

FOCUS

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2015 Vital Statistics

Missouri resident deaths reached a record high number for the third consecutive year, increasing by 2.9 percent from 58,141 in 2014 to 59,810 in 2015 (See Table 1). Nationally, deaths increased to more than 2.7 million in 2015, also a record number as deaths increased by about 3 percent. The state life expectancy decreased by 0.4 years from 77.7 years in 2014 to 77.3 years in 2015, the state's shortest life expectancy since 2007. This compares to 78.8 years, the latest

available national life expectancy in 2014. Life expectancy for Missouri females decreased from 80.1 in 2014 to 79.9 years in 2015, while male life expectancy decreased from 75.1 years in 2014 to 74.8 in 2015.

As reflected in Table 2, deaths from nine of the ten leading causes of death increased [in](#) 2015 compared with 2014. The one exception was cancer, which decreased slightly in 2015. The order of the ten leading causes remained the same

Table 1

Vital Statistics for Missouri: 2005, 2014 and 2015

	<i>Numbers</i>			<i>Rates per 1,000 Population</i>		
	2005	2014	2015	2005	2014	2015
Births	78,547	75,104	75,042	13.6	12.4	12.3
Deaths	54,324	58,141	59,810	9.4	9.6	9.8
Natural increase	24,223	16,963	15,232	4.2	2.8	2.5
Marriages	40,675	40,779	41,377	7.0	6.7	6.8
Divorces	21,013	19,877	19,330	3.6	3.3	3.2
Infant deaths	588	456	489	7.5*	6.1*	6.5*
Abortions	11,619	8,129	7,474	147.9*	108.2*	99.6*
Population (1000s)	5,790	6,064	6,084			

*Per 1,000 live births

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in 2014 and 2015. The ten leading causes of death for 2014 and 2015 were respectively heart disease, cancer, chronic lung disease, unintentional injuries, stroke, Alzheimer's disease, nephritis (kidney disease), diabetes, pneumonia and influenza, and suicide. The cause with the largest percentage increase in deaths was Alzheimer's disease with a 6 percent increase. Notable among the causes outside the top ten was a 23 percent increase in homicides from 440 in 2014 to 539 in 2015. This is the highest homicide count since 1994.

In terms of long-term ten year changes, suicides increased by 43 percent from 2005 to 2015, deaths from Alzheimer's disease increased by 33 percent, and chronic lung disease and nephritis deaths each increased by 28 percent. Deaths from unintentional injuries increased by 16 percent from 2005 to 2015, with the subcategory poisoning deaths increasing by 75 percent. On the positive side, pneumonia and influenza deaths decreased by 14 percent and stroke deaths decreased by 9 percent. Stroke was the third leading cause in 2005 and has dropped to the fifth leading cause in 2015. Heart disease mortality, the leading cause of death, had been decreasing sharply from a peak of 18,335 deaths in 1995 to a low of 13,609 in 2012. However since 2012, deaths due to heart disease have increased 8.6 percent to 14,778. The number of cancer deaths has been fairly steady throughout the last 20 years, with some improvement in rates.

Missouri resident live births decreased for the eighth consecutive year in 2015 as 75,042 babies were born compared with 75,104 in 2014 (Table 1). Missouri births have decreased by 8.4 percent since reaching a peak of 81,883 in 2007.

Between 2014 and 2015, teen births continued to decrease moving from 5,281 to 4,878 births born to mothers under the age of 20. This is a significant 44 percent decline in comparison to the 2005 count of 8,707. Early teen (less than age 18) births also decreased, moving from 1,406 in 2014 to 1,249 in 2015. This is 53 percent lower than the count ten years earlier in 2005. As Table 3 reflects, teen births have experienced a substantial decrease among both white and African-American teen mothers.

The infant death rate increased in 2015 from 6.1 in 2014 to 6.5 per 1,000 live births in 2015 (See Table 3). However, it is still 13 percent lower than the rate of 7.5 per 1,000 live births which occurred in 2005. Missouri's 2015 infant death rate of 6.5 per 1,000 live births was 11 percent higher than the most recent national rate of 5.8 in 2014. The 2015 Missouri infant death rate for African-Americans of 12.7 per 1,000 live births was nearly 2.4 times the white infant death rate of 5.4. The 2005 ratio of African-American infant mortality to white infant mortality was nearly the same as in 2015.

After five consecutive years of increases, the rate of inadequate prenatal care decreased in 2015 from 20.2 percent in 2014 to 19.4 percent in

Table 2
Leading Causes of Death with Rates: Missouri Residents 2005, 2014 and 2015

<u>Leading Causes of Death</u>	<i>Numbers</i>			<i>Rates per 100,000 Population</i>			<i>Percent Change</i>	
	2005	2014	2015	2005	2014	2015	2005-15	2014-15
Heart	14,818	14,210	14,778	255.2	234.3	242.9	-0.3	4.0
Cancer	12,381	13,009	12,938	213.2	214.5	212.7	4.5	-0.5
Lung cancer	3,882	3,963	3,864	66.9	65.4	63.5	-0.5	-2.5
Chronic lung disease	3,063	3,739	3,928	52.7	61.7	64.6	28.2	5.1
Unintentional injury	2,807	3,156	3,249	48.3	52.0	53.4	15.7	2.9
Motor vehicle	1,188	779	894	20.5	12.8	14.7	-24.7	14.8
Falls	594	732	743	10.2	12.1	12.2	25.1	1.5
Poisonings	528	987	924	9.1	16.3	15.2	75.0	-6.4
Other	497	658	688	8.6	10.9	11.3	38.4	4.6
Stroke	3,316	3,010	3,021	57.1	49.6	49.7	-8.9	0.4
Alzheimer's disease	1,631	2,047	2,169	28.1	33.8	35.7	33.0	6.0
Nephritis & nephrosis	1,154	1,446	1,480	19.9	23.8	24.3	28.2	2.4
Diabetes	1,549	1,413	1,464	26.7	23.3	24.1	-5.5	3.6
Pneumonia & influenza	1,546	1,317	1,333	26.6	21.7	21.9	-13.8	1.2
Suicide	731	1,004	1,043	12.6	16.6	17.1	42.7	3.9

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2015. The rate in 2015 was nearly double the 2005 rate of 10.2 percent, but this was largely due to a change in data collection techniques beginning in 2010. Inadequate prenatal care is defined as fewer than five visits for preterm pregnancies or fewer than eight visits for term pregnancies or prenatal care beginning after the first four months of pregnancy.

The rate of low birth weight (less than 2,500 grams) reached a record high of 8.4 percent in 2015 compared with rates of 8.2 percent in 2014 and 8.1 in 2005. Despite reaching a high rate, there have not been any dramatic changes in the rate overtime. The low birth weight rate has hovered around 8 percent for the last 15 years.

Other maternal and child health indicators presented in Table 3 show the following for 2015:

- The rate of out-of-wedlock births slightly rose from 40.3 to 40.4 percent between 2014 and 2015 and from 37.8 percent in 2005. Multiple births increased slightly from 3.5 percent to 3.7 percent of births.
- Short (less than 18 months) spacing between births remained at 12.1 percent in 2014 and 2015.
- The number and rate of Medicaid and WIC births both decreased, as did the number of mothers on Food Stamps.
- Abortions (See Table 1) decreased 8 percent in 2015 as 7,474 Missouri resident pregnancies were terminated compared with 8,129 in 2014.

Table 3
Trends in Maternal and Child Health Statistics: Missouri 2005, 2014 and 2015

	<i>Numbers</i>			<i>Percents</i>		
	2005	2014	2015	2005	2014	2015
Infant Deaths	588	456	489	7.5*	6.1*	6.5*
White	405	289	304	6.3*	5.2*	5.4*
Black	170	122	134	14.8*	11.4*	12.7*
Low Birth Weight	6,368	6,163	6,270	8.1	8.2	8.4
White	4,508	3,920	4,032	7.0	7.0	7.2
Black	1,651	1,558	1,568	14.4	14.5	14.8
Inadequate Prenatal Care	7,674	14,204	13,688	10.2	20.2	19.4
White	5,195	8,534	8,312	8.4	16.2	15.9
Black	2,084	3,424	3,194	19.6	35.6	33.9
Teen(10-19) Births	8,707	5,281	4,878	11.1	7.0	6.5
White	6,337	3,415	3,212	9.9	6.1	5.7
Black	2,145	1,117	978	18.7	10.4	9.2
Early Teen (10-17) Births	2,660	1,406	1,249	3.4	1.9	1.7
Preterm (<37 weeks) (DLNM)**	10,722	8,957	8,999	13.7	11.9	12.0
Preterm (<37 weeks) (Obst. Est.)**	8,375	7,322	7,507	10.7	9.8	10.0
Multiple Births	2,742	2,615	2,758	3.5	3.5	3.7
Birth Spacing<18 mos.	5,194	5,203	5,305	11.7	12.1	12.1
Out-of Wedlock Births	29,669	30,246	30,351	37.8	40.3	40.4
Smoking During Pregnancy	14,317	12,454	11,802	18.2	16.7	15.9
Mother Obese	16,655	18,814	19,281	22.4	25.4	26.0
Medicaid Births	36,775	30,229	29,878	47.5	40.7	40.3
WIC Births	32,954	31,746	30,572	42.6	43.0	41.5
Food Stamps Births	18,528	20,856	20,477	24.6	29.8	29.3
C-Sections	23,749	22,562	22,733	30.2	30.1	30.3
Live Births	78,547	75,104	75,042			

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

**Beginning in 2014 the National Center for Health Statistics recommended using the obstetrical estimate of gestational age. The obstetrical estimate is considered more accurate than the previous method using the calculated difference between date of last normal menses (DLNM) and date of birth. Both methods are shown in this table to provide a comparison.

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The 2015 number represents a 36 percent decrease from the 11,619 abortions ten years earlier.

- C-Sections increased slightly during the last year, resulting in an increase in the rate of all live births from 30.1 percent in 2014 to 30.3 percent in 2015.
- The rate of births to obese (BMI>30) mothers increased to 26.0 percent in 2015 from 25.4 in 2014 and 22.4 in 2005.

Marriages increased by 1.5 percent from 40,779 in 2014 to 41,377 in 2015, probably due to the legalization of same-sex marriages. Missouri had 726 reported same-sex marriages in 2015, although this number is considered incomplete because not all counties had the ability to report them throughout the year. Divorces decreased by 2.7 percent as 19,330 Missouri marriages were dissolved compared with 19,877 in 2014. The marriage to divorce ratio increased from 2.05 in 2014 to 2.14 in 2015.

The record levels of deaths in 2015 are the most discouraging news in this report. The mortality increase is partially explained by an aging population, but it also points to the continuing need for prevention efforts in reducing chronic diseases such as heart disease, cancer, chronic lung disease and stroke, as well as unintentional injuries. These include proper nutrition, regular exercise, smoking cessation, alcohol moderation and regular health screenings. On the positive side, preliminary 2016 data show a decrease in mortality from the record 2015 levels.