

A PUBLICATION OF THE

MISSOURI DEPARTMENT OF HEALTH & SENIOR SERVICES BUREAU OF HEALTH INFORMATICS JEFFERSON CITY, MISSOURI 65102-0570 (573) 751-6272

November 2012

2011 Vital statistics

Heart disease and cancer continued to be the leading causes of death in Missouri as 13,746 Missourians died from heart disease and 12,403 died from cancer according to 2011 provisional vital statistics data (See Table 1). Heart disease deaths showed virtually no change from 2010 to 2011 while cancer deaths decreased slightly. Chronic lower respiratory deaths remained at

number three among the state's leading causes for the fourth year in a row and also decreased slightly in 2011. Stroke had been the state's third leading cause from 1943 to 2007, but dropped to fourth in 2008, and in 2011 dropped further to fifth despite a slight increase in deaths from 2010 to 2011. Nationally, stroke was still the fourth leading cause of death in 2011.

Table 1 Leading Causes of Death with Rates: Missouri Residents 2001, 2010 and Provisional 2011

	Numbers			Rates per 100,000 Population		
	2001	2010 2011(prov)		2001	2010 2011(prov)	
<u>Leading Causes of Death</u>						
Heart	16,453	13,741	13,746	291.5	229.5	228.7
Cancer	12,289	12,569	12,403	217.7	209.9	206.3
Lung cancer	3,713	3,899	3,819	65.8	65.1	63.5
Chronic lower respiratory disease	2,861	3,542	3,483	50.7	59.2	57.9
Unintentional injury	2,439	2,969	3,178	43.2	49.6	52.9
Motor vehicle	1,081	838	830	19.2	14.0	13.8
Falls	503	645	690	8.9	10.8	11.5
Poisonings	245	883	856	4.3	14.7	14.2
Forces of nature	50	44	197	0.9	0.7	3.3
Other	560	559	605	9.9	9.3	10.1
Stroke	3,788	2,979	3,010	67.1	49.7	50.1
Alzheimer's disease	1,111	1,976	1,916	19.7	33.0	31.9
Diabetes	1,514	1,423	1,421	26.8	23.8	23.6
Nephritis & nephrosis	985	1,300	1,251	17.5	21.7	20.8
Pneumonia & influenza	1,594	1,188	1,200	28.2	19.8	20.0
Suicide	736	850	921	13.0	14.2	15.3

Unintentional injury deaths surpassed stroke as the state's fourth leading cause of death, as unintentional injury deaths increased by nearly 7 percent in 2011. Mortality related to the Joplin tornado in May 2011, was the primary reason for the increase. Accidental deaths due to forces of nature (including storms and extreme heat and cold) increased by more than fourfold from 44 to 197 from 2010 to 2011. The Joplin tornado killed 141 Missouri residents in 2011. However, unintentional injury deaths would still have surpassed stroke deaths in 2011 even if these tornado deaths were excluded. Deaths due to falls also increased in 2011. Accidental deaths from poisonings dropped in 2011, but had increased by nearly 250 percent in the last ten years from 245 in 2001 to 856 in 2011.

The sixth through tenth leading causes of death in 2011 were Alzheimer's Disease, diabetes, kidney disease (nephritis), pneumonia and influenza, and suicide, respectively and remained in the same order as 2010. Suicides increased by 8.4 percent from 2010 to 2011 and reached its highest level ever in Missouri at 921 deaths. Most of the increase occurred among females.

Total Missouri deaths increased from 55,054 in 2010 to 55,999 in 2011 as shown in Table 2. Despite this increase in deaths, the Missouri life expectancy increased by 0.1 years to a record level in 2011, 77.6 years at birth. The Missouri life

expectancy is still below the national life expectancy of 78.7 years in 2011. Female life expectancy remained five years longer than male life expectancy as Missouri females had a life expectancy of 80.1 years in 2011 compared with 75.1 years for males.

The Missouri infant death rate decreased from 6.6 per 1,000 live births in 2010 to 6.3 in 2011, another record low. The Missouri rate is still above national infant death rate of 6.1 per 1,000 live births in 2011. The 2011 Missouri infant death rate for African-Americans of 13.7 per 1,000 live births was more than two and one-half times the white rate of 5.1.

Births decreased for the fourth consecutive year as 76,069 Missouri babies were born in 2011 compared with 76,718 in 2010. Births have decreased by 7.1 percent since the peak year in 2007. The largest decrease in births by age in 2011 occurred among teens as there were 6,998 births to mothers under age 20 compared to 7,739 in 2010, a 9.6 percent decrease. This is the lowest number of births to mothers under age 20 in the 100 years of reported statewide vital statistics. The birth rate for Missouri mothers aged 20-24 also reached its lowest level in recorded history at 96.2 per 1,000 females aged 20-24.

Missouri resident abortions decreased by 5.9 percent in 2011 as 9,225 abortions occurred to Missouri women compared with 9,796 in 2010. This represents the lowest count since the mid 1970s.

Table 2

Vital Statistics for Missouri: 2001, 2010 and Provisional 2011

	Numbers			Rates per 1,000 Population			
	2001	2010	2011(prov)	2001	2010 2	2011(prov)	
Births	75,290	76,718	76,069	13.3	12.8	12.7	
Deaths	54,601	55,054	55,999	9.7	9.2	9.3	
Natural increase	20,689	21,664	20,070	3.7	3.6	3.3	
Marriages	42,086	38,998	39,481	7.5	6.5	6.6	
Divorces	22,374	23,349	23,272	4.0	3.9	3.9	
Infant deaths	555	504	482	7.4*	6.6*	6.3*	
Abortions	12,266	9,796	9,225	162.9*	128.4*	121.4*	
Population (1000s)	5,644	5,988	6,011				

^{*}Per 1,000 live births

The Missouri low birth weight (less than 5.5 pounds) rate decreased in 2011 to 7.9 percent from 8.2 percent in 2010. This decrease partially contributed to the decrease in infant mortality, as prematurity and low birth weight is the leading cause of infant mortality. The decrease in low birth weight was primarily among whites as the rate for African-Americans increased from 13.8 percent in 2010 to 14.4 percent in 2011. This was more than double the white rate of 6.7 percent in 2011.

Other maternal and child health indicators presented in Table 3 show the following in 2011:

- The rate of out-of wedlock births decreased slightly from 40.2 percent in 2010 to 40.1 percent in 2011 as 30,520 out-of wedlock births occurred in 2011 compared to 30,836 in 2010 and 26,209 in 2001.
- Multiple births decreased in 2011 to 3.5 percent from 3.7 percent in 2010.
- Short (less than 18 months) spacing between births decreased among 2011 births from 12.6 percent in 2010 to 11.9 percent.
- The rates of Medicaid, WIC and Food Stamp births all decreased slightly in 2011, but were all well above rates ten years earlier in 2001.

Table 3
Trends in Maternal and Child Health Statistics: Missouri 2001, 2010 and Provisional 2011

	Numbers			Percents		
	2001			2001	2010 2011(prov)	
Infant Deaths	555	504	482	7.4*	6.6*	6.3*
White	361	326	287	5.8*	5.7*	5.1*
Black	186	130	150	16.8*	12.0*	13.7*
Low Birth Weight	5,759	6,300	6,015	7.6	8.2	7.9
White	4,182	4,173	3,812	6.8	7.3	6.7
Black	1,405	1,496	1,574	12.7	13.8	14.4
Inadaguata Propostal Cara	7 724	11 005	12 101	10.7	16.8	17.8
Inadequate Prenatal Care White	7,734	11,895	12,181 7,282	8.8	13.5	17.8
	5,285	7,152	,			
Black	2,122	2,987	3,116	21.5	30.8	32.2
Preterm (<37 weeks)	9,803	9,425	8,973	13.0	12.3	11.8
Multiple Births	2,369	2,855	2,688	3.1	3.7	3.5
Birth Spacing<18 mos.	4,725	5,258	4,880	11.0	12.6	11.9
Out-of Wedlock Births	26,209	30,836	30,520	34.8	40.2	40.1
Teen(10-19) Births	9,426	7,739	6,998	12.5	10.1	9.2
Early Teen (10-17) Births	2,938	2,123	1,931	3.9	2.8	2.5
Smoking During Pregnanc	13,761	14,335	13,803	18.3	18.9	18.3
Medicaid Births	30,515	32,411	33,018	42.2	46.1	45.0
WIC Births	29,284	35,064	34,692	40.5	46.7	46.6
Food Stamps Births	12,852	24,564	24,011	17.8	34.4	33.9
C-Sections	18,266	24,427	23,760	24.3	31.9	31.4
Live Births	75,290	76,718	76,069			

^{*}Infant Death rates are per 1,000 live births.

(Focus continued)

- The rate of mothers smoking during pregnancy decreased from 18.9 percent in 2010 to 18.3 percent in 2011.
- The rate of preterm (less 37 weeks gestation) births declined from 12.3 percent in 2010 to 11.8 percent in 2011.
- The rate of inadequate prenatal care increased in 2011 from 16.8 percent in 2010 to 17.8 percent in 2011. A change in the wording of the question beginning in 2010 partially affects the higher rates in 2010 and 2011 compared with the rate in 2001.
- The C-Section rate decreased from 31.9 percent in 2010 to 31.4 percent in 2011, but increased by 29 percent in the last ten years.

Marriages and divorces both increased slightly in 2011, as 39,481 couples married and 23,272 couples dissolved their marriages. Over the past decade the marriage to divorce ratio was 1.80 and has been below 2.00 since 1989. This implies that over half of all Missouri marriages end in divorce.

¹ This number is only for Missouri resident deaths with an injury date of May 22, 2011, place of injury in the Joplin area, and the underlying cause of death on the death certificate given as 'victim of cataclysmic storm' (ICD code of X37). This number may disagree with numbers provided by other sources.