

# Child and Family Health Services (CFHS) Community Health Indicators Project



## 2007 Update:

*A Look At Past, Present, and Future Trends*

## EXECUTIVE SUMMARY

Produced by The Cuyahoga County Board of Health  
*November 2007*



The Cuyahoga County Board of Health would like to thank The City of Cleveland Department of Public Health, The Lakewood Department of Human Services/Division of Health, and The City of Shaker Heights Health Department, collectively known as the *Cuyahoga County Public Health Collaborative*, for supporting this project by providing countywide access to data used in this community assessment.



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## Introduction

The Community Indicators Project began in 1999, with the intent of compiling and analyzing data on a range of Maternal and Child health indicators identified as critical measures of community health status in the Maternal and Child Health Block Grant and adopted by the Ohio Department of Health. Between 1999 and 2004, a series of four reports (Phase I, Phase II, Phase III and Phase IV) were created as part of the Community Indicators Project to build our capacity to track these indicators on an ongoing basis. These reports can be viewed online at: [www.ccbh.net/ccbh/opencms/CCBH/digitallibrary/reports.html](http://www.ccbh.net/ccbh/opencms/CCBH/digitallibrary/reports.html).

This 2007 update to the previous reports follows the format of the Phase IV Report produced in 2004, summarizing and tracking each health indicator, then providing “At-A-Glance” Reports for each neighborhood in the City of Cleveland and every suburban municipality in Cuyahoga County. This update adds the newest information available (years 2001-2003), as well as using the past 9 years of data, to predict future progress towards reaching the national *Healthy People 2010* goals. This added information also allows projection of the county maternal-child health status in 2010 if current trends continue, which is a new feature in this report. This process allows us to present valuable information to aid Cuyahoga County in planning and prioritizing health goals, and formulating programs to meet community needs.

As part of an ongoing assessment process, the Cuyahoga County Board of Health (CCBH) collected and analyzed data on 22 maternal and child health indicators initially chosen for the Child and Family Health Services (CFHS) Indicators for Cuyahoga County as identified in the Maternal and Child Health Block Grant and adopted by the Ohio Department of Health. The Cuyahoga County CFHS Project, administered by the CCBH through a grant from the Ohio Department of Health, provided funding for this assessment. These indicators help profile the health status of Cuyahoga County and its individual communities.

The baseline information for a majority of the indicators is from 1995, which was the most recent data available when Cuyahoga County first began to track these indicators. This 2007 Update Report tracks these indicators through 2003, the most recent information available at the inception of this report. After a majority of the report was completed, county level data became available for 2004 and 2005 for sixteen of the indicators. References to this newer information have been made in the report summary.

The focus of this report is to:

- ✓ Update county assessments of all chosen indicators for the newest data available (2001-2003 at the time of this report’s production).
- ✓ Assess Cuyahoga County’s progress toward meeting National Healthy People 2010 goals since 1995, and determine the likelihood of reaching those goals by 2010.
- ✓ Provide comparison data to help prioritize the indicators on which Cuyahoga County is currently not on pace to reach Healthy People 2010 goals.
- ✓ Update health status profiles for each Cuyahoga County suburban municipality and City of Cleveland neighborhood, and assess their progress toward reaching Healthy People 2010 goals.

This report includes county-wide tracking and analysis of the following indicators:

- 1) **Infant Mortality Rate**
- 2) **Disparity Between Black and White Infant Mortality Rates**
- 3) **Neonatal Mortality Rate**
- 4) **Perinatal Mortality Rate**
- 5) **Ratio of Black Perinatal Mortality Rate to White Perinatal Mortality Rate**
- 6) **Postneonatal Mortality Rate**
- 7) **Percentage of Low Birthweight Births**
- 8) **Percentage of Very Low Birthweight Births**
- 9) **Percentage of Very Low Birthweight Infants Delivered at Facilities for High-Risk Deliveries and Neonates**
- 10) **Premature Birth Rate**
- 11) **Percentage of Women Who Reported Smoking During Pregnancy**
- 12) **Percentage of Infants Born to Women Receiving Prenatal Care in the First Trimester**
- 13) **Percentage of Women Receiving Adequate Prenatal Care**
- 14) **Rates of Birth Among 10-14 Year Olds\***
- 15) **Rates of Birth Among 15-17 Year Olds**
- 16) **Incidence of Neural Tube Defects**
- 17) **Childhood Immunization Rate\***
- 18) **Percentage of Screened Children with Elevated Blood Lead Levels**
- 19) **Child Mortality Rate among 1-14 Year Olds**
- 20) **Adolescent Mortality Rate Among 15-19 Year Olds**
- 21) **Child Mortality Rate among 1-14 Year Olds caused by Motor Vehicle Crashes**
- 22) **Rate of Suicide Deaths Among 15-19 Year Olds**

\*Progress toward Healthy People 2010 goals could not be determined for these two indicators due to no Healthy People goal being established (births among 10-14 year olds) and not having enough data to establish a trend (immunization rates).

## Summary of Progress Towards Healthy People 2010 Goals

### *Healthy People 2010 Goals Met*

Four Healthy People goals have already been met as of 2003. These are the areas where Cuyahoga County has been consistently strong. Although there is always room for improvement, the current programs and strategies have proven to be adequate for meeting and exceeding national standards of public health.

- ✓ **Birth rate among 15-17 year olds:** The birth rate among adolescents age 15-17 decreased from 37.0 in 1995-7 to 24.9 in 2001-3. The HP 2010 goal of reducing adolescent pregnancies to 43.0 per 1,000 has already been met and exceeded. If this rate of progress continues, the birth rate among adolescents age 15-17 in Cuyahoga County will decrease to 14.7 by 2010.
- ✓ **Mortality among children ages 1-14:** The child mortality rate decreased from 25.6 in 1995-7 to 17.0 in 2001-3. Although there is no HP 2010 goal for this indicator, Cuyahoga County has exceeded the HP 2000 goal of no more than 20 child deaths per 100,000 children. If this rate of progress continues, the child mortality rate in Cuyahoga County will fall to 10.2 by 2010.
- ✓ **Motor vehicle mortalities among children ages 1-14:** The motor vehicle-related child mortality rate decreased from 2.8 in 1995-7 to 1.6 in 2001-3. If this rate of progress continues, the child mortality rate in Cuyahoga County will fall to 1.0 by 2010, meeting and far exceeding the HP 2010 goal for all age groups of 9.2.
- ✓ **Mortality due to suicide among ages 15-19:** The suicide-related adolescent mortality rate decreased from 6.7 in 1995-7 to 4.8 in 2001-3. The HP 2010 goal for reducing suicide deaths among all age groups to no more than 5.0 per 100,000 people has already been met and exceeded. If this rate of progress continues, the suicide-related adolescent mortality rate in Cuyahoga County will fall to 2.3 by 2010.

## *On Target to meet HP 2010 Goals*

These five health indicators have not yet met Healthy People goals, but are trending in the correct direction so quickly, that we expect the Healthy People goal to be met or exceeded by 2010. Although there are no guarantees, if current strategies continue to be implemented effectively and consistently, we can expect to meet these national goals on time.

- (✓) **Women receiving prenatal care in 1st trimester:** The percentage of women receiving prenatal care in the first trimester increased from 83.0% in 1995-7 to 86.9% in 2001-3. If this rate of progress continues, the percentage of women receiving prenatal care in the first trimester in Cuyahoga County will increase to 92.4% by 2010, meeting and exceeding the HP 2010 goal of 90%.
- (✓) **Women receiving adequate prenatal care:** The percentage of women receiving adequate prenatal care increased from 65.2% in 1995-7 to 77.0% in 2001-3. If this rate of progress continues, the percentage of women receiving adequate prenatal care in Cuyahoga County will increase to 95.4% by 2010, meeting and exceeding the HP 2010 goal.
- (✓) **Very low birth weight infants born at Level III facilities:** The percentage of VLBW infants delivered at Level III facilities increased from 74.1% in 1995-7 to 89.1% in 2001-3. If this rate of progress continues, the percentage of VLBW infants delivered at Level III facilities in Cuyahoga County will increase to nearly 100% by 2010, meeting and exceeding the HP 2010 goal of 90%.
- (✓) **Mortality rate among ages 15-19:** The adolescent mortality rate decreased from 59.3 in 1995-7 to 53.4 in 2001-3. If this rate of progress continues, the adolescent mortality rate in Cuyahoga County will fall to 35.3 by 2010, meeting and exceeding the HP 2010 goal of 39.8.
- (✓) **Neural tube defects:** The rate of neural tube defects decreased from 6.1 in 1995-7 to 3.4 in 2001-3. If this rate of progress continues, the incidence of neural tube defects in Cuyahoga County will decrease to 1.5 by 2010, meeting and exceeding the HP 2010 goal of 3.0.

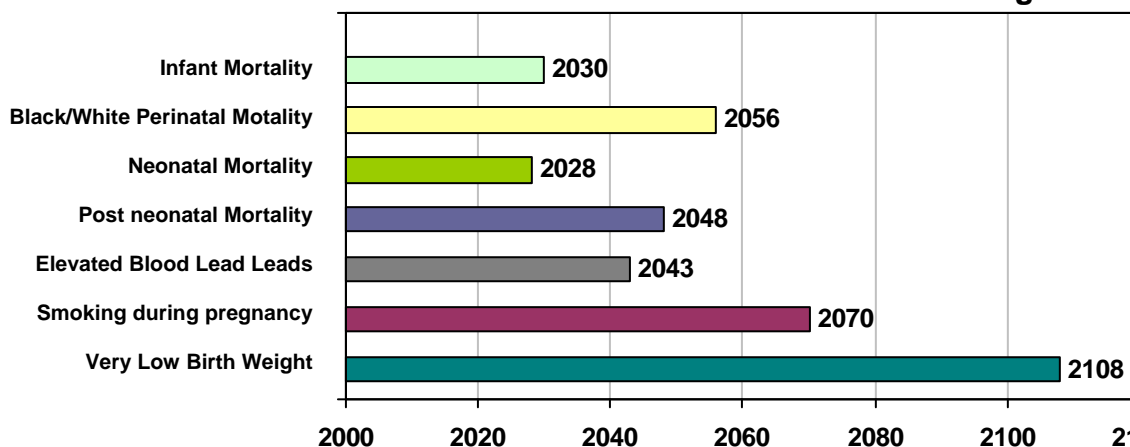
## Faster Improvement Needed to Reach Goal by 2010

Although all of these indicators have seen improvement in the past nine years, the progress has likely been too slow to meet current Healthy People goals by the year 2010. These goals may need to be re-examined by the local public health, social service, and medical community in order to determine realistic benchmarks and to prioritize and better address our most pressing issues.

- ⌚ **Infant mortality:** The HP goal is 4.5 deaths per 1,000 live births. At the existing rate of improvement, the current rate may only be reduced to 7.3 by 2010.
- ⌚ **Black/White perinatal mortality ratio:** The HP goal is to demonstrate no disparity between the rate of Black and White perinatal mortalities (a ratio of 1:1). At the existing rate of improvement, this ratio may only be reduced to 1.7 by 2010.
- ⌚ **Neonatal mortality:** The HP goal is 4.5 deaths per 1,000 live births. At the existing rate of improvement, this rate may only be reduced to 4.9 by 2010.
- ⌚ **Post neonatal mortality:** The HP goal is no more than 1.2 deaths per 1,000 live births. At the existing rate of improvement, this rate may only be reduced to 2.3 by 2010.
- ⌚ **Elevated childhood blood lead levels:** The HP goal is for no child to be lead poisoned. The county percentage dropped from 10.1% of tested children in 1999-2001 to 8.4% in 2001-3. At the existing rate of improvement, the percentage of tested children with elevated blood lead levels would only decrease to 5.8% by 2010.
- ⌚ **Smoking during pregnancy:** The HP goal is to have no more than 1% of women smoke during pregnancy. At the existing rate of improvement, the current percentage of 12.4% would only decrease to 10.1% by 2010.
- ⌚ **Very low birth weight births:** The percentage of VLBW births has remained fairly steady at 2.1% in 1995-7 to 2.0 in 2001-3. Analysis shows a very slight downward trend indicating that by 2010 the rate may be reduced to 1.9%, barely making progress towards the HP 2010 goal of 0.9%.

Comparing the estimated time it will take Cuyahoga County to meet these goals provides a standardized comparison which can help to assess which areas need the most attention:

**Estimated Time to Reach HP2010 Goals at Current Progress**



## Indicators Losing Ground

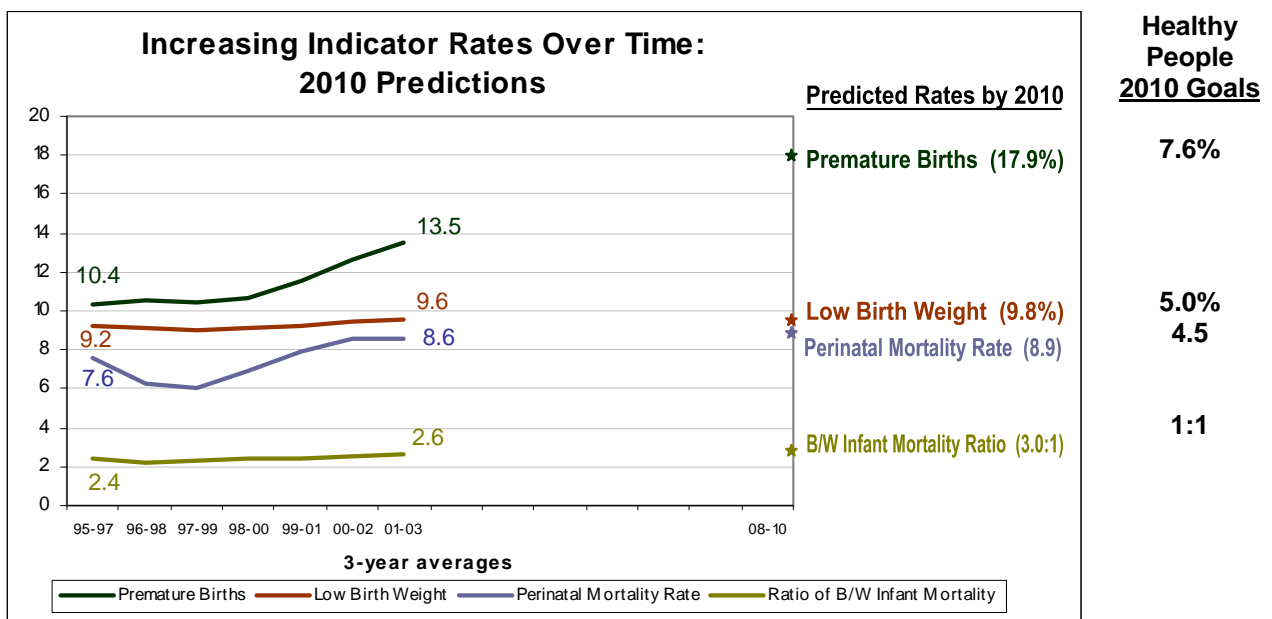
The following four indicators have been trending in the wrong direction since 1995 when they first started being tracked by Cuyahoga County. Because all of these negative trends have been seen at both the state and national levels as well, they will likely pose the biggest challenges to public health efforts.

**Premature Births:** The percentage of premature births remained fairly steady at between 10.2% and 11.1% until 2001, when the percentage of premature births jumped to 13.4%. This sudden increase most likely reflects a data collection change implemented in 2001 in order to increase the accuracy of determining gestational age, and does not suggest an actual increase in premature births during this time period. However, rates of premature births examined both before and after this change do not appear to be improving over time. This trend has also been seen nationwide and in the state of Ohio.

**Low Birth Weight:** The percentage of low birth weight births increased slightly from 9.2% in 1995-7 to 9.6% in 2001-3. If this trend continues, the percentage of LBW births in Cuyahoga County will increase to 9.8% by 2010, continuing to move away from the HP 2010 goal of 5.0%. This trend has also been seen nationwide and in the state of Ohio.

**Perinatal Mortality:** The perinatal mortality rate increased from 7.6 in 1995-7 to 8.7 in 2001-3. The rate of perinatal mortality was consistent with rates seen in Ohio and the nation when Cuyahoga County first began tracking indicators in 1995. However, recent trends show that while the perinatal mortality rate appears to be slowly declining in the state and nation, the rate has begun to rise in Cuyahoga County. If current trends continue, the perinatal mortality rate in Cuyahoga County may reach 8.9 by the year 2010.

**Ratio of Black/White Infant Mortality:** The ratio of Black to White infant mortality rates has increased from 2.4 in 1995-7 to 2.6 in 2001-3. If this trend continues, the ratio of Black to White infant mortality rates in Cuyahoga County will increase to 3.0 by 2010. This trend has also been seen at both the national and state levels.



## SUMMARY/FUTURE STEPS

### Summary

The trend toward improvement during the 1995-1997 and 2001-2003 time periods was apparent for many of the project indicators. Specifically, four have already met the Healthy People 2010 goals and an additional five are on track to meet the goals by 2010. However, substantial improvements need to occur over the rest of the decade to reach the Healthy People 2010 goals for 11 of 22 indicators that are losing ground or not progressing fast enough. Additionally, progress towards Healthy People 2010 goals could not be determined for two indicators due to no Healthy People goal being established (births among 10-14 year olds) and not having enough data to establish a trend (immunization rates).

County level data became available for 16 of the 22 indicators near the completion of the report and are not included in the trend analyses. However, the table below provides the 2005 county level data for these indicators and comments whether this most recent data is higher, lower, or consistent with the trends in the report.

Indicator	2005 County Data	Comparison to Trend in Current Report
Infant Mortality Rate	10.1	Higher
Neonatal Mortality Rate	7.9	Higher
Perinatal Mortality Rate	9.9	Higher
Percentage of Low Birthweight Births	9.9	Higher
Percentage of Women who Smoke during Pregnancy	14.7	Higher
Child Mortality Rate among 1-14 Year Olds	20.6	Higher
Percentage of Very Low Birthweight Births Born at Level III Facilities	84.8	Lower*
Percent of Women Receiving Prenatal Care in First Trimester	84.3	Lower*
Disparity (Ratio) of Black to White Infant Mortality	2.9	Consistent
Disparity (Ratio) of Black to White Perinatal Mortality	2.3	Consistent
Percentage of Very Low Birthweight Births	2.1	Consistent
Premature Birth Rate	13.4	Consistent
Rates of Births Among 10-14 Year Olds	0.9	Consistent
Rates of Births Among 15-17 Year Olds	22.2	Consistent
Percentage of Children with Elevated Blood Lead Levels	6.9	Consistent
Rates of Births Among 10-14 Year Olds due to Motor Vehicle Crashes	1.6	Consistent
Postneonatal Mortality Rate	2.2	Lower

\*Going in the wrong direction.

Among these sixteen indicators, eight are consistent with the trends established in the report. For the remaining indicators, the 2005 data suggests that the rates are getting worse than estimated in the report (except for improvement in the postneonatal mortality rate). Further data analyses are needed to determine whether this is due to random fluctuation, or represents a bigger challenge than what has been forecasted in the report.

### Future Steps

Additional data analyses will be conducted to continue the assessment of progress towards the Healthy People 2010 goals. Furthermore it is important to take a closer look at those indicators that are losing ground or progressing too slowly towards the Healthy People goals to determine what steps can be taken to alter the current trends. This will assist the Cuyahoga County CFHS Program in identifying priority areas for the next planning period in order to impact these indicators. Additionally, this information will be used to enhance and/or develop new programming aimed at improving the health and outcomes associated with the priority areas.

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Funding for this assessment is provided by the  
Cuyahoga County Child and Family Health Services Project  
*Administered by the Cuyahoga County Board of Health*  
Through a grant from the Ohio Department of Health.

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