

**Douglas County Trend Analysis, 2016**  
**Progress Toward Healthy People 2020 Targets or Colorado 2020 Targets**

Maternal and Child Health Indicator (Sorted by 2016 Position Relative to 2020 Target)	Number of Years of Data	Healthy People 2020 or Colorado 2020 Target	MCH Data By Year*						Short Term Trend: 2012 to 2016	Long Term Trend: Percent Change 2006 to 2016	2016 Position Relative to 2020 Target
			2006	2012	2013	2014	2015	2016			
% births very low birth weight	3	1.4%	1.2%	1.5%	1.5%	1.4%	1.2%	1.1%	Improved	-8.3%	Meets target
Infant mortality rate	5	6.0 per 1,000	3.5	4.2	4.1	4.5	3.9	3.8	Improved	+8.6%	Meets target
Neonatal mortality rate	5	4.1 per 1,000	2.6	3.4	3.2	3.5	3.3	3.1	Improved	+19.2%	Meets target
Postneonatal mortality rate	5	2.0 per 1,000	0.8	0.8	0.9	0.9	0.6	0.6	Improved	-25.0%	Meets target
Perinatal mortality rate	5	5.9 per 1,000	4.5	4.5	4.4	4.6	4.4	3.9	Improved	-13.3%	Meets target
Injury hospitalization rate ages 10-19	3	226.9 <sup>b</sup>	319.2	215.2	208.4	213.9	201.8	194.6	Improved	-39.0%	Meets target
Teen birth rate ages 15-17	3	10.0 per 1,000 <sup>b</sup>	4.5	2.8	2.4	1.9	2.2	1.9	Improved	-57.8%	Meets target
Teen motor vehicle death rate ages 15-19	3	12.4 per 100,000 <sup>a</sup>	29.4	8.9	8.2	7.6	8.5	8.1	Improved	-72.4%	Meets target
% mothers who smoked 3 months before pregnancy	1	14.6%	N/A	3.7%	3.5%	2.7%	3.5%	3.5%	Mixed	N/A	Meets target
% mothers who smoked during pregnancy	1	6.1% <sup>b</sup>	N/A	2.5%	2.2%	2.1%	2.4%	2.7%	Mixed	N/A	Meets target
% mothers overweight or obese before pregnancy	1	38.0% <sup>b</sup>	N/A	28.7%	34.7% <sup>c</sup>	33.6% <sup>c</sup>	34.8% <sup>c</sup>	35.3% <sup>c</sup>	No real change <sup>d</sup>	N/A	Meets target
% very low birth weight births in Level IIIs	5	83.7%	91.4%	97.6%	98.0%	98.8%	98.3%	98.1%	No real change	+7.3%	Meets target
% infants who were ever breastfed	5	84.5% <sup>b</sup>	89%	95%	95%	96%	95%	N/A <sup>e</sup>	No real change <sup>f</sup>	N/A	Meets target <sup>g</sup>
% infants placed to sleep on their backs	2	75.9%	N/A	90%	94%	92%	90%	N/A <sup>e</sup>	No real change <sup>f</sup>	N/A	Meets target <sup>g</sup>
% children ages 2-14 overweight or obese	2	25.0% <sup>b</sup>	N/A	19%	13% <sup>h</sup>	15% <sup>h</sup>	22% <sup>h</sup>	18% <sup>h</sup>	No real change <sup>d</sup>	N/A	Meets target
% children ages 1-14 with a medical home	3	63.3%	N/A	N/A	N/A	72%	76%	72%	No real change <sup>i</sup>	N/A	Meets target
% children ages 1-5 w/ parents asked by provider to fill out child q'naire	3	52.0% <sup>b</sup>	N/A	N/A	N/A	54%	55%	57%	No real change <sup>i</sup>	N/A	Meets target
% children ages 6-11 physically active 60 min per day	3	37.0% <sup>b</sup>	N/A	N/A	N/A	N/A	47%	41%	Cannot ascertain	N/A	Meets target
% mothers with appropriate weight gain during pregnancy	1	38.0% <sup>b</sup>	N/A	33.5%	35.6% <sup>c</sup>	35.6% <sup>c</sup>	36.5% <sup>c</sup>	37.5% <sup>c</sup>	Improved <sup>d</sup>	N/A	Close to target
% births low birth weight	3	7.8%	8.9%	9.1%	9.3%	9.6%	8.8%	8.5%	Improved	-4.5%	Close to target
% births preterm	3	8.0% <sup>b</sup>	10.3%	10.8%	10.3%	9.8%	8.8%	8.6%	Improved	-16.5%	Close to target
% cesarean deliveries among low-risk first births	3	18.5% <sup>b</sup>	N/A	26.2%	25.4%	24.7%	24.9%	25.0%	Mixed	N/A	At some distance
Teen suicide death rate ages 15-19	5	10.2 per 100,000 <sup>a</sup>	4.2	12.1	16.2	17.3	16.9	19.0	Worse	+352.4%	At some distance
% teens who were bullied in past year	1	22.0% <sup>b</sup>	NA	N/A	N/A	N/A	N/A	27%	Cannot ascertain	N/A	At some distance
Motor vehicle death rate ages 0-14	3	12.4 per 100,000 <sup>a</sup>	2.8	0.0	DS	DS	DS	DS	Cannot ascertain	N/A	Unknown
% EIC referrals from targeted screening sources	1	N/A	N/A	45.8%	50.4%	48.1%	54.1%	54.6%	Improved	N/A	N/A

N/A denotes data not available or applicable.

Cells shaded in light blue represent survey data results which require greater change over time to be considered "Improved" or "Worse" compared to non-survey data.

\* Refer to the accompanying data years table to determine the exact years for each value.

<sup>a</sup> Healthy People targets are for all ages and are not specific to the age group shown.

<sup>b</sup> Colorado 2020 target.

<sup>c</sup> Uses 2009 IOM weight gain recommendations. Earlier years use 1990 IOM weight gain recommendations.

<sup>d</sup> Short term trend is measured from 2013 to 2016.

<sup>e</sup> 2014 PRAMS data were not available at time of trend analysis production.

<sup>f</sup> Short term trend is measured from 2012 to 2015.

<sup>g</sup> Position relative to 2020 target is based on the data reported in 2015, not 2016.

<sup>h</sup> Changes were made to the sampling and weighting methodology of the Child Health Survey.

Comparisons should be made only between 2012 and earlier or 2013 and later.

<sup>i</sup> Short term trend is measured from 2014 to 2016.

## **Additional Notes**

### **Maternal and Child Health Indicator**

Data are shown for indicators that have been included in the MCH County Data Sets for a number of years, or for new national or state MCH performance measures. Eight indicators are based on survey data available from the Pregnancy Risk Assessment Monitoring System, the Colorado Child Health Survey, and the Healthy Kids Colorado Survey: ever breastfed, infants placed to sleep on their backs, unintended births, child development questionnaire, medical home, overweight or obese children, physically active children, and bullied teens. Data and short term trends for these indicators are lightly shaded. Most other indicators come from birth and death data, but some indicators (injury hospitalization, EIC referrals) are derived from special registries or data sets. Refer to the *Definitions for Data in 2016 County Trend Analysis* handout for further explanation of each indicator.

### **Number of Years of Data**

Indicators use one, two, three, or five years of data. For example, the 2016 teen motor vehicle death rate for ages 15-19 is based on three years of data (2012, 2013, and 2014).

### **Healthy People 2020 or Colorado 2020 Target**

Every ten years, Healthy People sets targets for numerous public health objectives. For 2010 there were 467 separate objectives; for 2020, the number increased to nearly 600. While many 2010 objectives were retained for 2020, the targets for nearly all of them have changed, and the new targets are virtually all more modest than those set for 2010. For more information, visit: <http://www.healthypeople.gov/2020/default.aspx>. Colorado 2020 targets are used in place of Healthy People 2020 targets where available.

### **MCH Data by Year**

Each year when a county trend analysis is released the most recent available data are presented. The years of data that are available differ among indicators. For example, the most recent data available for the teen motor vehicle death rate for ages 15-19 is from 2014. Because this measure is a three-year rate, data from 2012, 2013, and 2014 are presented under the 2016 heading. As a general rule, the values shown beneath a column heading reflect data from at least two years earlier. Refer to the accompanying data years table to determine the exact years for each value.

### **Short Term Trend: 2012 to 2016**

Short term trends are categorized as "Improved," "Worse," "Mixed," or "No real change." For a variety of reasons, some trends cannot be determined and are shown as "Cannot ascertain." The labeling of the change between 2012 and 2016 (or other years as footnoted) may be somewhat arbitrary. Values based on survey data need relatively large changes to obtain "Improved" or "Worse" labels because percentages shown are estimates that have confidence intervals. Values based on full count data (births, deaths, registries) require smaller changes to obtain labels denoting change. The 2012 and 2016 data values usually contain data from the previous 5 years, 3 years, or 1 year, so the trends described reflect changes in the data that are reported in the MCH Trend Analysis for 2012 and 2016, and do not represent changes that actually occurred between 2012 and 2016.

### **Long Term Trend: Percent Change 2006 to 2016**

Long term trends are presented when data are available and comparable between 2006 and 2016. The percent change is the difference between the old and new estimates divided by the old estimate. The result is multiplied by 100 to yield a percent. The percent change is how much the measure has increased (+%) or decreased (-%) over the ten-year period. The 2006 and 2016 data values usually contain data from the previous 5 years, 3 years, or 1 year (children overweight or obese and infants placed to sleep on their backs contain data from 2 years), so the trends described reflect changes in the data that are reported in the MCH County Data Sets for 2006 and in the MCH Trend Analysis for 2016 and do not represent changes that actually occurred between 2006 and 2016.

### **2016 Position Relative to 2020 Target**

"Meets target" indicates that the value shown in the MCH Trend Analysis released in 2016 is the same or better than the target. "Close to target" indicates that the value is within 20 percent of the target. "At some distance" describes values that are more than 20 percent away from the target, but are less than double the target for indicators requiring a decrease and are up to half the target for indicators requiring an increase. "Far from target" indicates a value that is either double or half the HP 2020 target, depending on whether the indicator requires a decrease or an increase. The values shown in 2016 are compared to the HP 2020 targets or the Colorado 2020 targets; see footnotes.

## Douglas County Trend Analysis, 2016

Data Years

Maternal and Child Health Indicator	Number of Years of Data	MCH Data By Year					
		2006	2012	2013	2014	2015	2016
% births very low birth weight	3	2002-2004	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014
Infant mortality rate	5	2000-2004	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Neonatal mortality rate	5	2000-2004	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Postneonatal mortality rate	5	2000-2004	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Perinatal mortality rate	5	2000-2004	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
Injury hospitalization rate ages 10-19	3	2002-2004	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014
Teen birth rate ages 15-17	3	2002-2004	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014
Teen motor vehicle death rate ages 15-19	3	2002-2004	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014
% mothers who smoked 3 months before pregnancy	1	N/A	2010	2011	2012	2013	2014
% mothers who smoked during pregnancy	1	N/A	2010	2011	2012	2013	2014
% mothers overweight or obese before pregnancy	1	N/A	2010	2011	2012	2013	2014
% very low birth weight births in Level IIIs	5	2000-2004	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
% infants who were ever breastfed	5	1999-2003	2006-2010	2007-2011	2008-2012	2009-2013	N/A
% infants placed to sleep on their backs	2	N/A	2009-2010	2010-2011	2011-2012	2012-2013	N/A
% children ages 2-14 overweight or obese	2	N/A	2009-2010	2010-2011	2011-2012	2012-2013	2013-2014
% children ages 1-14 with a medical home	3	N/A	N/A	N/A	2010-2012	2011-2013	2012-2014
% children ages 1-5 w/ parents asked by provider to fill out child q'naire	3	N/A	N/A	N/A	2010-2012	2011-2013	2012-2014
% children ages 6-11 physically active 60 min per day	3	N/A	N/A	N/A	N/A	2011-2013	2012-2014
% mothers with appropriate weight gain during pregnancy	1	N/A	2010	2011	2012	2013	2014
% births low birth weight	3	2002-2004	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014
% births preterm	3	2002-2004	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014
% cesarean deliveries among low-risk first births	3	N/A	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014
Teen suicide death rate ages 15-19	5	2000-2004	2006-2010	2007-2011	2008-2012	2009-2013	2010-2014
% teens who were bullied in past year	1	N/A	N/A	N/A	N/A	N/A	2013
Motor vehicle death rate ages 0-14	3	2002-2004	2008-2010	2009-2011	2010-2012	2011-2013	2012-2014
% EIC referrals from targeted screening sources	1	N/A	2010	2011	2012	2013	2014