

# Lorain County Child and Family Health Services: Community Health Indicators 2009 Update



Public Services Institute /  
Joint Center for Policy Research  
Lorain County Community College  
Jeffrey K. Lange, Ph.D.  
September, 2009



Elyria City  
Health District



LORAIN CITY  
HEALTH DEPARTMENT

# NATIONAL, STATE AND LOCAL FERTILITY

- In **1960**, the U.S. birth rate was **23.7 per 1,000** in the total population. At that time, the death rate was **9.5 per 1,000**. This yielded a net natural increase of 14.2 per thousand or **1.4% annual growth** (excluding migration).
- By **2000**, the birth rate had dropped to **14.3 per 1,000** and the death rate to **8.5 per 1,000**, yielding a net **annual natural increase of 0.6%**. Some Western European nations are at Zero Population Growth (Italy, Spain, Russia, more).
- By **2006**, **Ohio's** birth rate was **13.1 per 1,000** and the **fertility rate** (considering women of childbearing age only) was **64.7 per 1,000** versus 68.5 per 1,000 in the overall U.S. population.

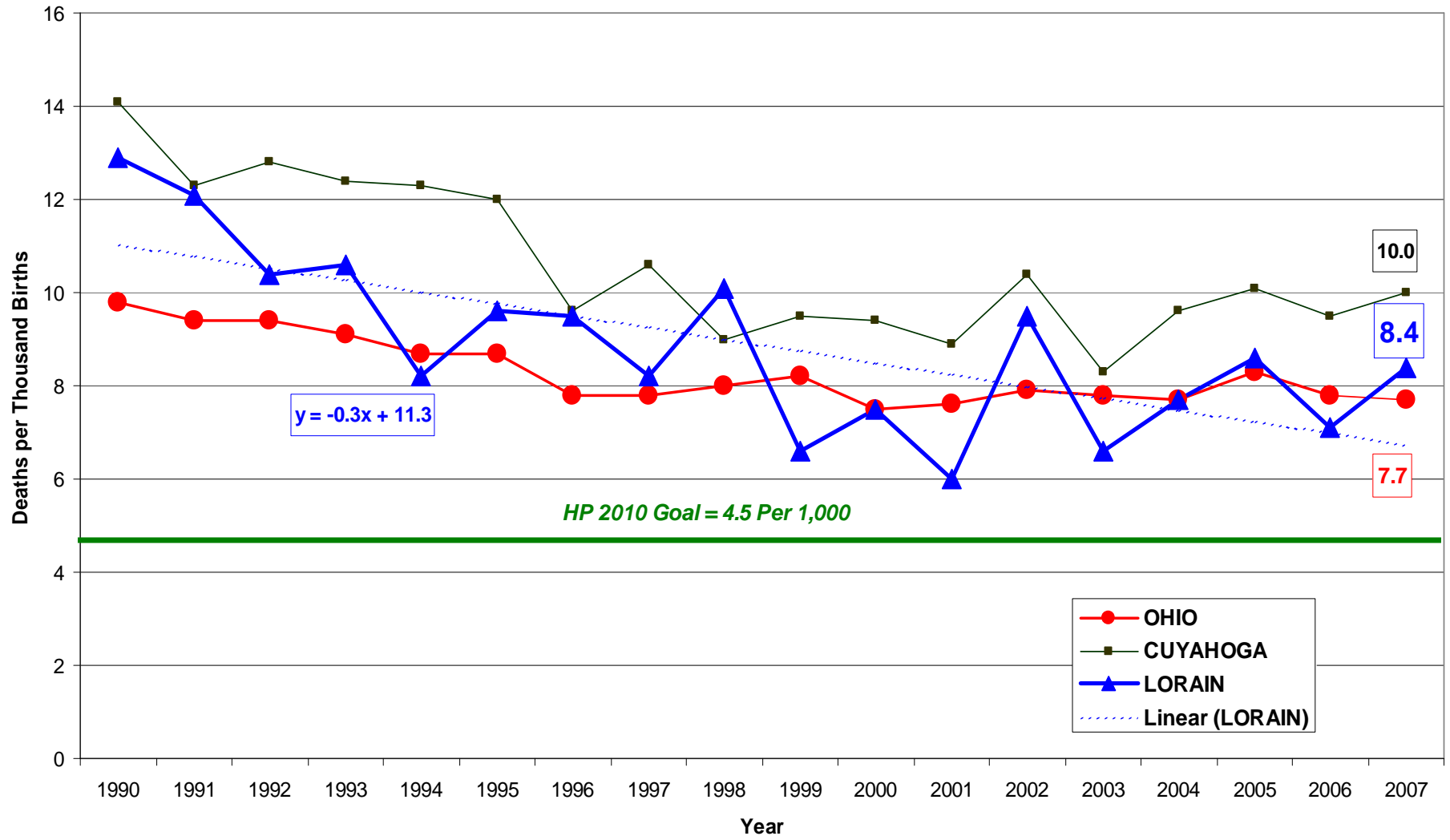
# INFANT MORTALITY #1

- Worldwide (as of 2005), the highest infant mortality rate was registered in Angola, at **186 per 1,000** children under age 1 year (18.6%). An unlucky thirteen nations (12 in Africa; 1 in Asia) have rates at or above 100/1,000 – 10% or more.
- Japan's rate was **2.8 per 1,000** (~ 0.3%), while France came in at 3.5 and Germany at 4.2 per 1,000, respectively. The median national infant mortality rate worldwide was **20.8 per 1,000** (~ 2%).

# INFANT MORTALITY #2

- The **U.S.** infant mortality rate in 2007 was **6.4 per 1,000**. We are approximately at the 85<sup>th</sup> percentile level (population-based) among nations. This means about 15% of the world's population lives where the infant mortality is more favorable than in the US.
- **Ohio's** 2007 infant mortality rate – **7.7 per 1,000** -- exceeded that of the U.S. generally, while **Lorain County** most recently showed a rate of **8.4 per 1,000**. This is actually **higher** than the 2006 level of **7.1**, but more in line with the 2005 figure of **8.6**.

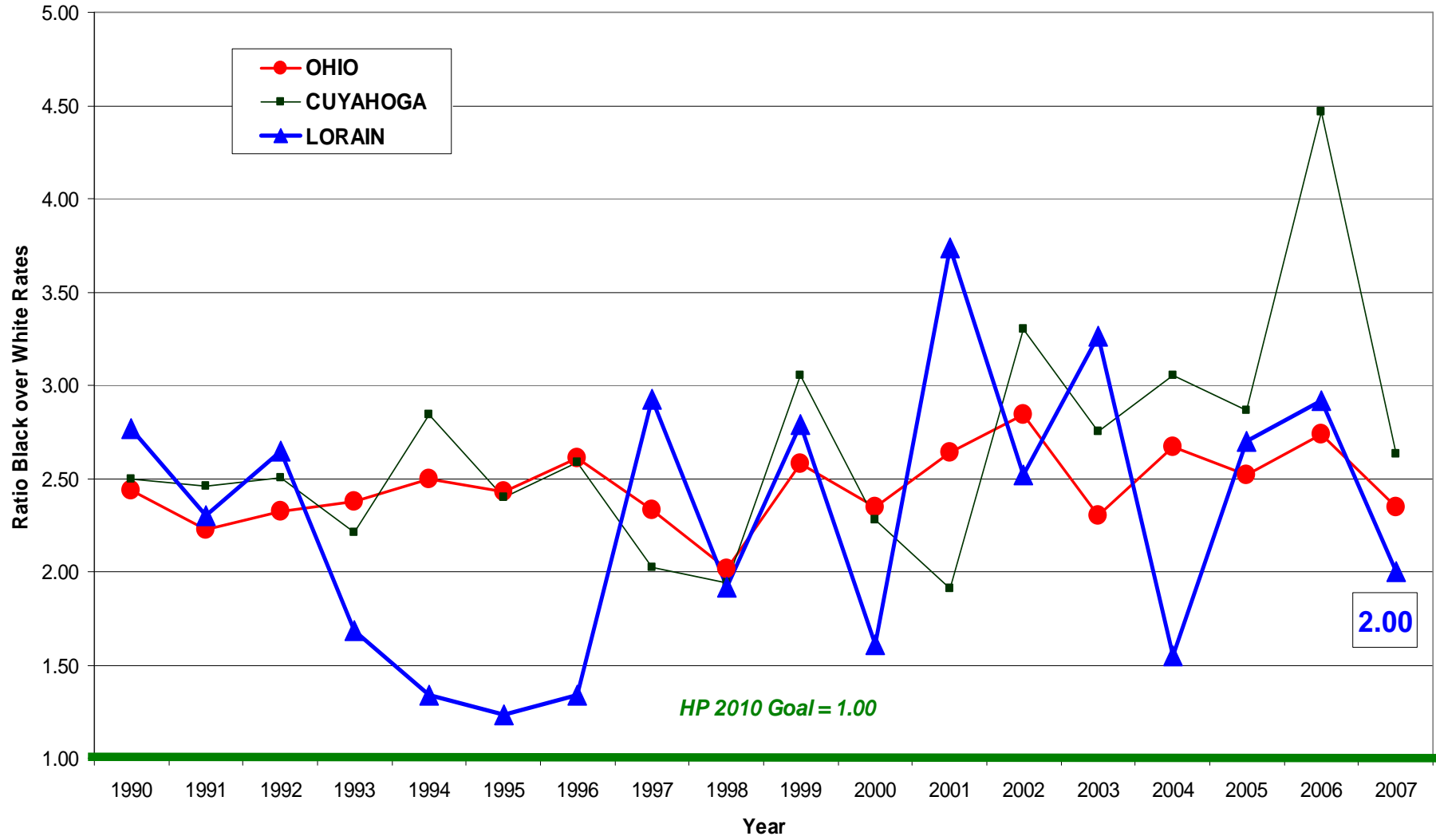
# Infant Mortality Rate



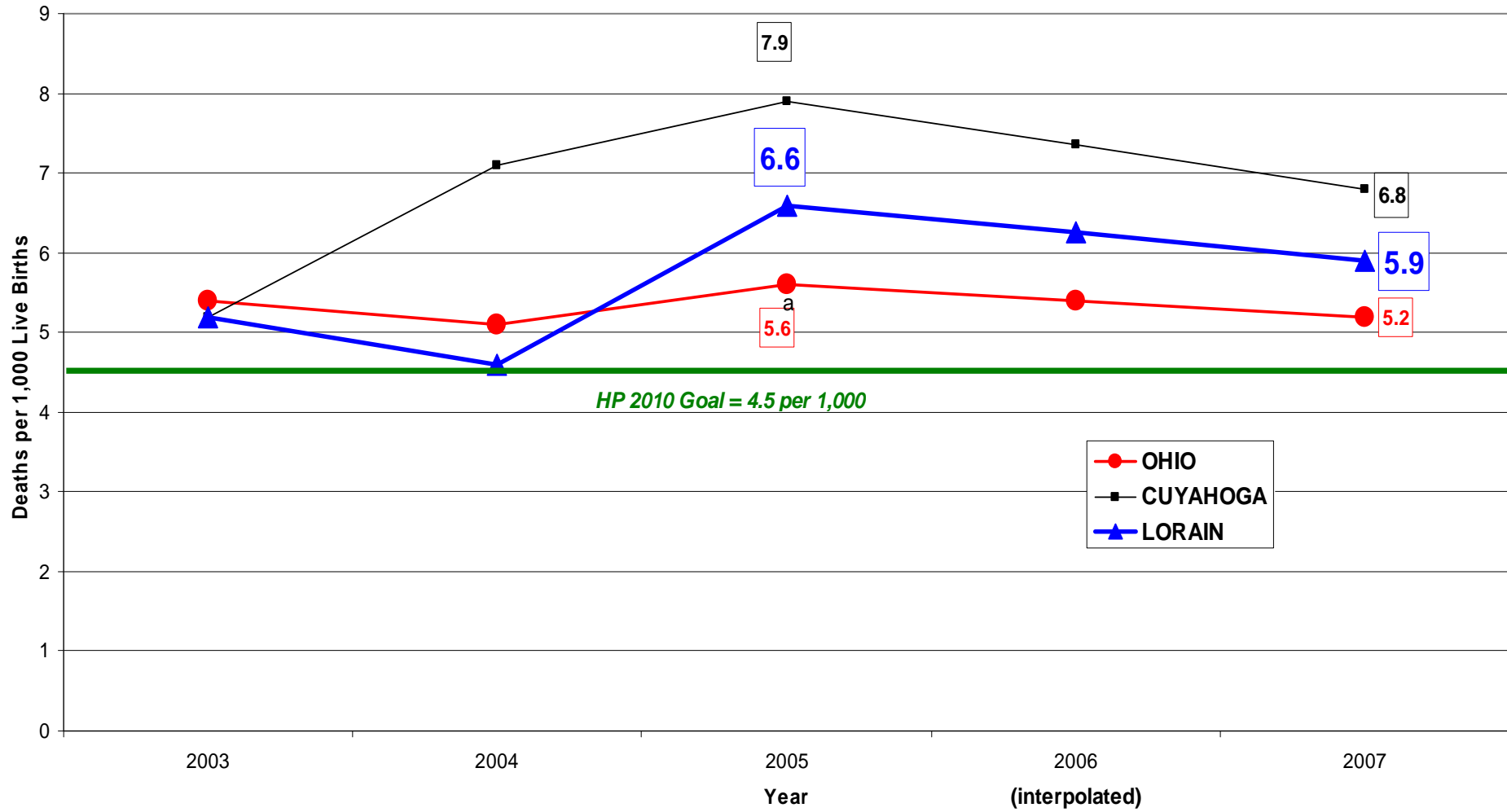
# INFANT MORTALITY #3

- Following a persistent national pattern, the 2007 black infant mortality rate in **Lorain County** was double the rate among the County's white population (though down from the ratio of **2.9** a year before).
- For 2007, the black IMR was **15.0** and the white **7.5** per 1,000, respectively. This was achieved largely because the white IMR rose from 5.8 the year before, while the black IMR dropped from 16.9.
- Put in some historical context, the black IMR in 1960 was 44.3 per 1,000 and the white 22.9 per 1,000, for a ratio of **1.9**.

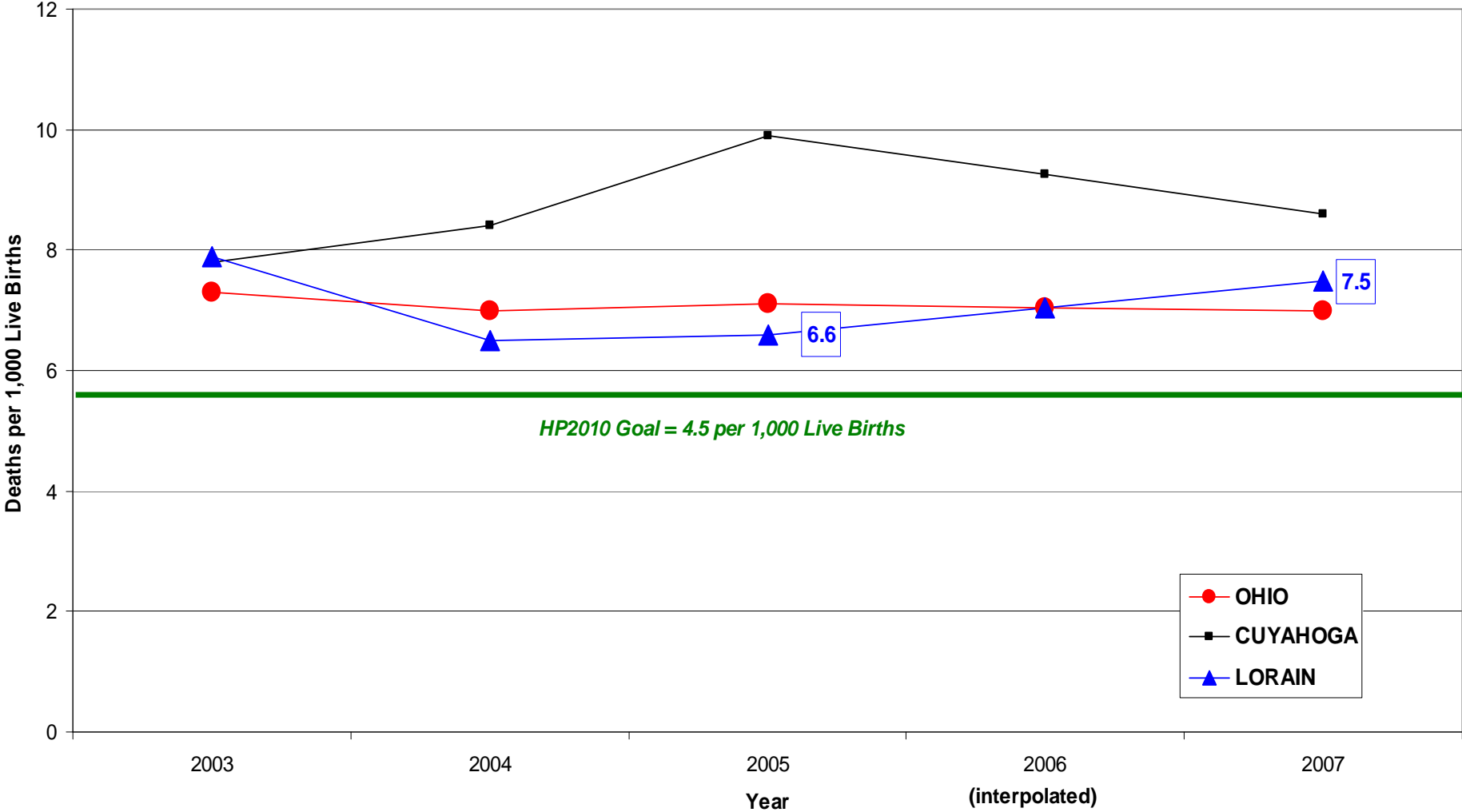
### Black to White Ratio Infant Mortality Rate



# Neonatal Mortality Rate Deaths under 28 Days of Age

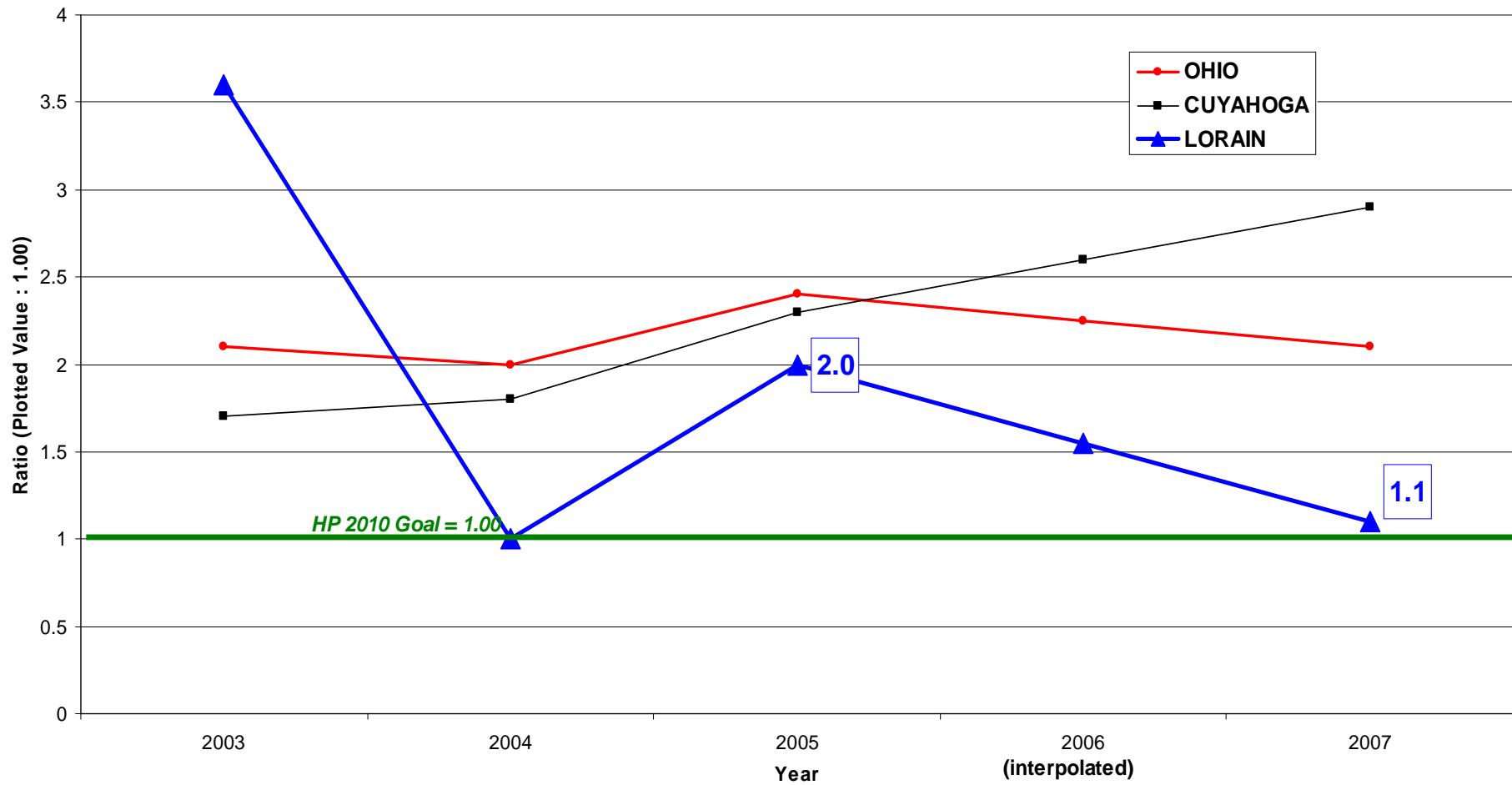


### Perinatal Mortality Rate\*



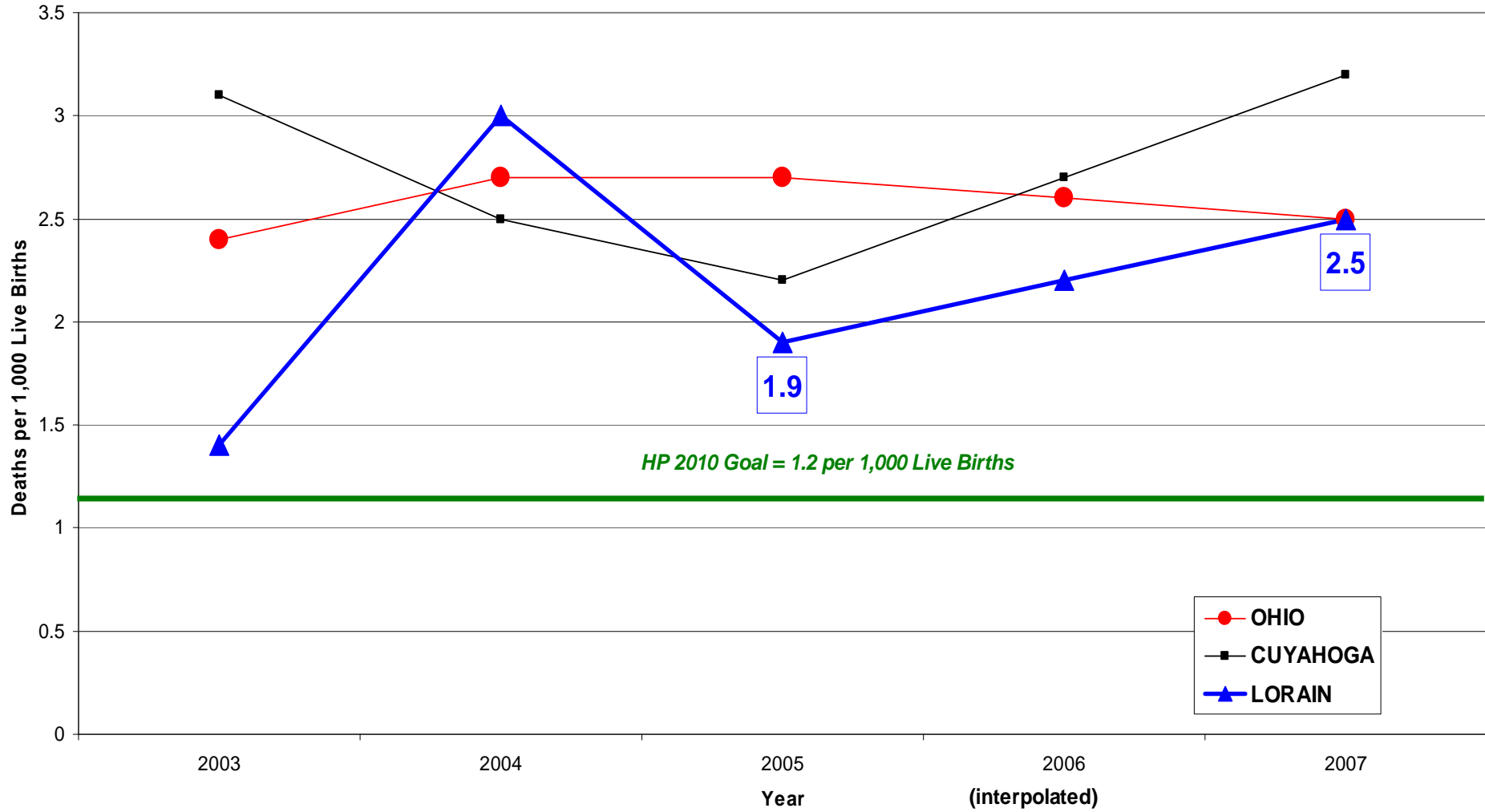
\* Number of late fetal deaths (28 wks+ gestation) plus infant deaths within 7 days of birth per 1,000 live births plus late fetal deaths.

### Ratio of Black to White Perinatal Mortality Rates \*



\* Number of late fetal deaths (28 wks+ gestation) plus infant deaths within 7 days of birth per 1,000 live births plus late fetal deaths.

### Postneonatal Mortality Rate\*

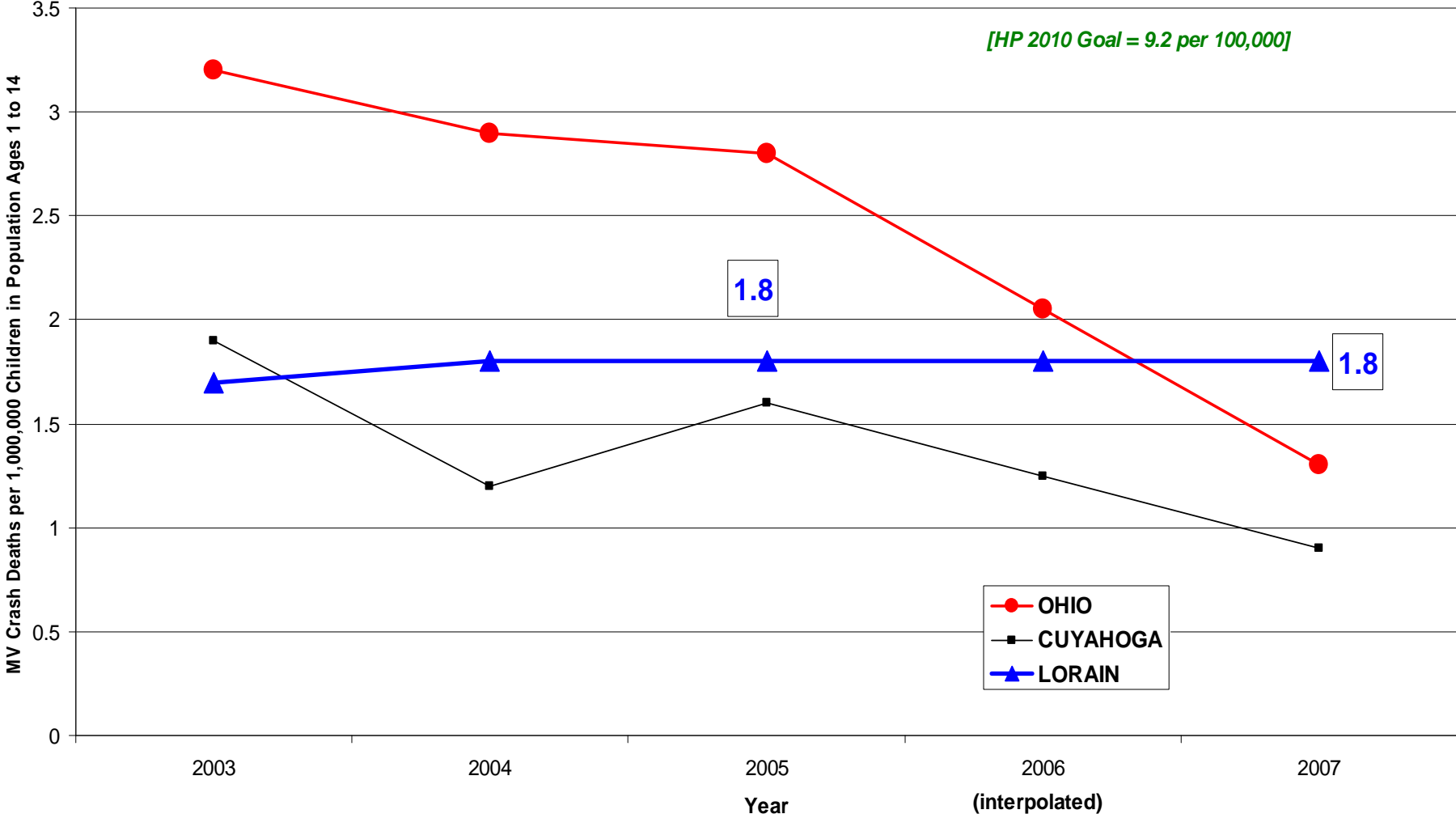


\* Number of deaths 28 days to 11 months of age per 1,000 live births.

# CHILD MORTALITY

- Lorain County, Cuyahoga County, and the State of Ohio are well below the minimum HP2010 goal for motor vehicle deaths among children ages 1 through 14 (9.2 per 100,000). Lorain County registered 1.8 per 100,000 in both 2005 and 2007, suggesting this measure has reached a plateau.

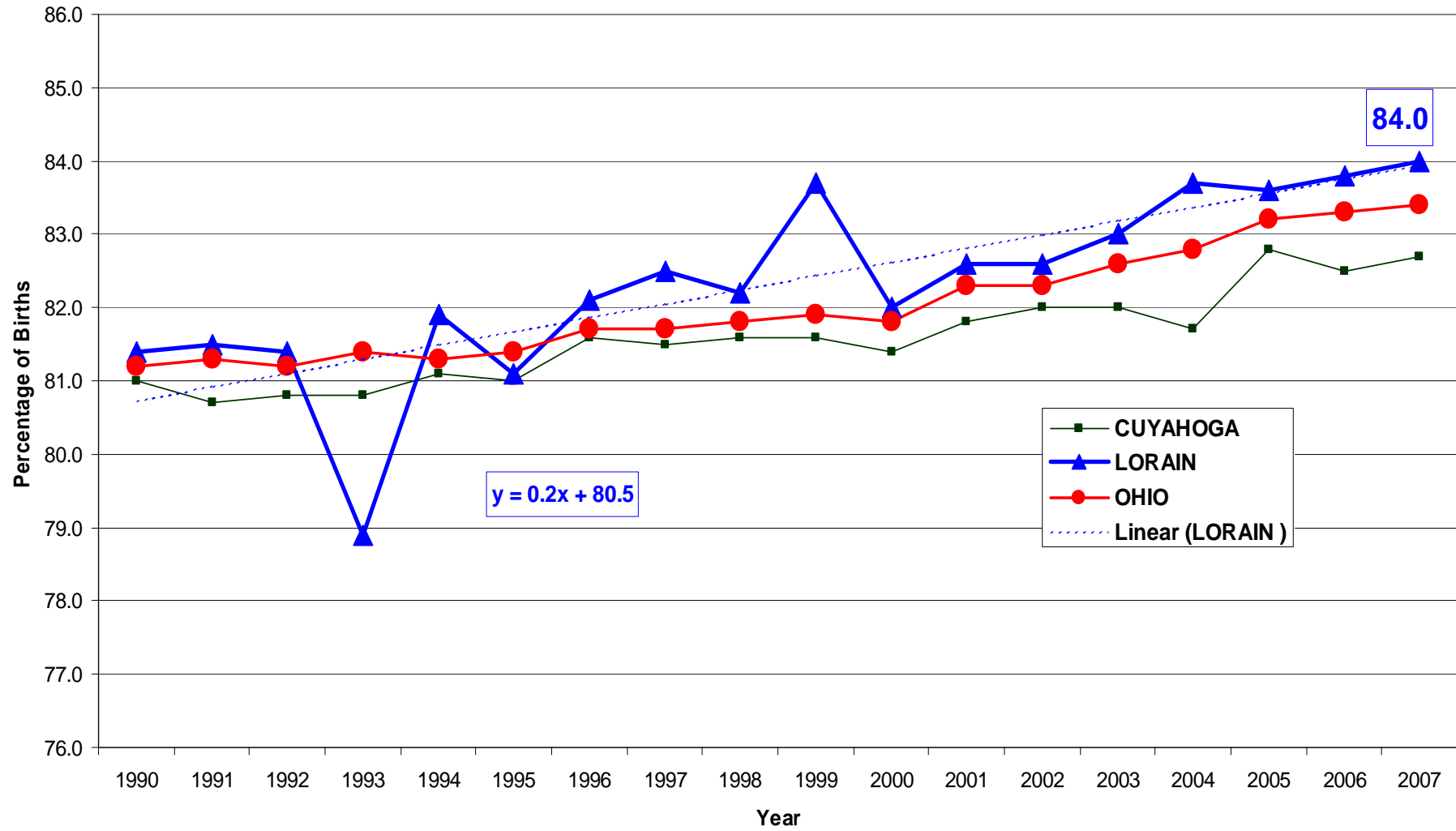
# Child Motor Vehicle Crash Death Rates



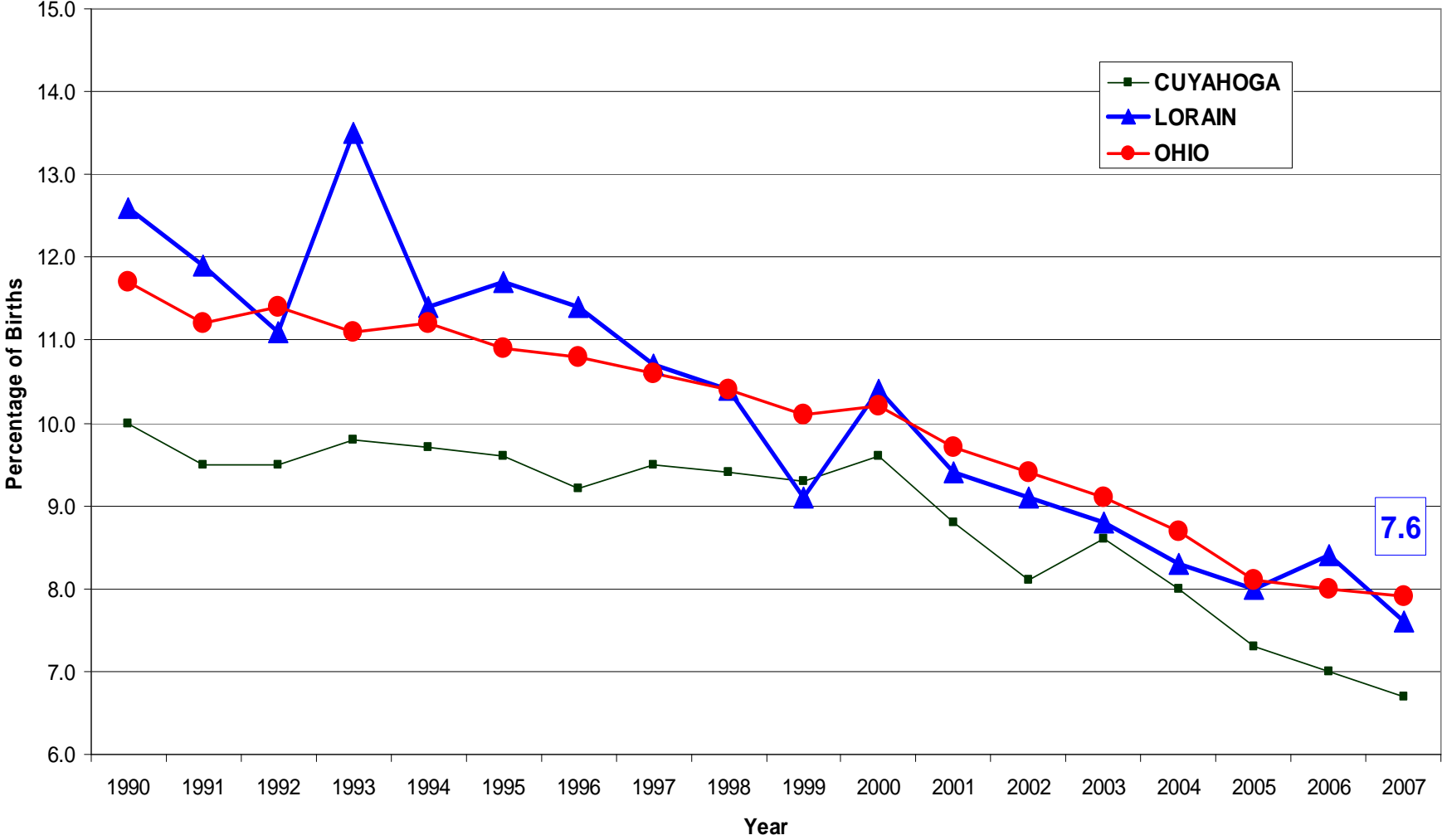
# BIRTHWEIGHT

- Birthweights within the “normal” range continue to rise steadily in Lorain County and the rest of Ohio. But **low** birthweights were **also** on the rise – at 8.4% of Lorain County births in 2007 – and moving **away** (at a rate of 0.1% a year) from the HP2010 benchmark.
- High birthweights – 4,000 grams and over – constituted a diminishing share of Lorain County’s and Ohio’s births, respectively.
- Lorain County was previously moving toward the HP2010 goal of having 90% of very low birthweight infants delivered at Level 3 medical facilities. The most recent figure is adverse.
- Premature births, which may have peaked about 2002, are now moving downward – recently to 12.7% in Lorain County. This remains well above the national goal of 7.6% by 2010.

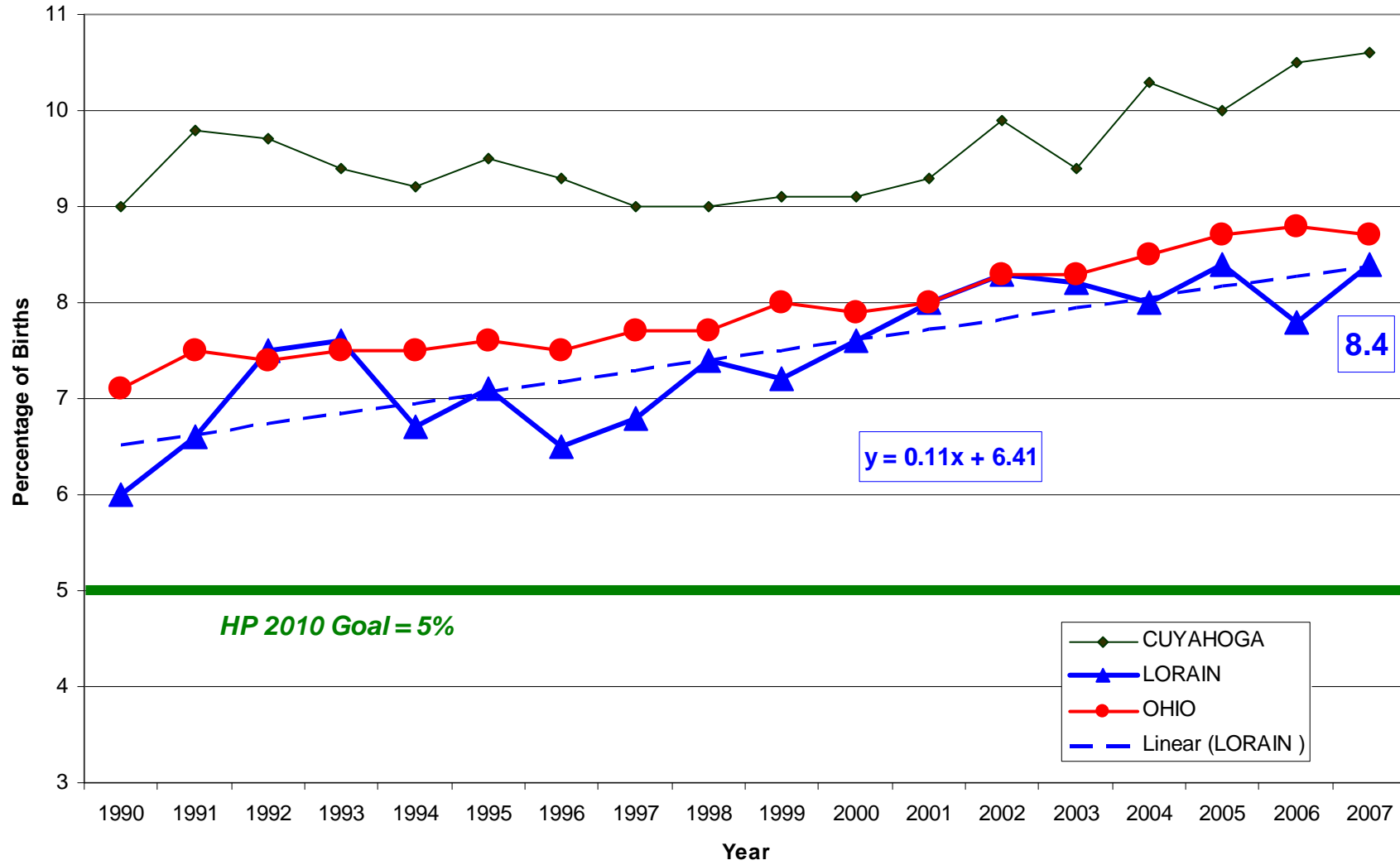
### Percentage Normal Birth Weight (2500 to 3999 grams)



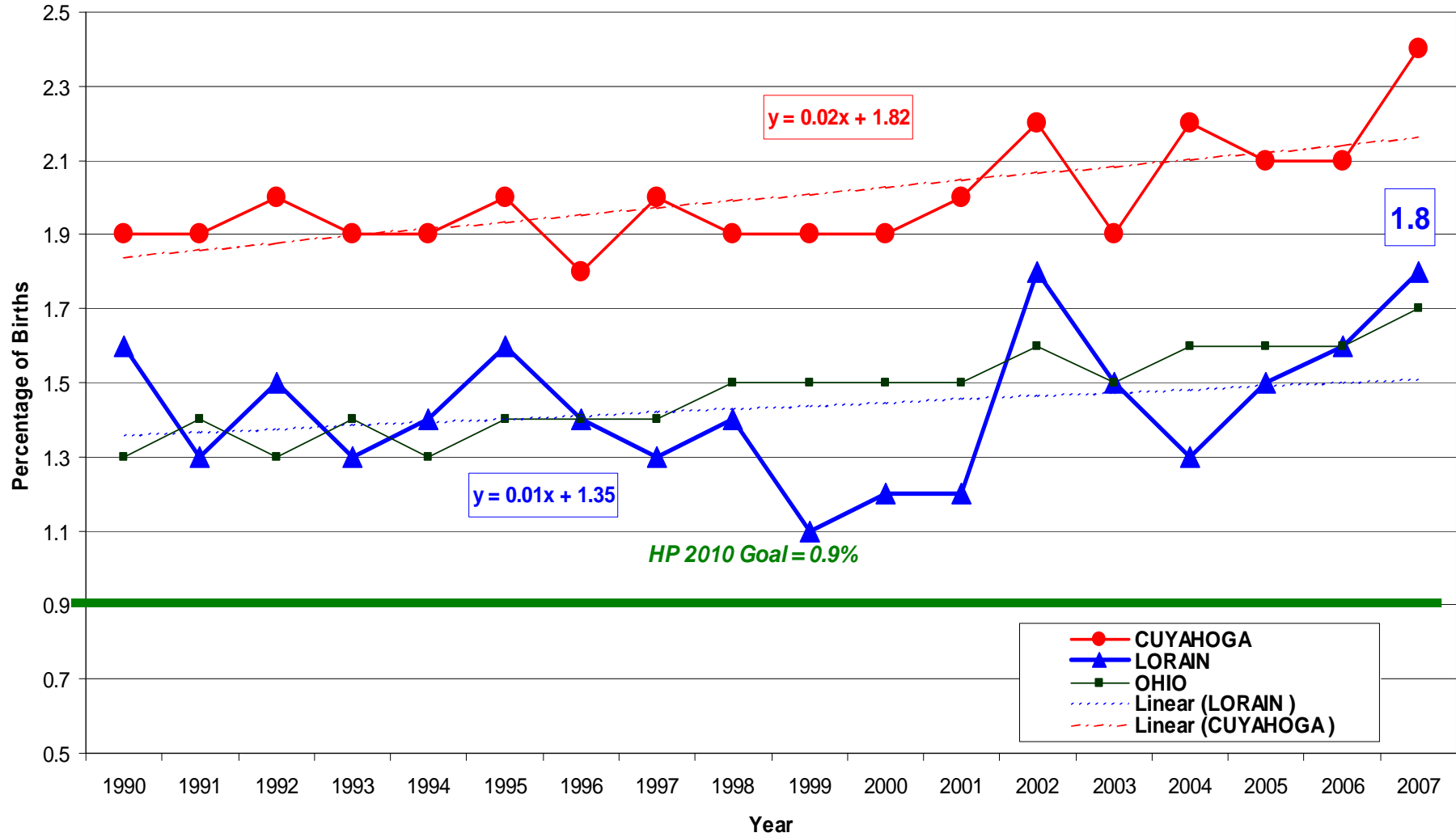
### Percentage High Birthweights 4000+ Grams



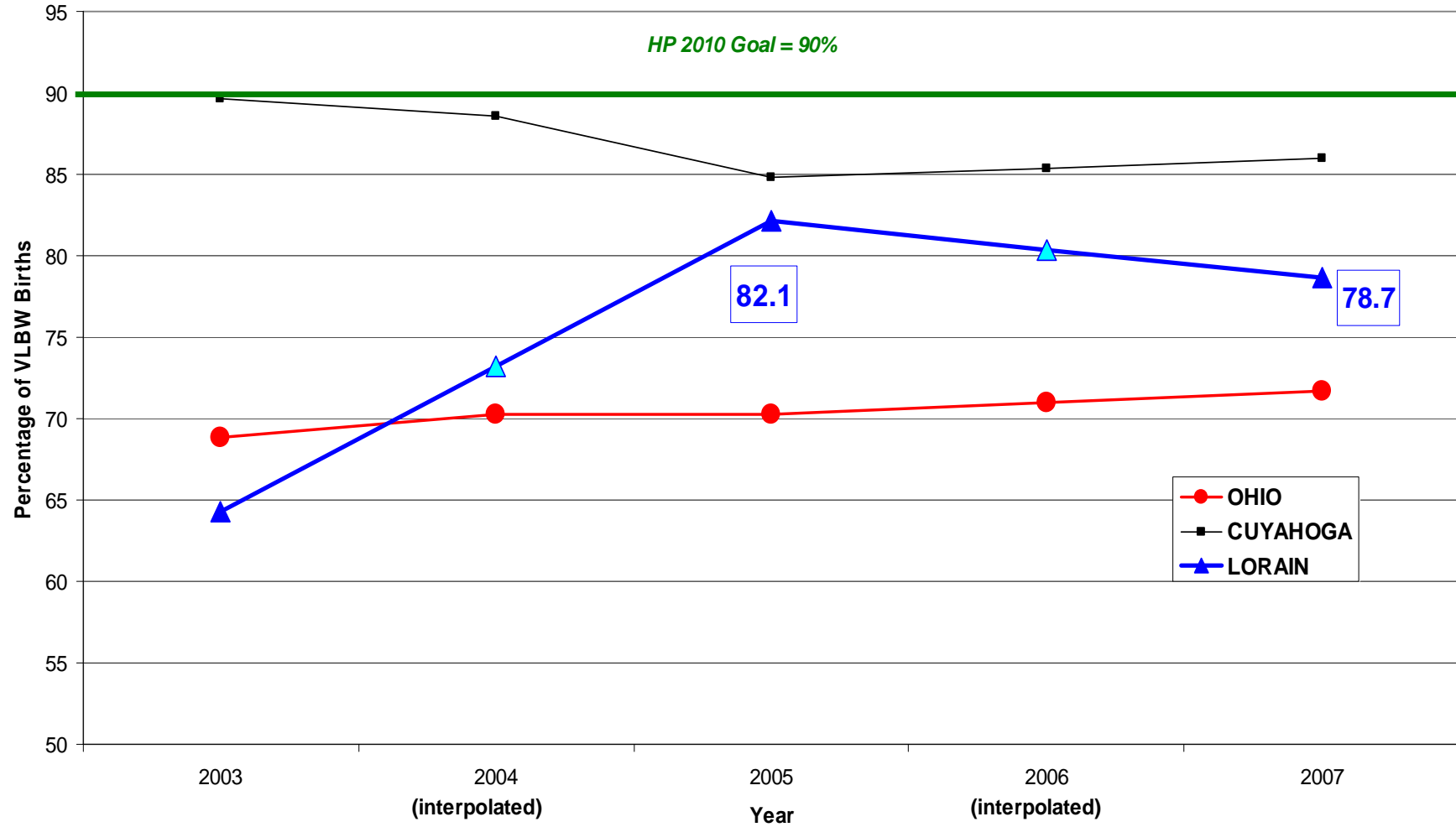
## Low Birthweights (Less than 2500 grams)



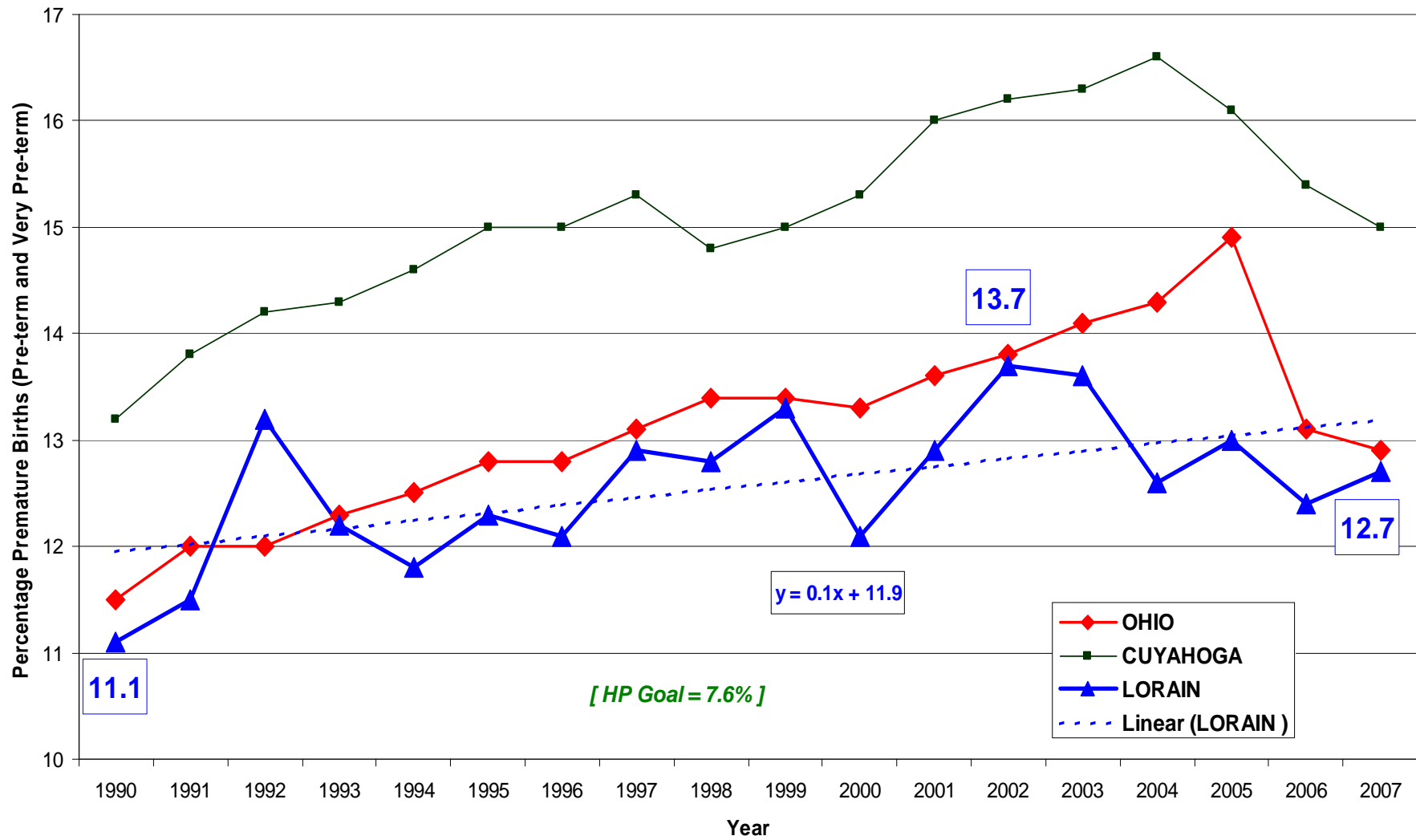
## Very Low Birthweights (Less than 1500 grams)



### VLBW Infants Delivered at Level 3 Facilities



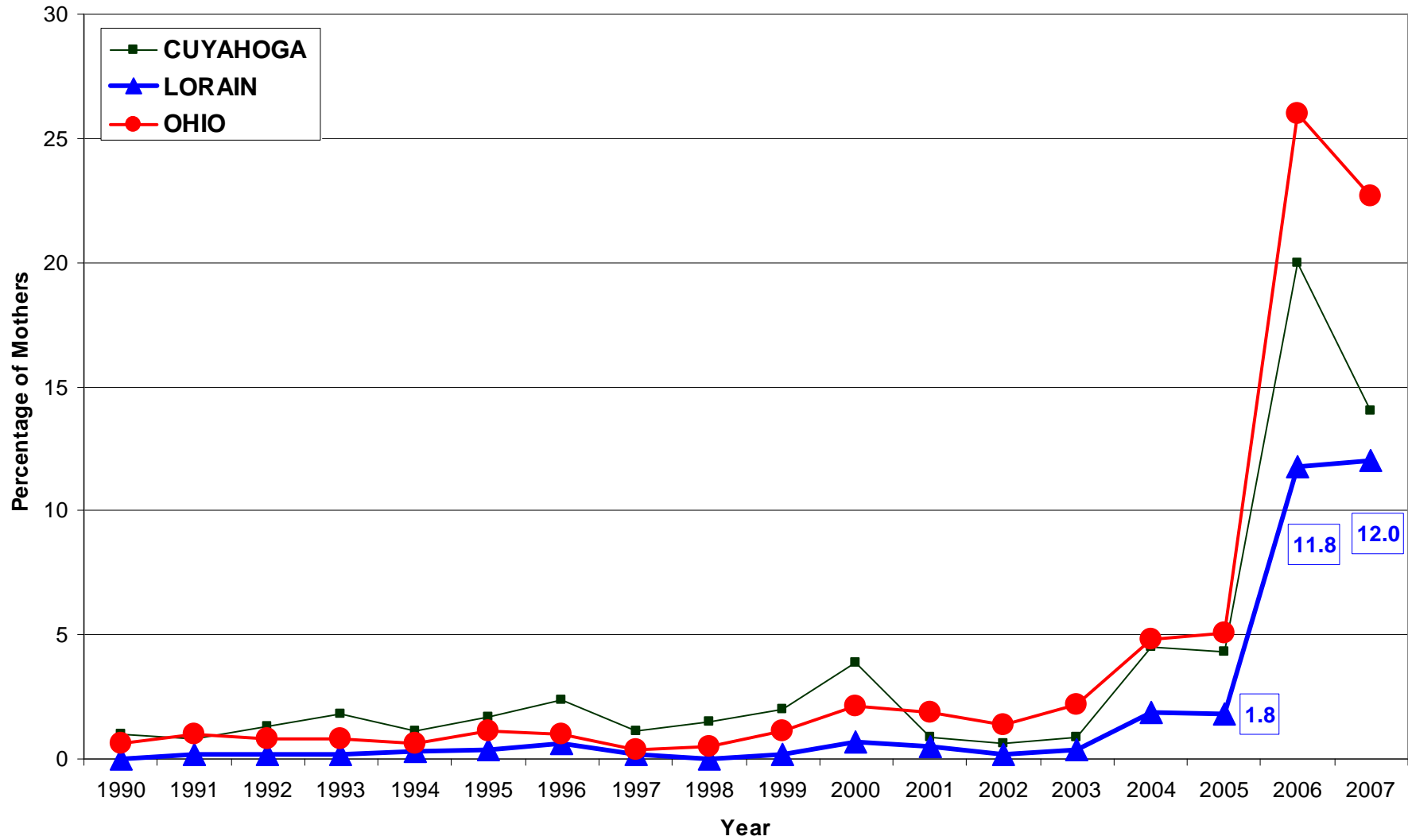
### Premature Birth Rate



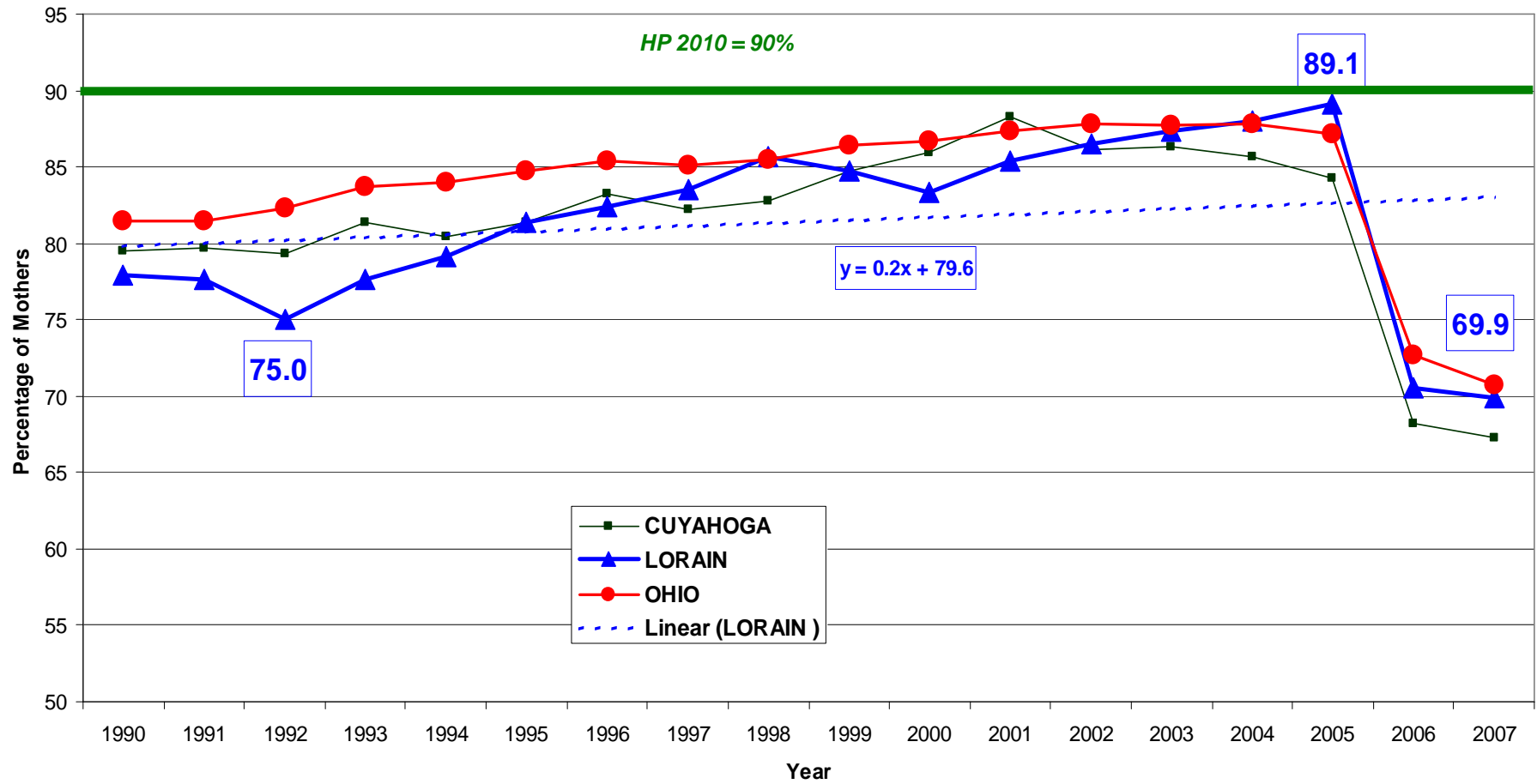
# PRENATAL CARE

- Lorain County's rating on encouraging first-trimester prenatal care edged close to the HP 2010 Goal of 90% as of 2005.
- Changes in the method of recording prenatal care entry resulted in a dramatic surge in cases categorized as "Unknown."
- "Unknown" now accounts for about 12% of all births, compared with around 1-2% for previous methods of recording prenatal care entry.
- Merely eliminating "unknown" cases from the tally does not restore first-trimester entry to the level to which we have become accustomed. The earlier-entry cases may be more ambiguous.
- Recommendation: Suspend judgment of programs designed to encourage women into appropriately early prenatal care until the new procedure "settles in" and "unknown" declines to its previous levels.

# Rate of "Unknown" Entry to Prenatal Care



# First Trimester Entry to Prenatal Care



PSI

