

Maternal and Infant Health Monthly Surveillance Report
Hamilton County
June 2009

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Introduction

The series of Maternal and Infant Health Monthly Surveillance Reports is part of a county-wide initiative to improve maternal and infant health and reduce infant mortality. In order to make effective actions that improve the health and safety of infants in the community, it is essential to identify, describe, and monitor the problem and the populations at risk. This report characterizes the current status of infant mortality and select risk factors in Hamilton County.

Highlights of this report:

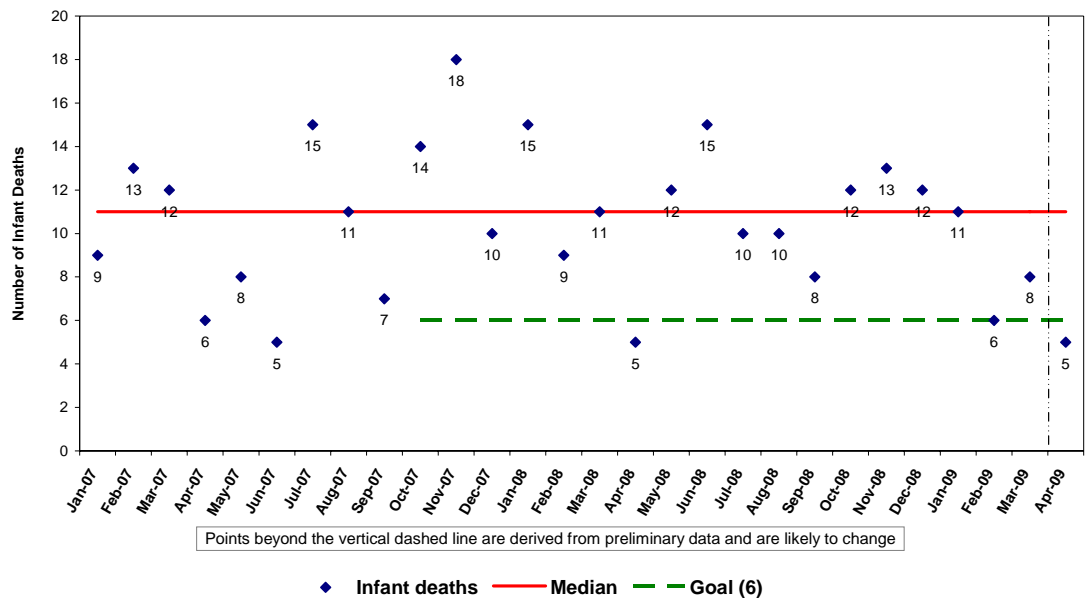
Monthly surveillance

- Number of infant deaths by month
- Current monthly infant mortality rate
- Current monthly neonatal mortality rate
- Current monthly preterm birth rate

Number of Infant Deaths

The following run chart method is used to monitor the number of infant deaths each month. By using this method, it is readily seen whether the number of infant deaths each month is higher or lower than the median and whether the number is lower than the goal. The number of infant deaths in February and March 2009 remained below the median for 2007-2009 (Figure 1).

Figure 1. Infant Mortality Run Chart, Hamilton County 2007-2009*



Data Source: Ohio Department of Health
*Data for 2008 and 2009 are preliminary

March 2009
Infant Deaths:

8

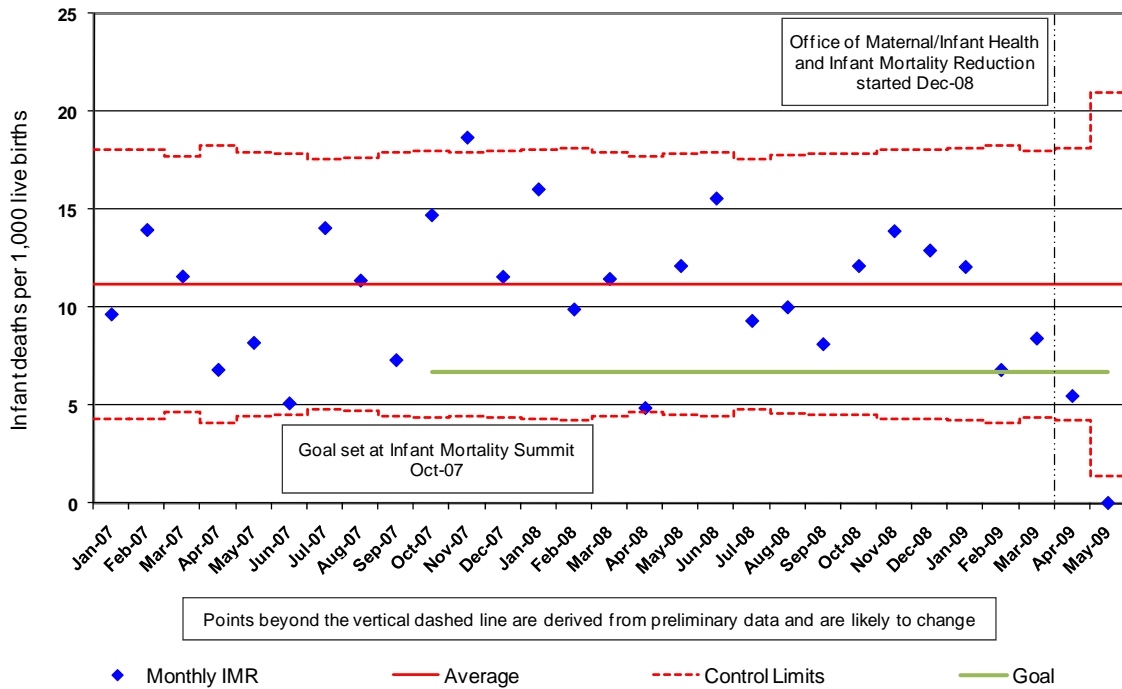
Infant Mortality Rates

The control chart method with upper and lower control limits used here for mortality rates and preterm birth rates is particularly helpful in identifying outliers, or months where the rate is especially high or low. Like the run chart, it also displays whether the monthly rate is below the average rate or below the goal.

In March 2009 the Infant Mortality Rate & Neonatal Mortality Rate was below the average rate for 2007-2009.

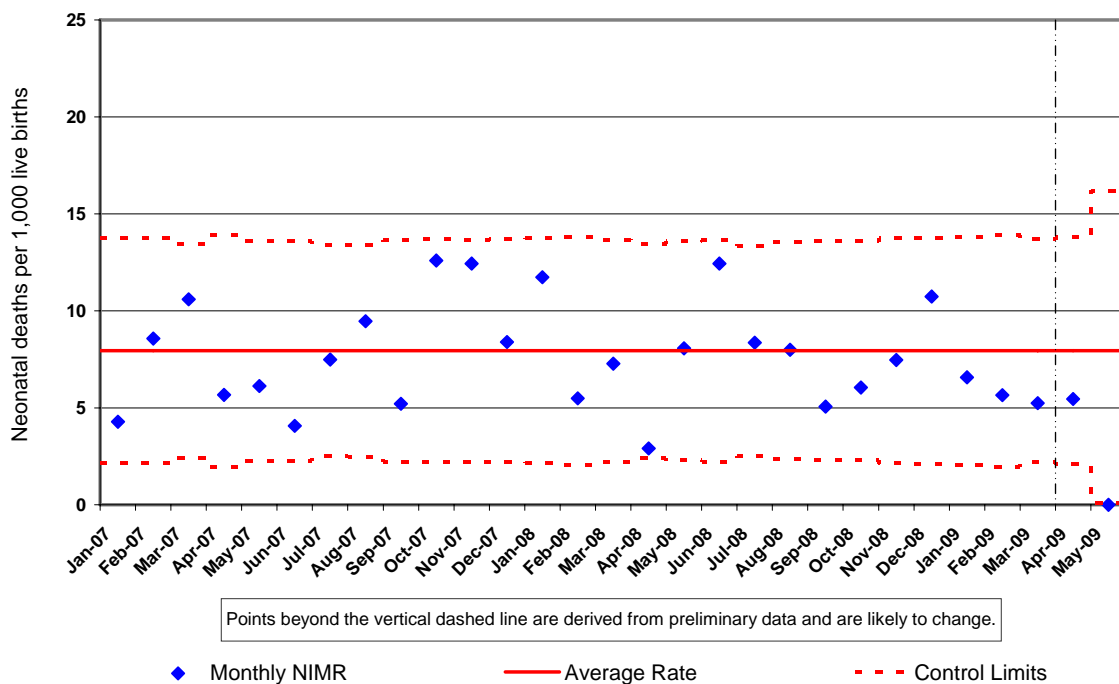
In February and March 2009 the Infant Mortality Rate – number of infants less than one year who died per 1,000 live births – was below the average rate for 2007-2009 (Figure 2). The Neonatal Mortality Rate, number of infants less than 28 days who died per 1,000 live births, was also below the average rate for 2007-2009 in February and March 2009 (Figure 3).

Figure 2. Infant Mortality Rate Control Chart, Hamilton County 2007-2009*



Data Source: Ohio Department of Health
 * 2008 and 2009 data are preliminary

Figure 3. Neonatal Mortality Rate Control Chart, Hamilton County 2007-2009*



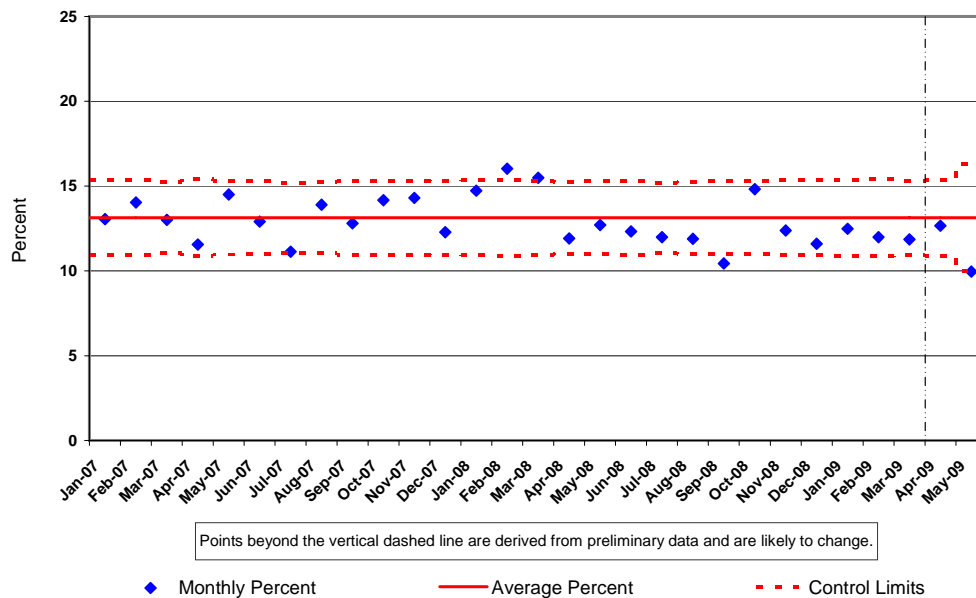
Data Source: Ohio Department of Health
 *Data for 2008 and 2009 are preliminary

Preterm Birth Rates

In March 2009 the preterm birth rate was below the average rate for 2007-2009.

As noted in the February and March Surveillance reports, the percentage of births in Hamilton County that were preterm each month declined significantly over 2008. The preterm birth rate, number of infants born before 37 weeks gestation divided by the number of live births, remained below the average for 2007-2009 in January, February and March 2009 (Figure 4). A complimentary analysis of fetal deaths may provide further insight regarding the decline in preterm births.

Figure 4. Preterm Birth Rate Control Chart, Hamilton County 2007-2009*



Data Source: Ohio Department of Health
 *Data for 2008 and 2009 are preliminary

Thank you to John Paulson at the Ohio Department of Health for providing data for this report. Many thanks to the Child Policy Research Center at Cincinnati Children’s Hospital Medical Center for ongoing quality improvement support. And thank you to the HCMISS Data Work Group for reviewing this report.

**With questions or comments, please contact:
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