8) showing a decrease.

Heart disease and cancer remained the state's two leading killers in 2008, but chronic lung disease surpassed stroke as Missouri's third leading cause of death. This was the first time since 1943 that stroke was not the state's third leading cause of death. Stroke, the fourth leading cause of death in 2008, actually increased slightly from 3,226 in 2007 to 3,252 deaths in 2008. But chronic lung disease

Vital Statistics for Missouri: 1998, 2007 and 2008							
	1	Numbers		Rates per 1,000 Population			
	1998	2007	2008	1998	2007	2008	
Births	75,242	81,883	80,944	13.6	13.9	13.7	
Deaths	54,849	53,937	56,278	9.9	9.2	9.5	
Natural increase	20,393	27,946	24,666	3.7	4.8	4.2	
Marriages	43,685	40,405	40,146	7.9	6.9	6.8	
Divorces	25,305	22,223	21,970 **	4.6	3.8	3.7*	
Infant deaths	573	613	583	7.6*	7.5*	7.2*	
Abortions	12,751	11,470	11,508	169.5*	140.1*	142.2*	
Population (1000s)	5,522	5,878	5,912				

## Table 2

	Numbers			Rates per 100,000 Population			
	1998	2007	2008	1998	2007	2008	
Leading Causes of Death							
Heart	17,841	14,237	14,550	323.1	242.2	246.1	
Cancer	12,377	12,354	12,497	224.1	210.2	211.4	
Lung cancer	3,876	3,857	3,933	70.2	65.6	66.5	
Chronic lung disease	2,735	3,070	3,743	49.5	52.2	63.3	
Stroke	3,952	3,226	3,252	71.6	54.9	55.0	
Unintentional injury	2,381	2,930	2,876	43.1	49.8	48.7	
Motor vehicle	1,159	1,015	969	21.0	17.3	16.4	
Falls	488	700	699	8.8	11.9	11.8	
Poisonings	170	651	687	3.1	11.1	11.6	
Other	564	564	521	10.2	9.6	8.8	
Alzheimer's disease	529	1,632	2,014	9.6	27.8	34.1	
Pneumonia & influenza	2,438	1,312	1,428	44.2	22.3	24.2	
Diabetes	1,390	1,435	1,332	25.2	24.4	22.5	
Nephritis & nephrosis	706	1,192	1,275	12.8	20.3	21.6	
Septicemia	511	718	826	9.3	12.2	14.0	
Other causes of death							
Suicide	691	810	775	12.5	13.8	13.1	
Homicide	441	394	486	8.0	6.7	8.2	
AIDS	145	129	116	2.6	2.2	2.0	
Maternal Deaths	10	14	13	13.3 **	17.1 **	16.1*	

## Leading Causes of Death with Rates: Missouri Residents 1998, 2007 and 2008

deaths jumped by 22 percent, from 3,070 to 3,743. Over the last 10 years, chronic lung disease deaths have increased by 37 percent in Missouri while stroke deaths have decreased by 18 percent. Other causes in the top 10 in 2008, all with substantial increases in deaths, were Alzheimer's disease, pneumonia and influenza, kidney disease (nephritis & nephrosis) and blood poisoning (septicemia).

The 2008 increase in chronic lung disease deaths is part of a national trend, according to preliminary data from the National Center for Health Statistics. The increase in Missouri, however, is larger than that in other states. Chronic lung disease includes a wide variety of slowly progressive diseases characterized by airflow obstruction that interferes with normal breathing. Emphysema, asthma, bronchitis and chronic obstructive pulmonary disease are among the diseases in this category. According to the Centers for Disease Control and Prevention, smoking is estimated to be responsible for 75 percent of chronic lung disease deaths. A change in classification in 2008 is estimated to be responsible for about 10 percent of the Missouri increase, but the remaining increase is probably the result of actual increases in the number of deaths caused by lung disease. The flu epidemic may have exacerbated the chronic lung disease already present in many elderly patients and led to their deaths.

Live births decreased by a little more than 1 percent in 2008, as 80,944 Missouri babies were born compared with 81,883 in 2007. This represented the first decrease in births since 2002. The downturn in the economy may have contributed to this decrease. Hispanic births also decreased in 2008 (by 3 percent). It was the first decrease in Hispanic births since 1991. The infant death rate decreased in 2008 from 7.5 in 2007 to 7.2 per 1,000 live births (See Table 1). The rate of 7.2 ties the record low set in 2000. A reduction in very small babies (less than 1.1 pounds) is the primary reason for this 2008 decrease. The infant death rate of 7.2 in 2008 was about 9 percent higher than the national rate of 6.6 per 1,000 live births in 2007. The Missouri infant death rate for African-Americans of 15.0 per 1,000 live births was more than 2.5 times the white rate (5.9), but decreased by 8 percent in 2008 while the rate among whites stayed the same. As Table 3 shows, the low birth weight (less than 5.5 pounds) rate increased slightly from 7.9 percent in 2007 to 8.1 percent in 2008.

Teen births decreased slightly in 2008, as 9,246 babies were born to mothers under age 20 compared with 9,339 in 2007. But this was still 6 percent above the low point of 8,707 in 2005. Early teen (less than age 18) births also decreased, from 2,792 in 2007 to 2,754, but were 4 percent above the 2005 low point of 2,660.

Trends in Maternal and Child Health Statistics: Missouri Residents 1998, 2007 and 2008								
	1998	2007	2008	1998	2007	2008		
Infant Deaths	573	613	583	7.6*	7.5 *	7.2*		
White	378	389	387	6.1 *	5.9*	5.9*		
Black	190	207	188	16.7*	16.3*	15*		
Low Birth Weight	5,896	6,456	6,585	7.8	7.9	8.1		
White	4,173	4,539	4,637	6.7	6.9	7.1		
Black	1,600	1,705	1,661	14.1	13.5	13.3		
Inadequate Prenatal Care	8,041	9,242	9,150	10.9	11.9	11.9		
White	5,326	6,129	5,984	8.6	9.6	9.6		
Black	2,555	2,635	2,609	23.5	23.0	22.7		
Preterm (<37 weeks)	9,238	10,612	10,256	12.3	13.0	12.7		
Multiple Births	2,234	2,679	2,782	2.9	3.3	3.4		
Birth Spacing<18 mos.	4,476	5,837	5,742	10.5	12.8	12.8		
Out-of Wedlock Births	25,650	33,173	33,069	34.1	40.5	40.9		
Teen(10-19) Births	10,407	9,339	9,246	13.9	11.4	11.4		
Early Teen (10-17) Births	3,616	2,792	2,754	5.0	3.4	3.4		
Smoking During Pregnancy	14,309	14,534	14,212	19.5	17.7	17.6		
Medicaid Births	28,847	38,344	38,004	39.7	47.5	47.7		
WIC Births	29,714	34,636	34,659	40.9	43.0	43.5		
Food Stamps Births	12,005	19,966	20,593	16.5	25.4	26.5		
C-Sections	15,872	25,313	25,642	21.1	30.9	31.7		
Live Births	75,242	81,883	80,944					

Other maternal and child health indicators in 2008 presented in Table 3 show the following:

- The rate of out-of wedlock births rose again, as 40.9 of all Missouri births were born out-of wedlock compared with 40.5 percent in 2007 and 34.1 percent in 1998.
- Multiple births increased slightly, from 3.3 percent to 3.4 percent of births, and were 17 percent above the 1998 rate.
- Short (less than 18 months) spacing between births remained at 12.8 percent of 2007 and 2008 live births, but was 22 percent above the 1998 rate of 10.5 percent.
- The rate of Medicaid and WIC births, as well as the rate of mothers on Food Stamps, all increased, with the Food Stamp increase being the largest.

- Abortions increased slightly as 11,508 Missouri resident pregnancies were terminated compared with 11,470 in 2007. However the 2008 number represents nearly a 10 percent decrease from 12,751 ten years ago.
- The rate of inadequate prenatal care stayed at 11.9 percent, but was 9 percent higher than the rate of 10.9 percent in 1998.
- C-Sections increased by a little more than 1 percent in the last year and 62 percent since 1998, reaching a record high of 31.7 percent of all births.

Marriages and divorces both decreased slightly in 2008. The number of marriages fell from 40,405 in 2007 to 40,146 in 2008 while the number of divorces dropped from 22,223 to 21,970. Since 1998 marriages have declined by 8 percent and divorces by 13 percent.