

# Ohio Collaborative to Prevent Infant Mortality: Ohio's 2012 Infant Mortality Data

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December 5, 2013

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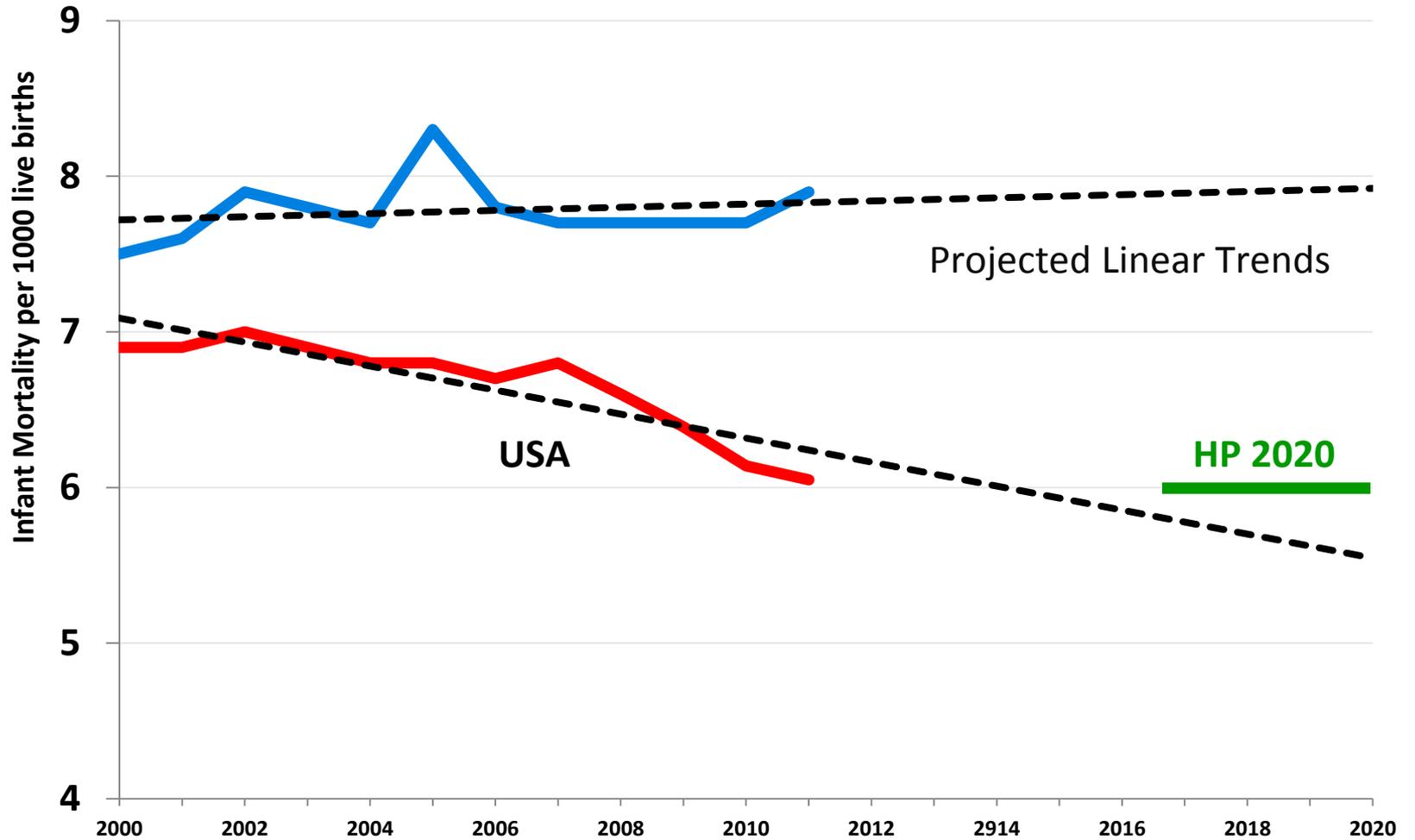
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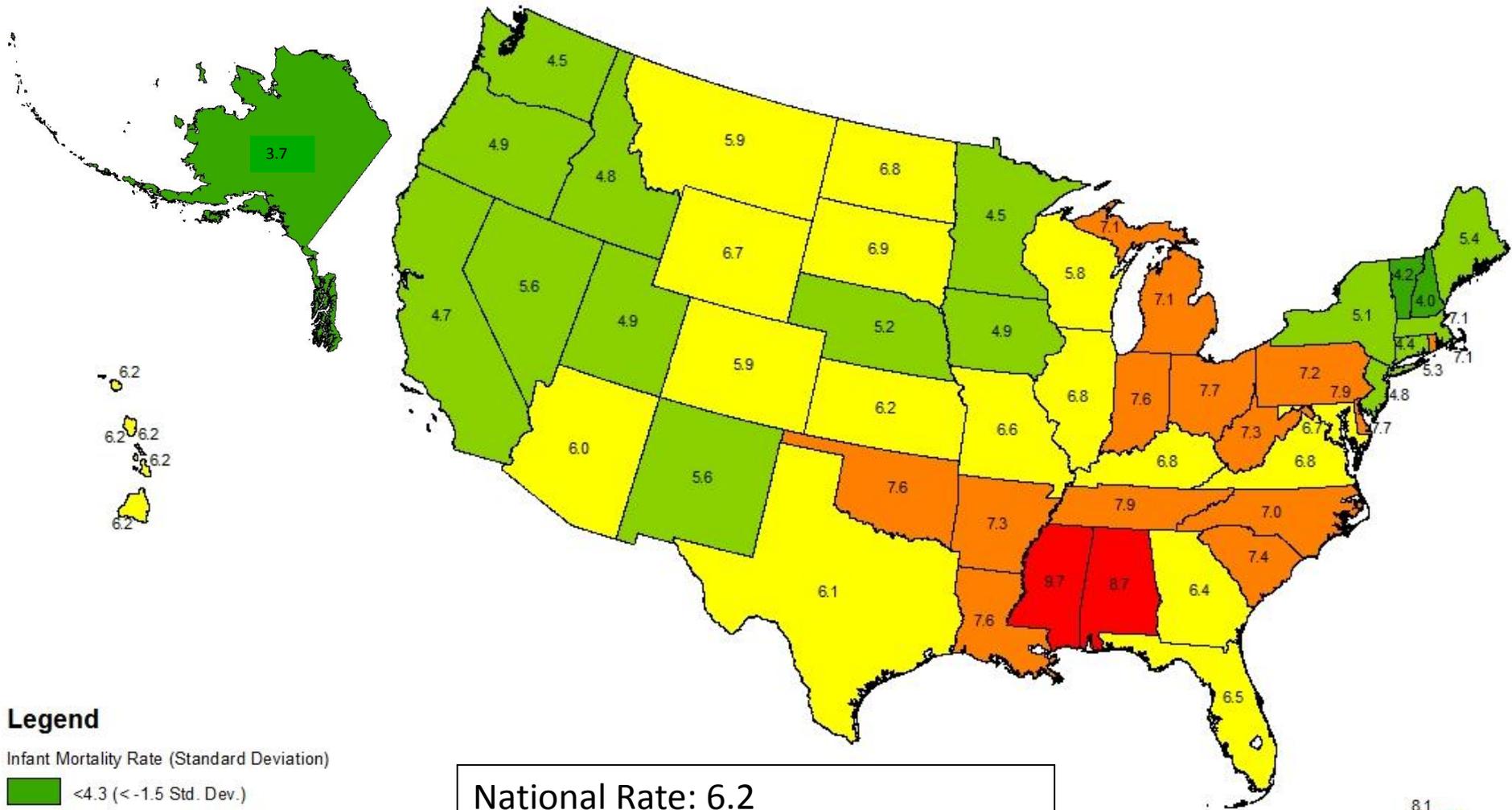
# Ten US States with most births: 2010

#	State:	# Births: 2010:	2010 Overall IMR:
1	California	510,198	4.7
2	Texas	386,118	6.1
3	New York	244,375	5.1
4	Florida	214,590	6.5
5	Illinois	165,200	6.8
6	Pennsylvania	143,321	7.2
<b>7</b>	<b>Ohio</b>	<b>139,128</b>	<b>7.7</b>
8	Georgia	133,947	6.4
9	North Carolina	122,350	7.0
10	Michigan	114,531	7.1

# IMR: Ohio c/w USA



# 2010 Overall Infant Mortality Rate, United States



**Legend**  
 Infant Mortality Rate (Standard Deviation)

- <4.3 (< -1.5 Std. Dev.)
- 4.3-5.6 (-1.5 - -0.50 Std. Dev.)
- 5.6-6.9 (-0.50 - 0.50 Std. Dev.)
- 6.9-8.2 (0.50 - 1.5 Std. Dev.)
- >8.2 (> 1.5 Std. Dev.)

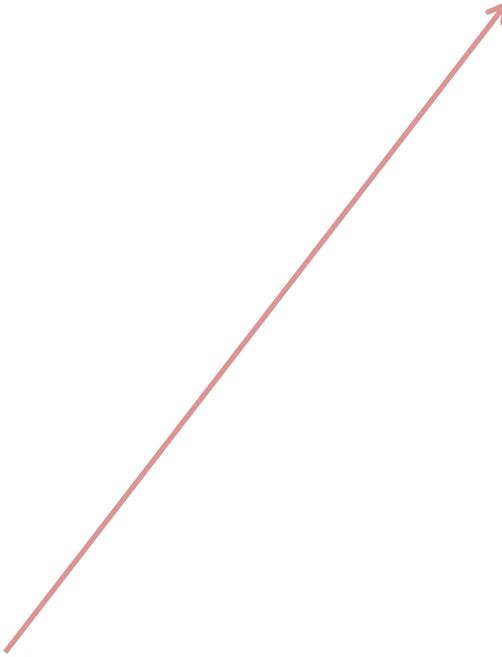
National Rate: 6.2  
 Healthy People 2020 Objective: 6.0  
**Ohio ranks #47**

Source: National Center for Health Statistics

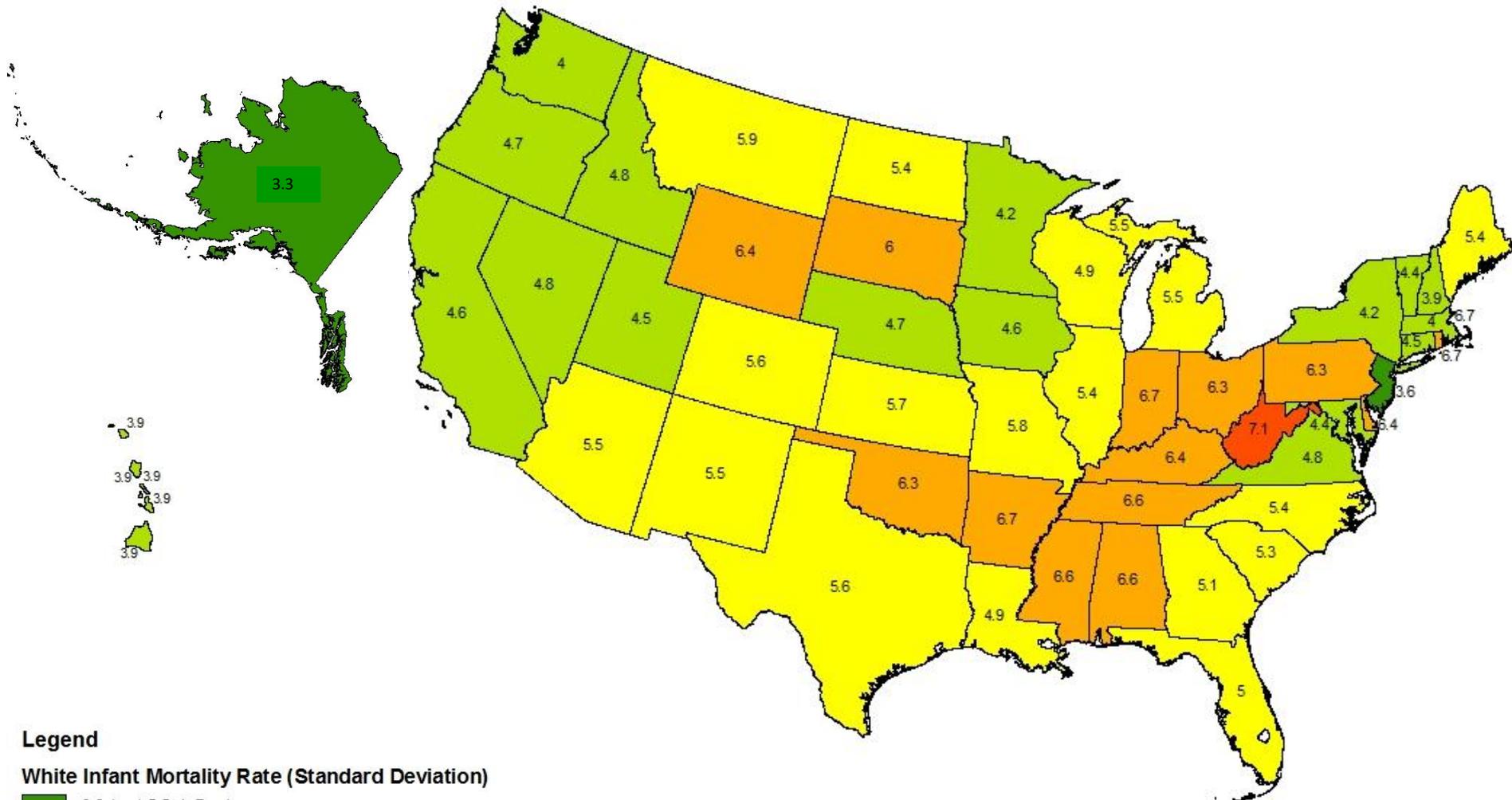
# IMR: USA 2000 c/w 2010, Overall IMR State Rankings

(worst to best)

USA/2000	6.9	USA/2010	6.15
#50: Mississippi	10.7	#50: Mississippi	9.67
#49: Alabama:	9.4	#49: Alabama	8.71
#48: Delaware	9.2	#48: Tennessee	7.93
#47: Tennessee	9.1	<b>#47: Ohio</b>	<b>7.71</b>
#46: Louisiana:	9.0	#46: Delaware	7.66
#45: S. Carolina	8.7		
#44: N. Carolina	8.6		
#43: Illinois	8.5		
#42: Oklahoma:	8.5		
#41: Georgia:	8.5		
#40: Arkansas	8.4		
#39: Michigan	8.2		
#38: N. Dakota	8.1		
#37: Hawaii	8.1		
#36: Indiana	7.8		
#35: Maryland	7.6		
<b>#34: Ohio</b>	<b>7.6</b>		



# 2010 White Infant Mortality Rate, United States



## Legend

### White Infant Mortality Rate (Standard Deviation)

- <3.8 (< -1.5 Std. Dev.)
- 3.8-4.8 (-1.5 - -0.50 Std. Dev.)
- 4.8-5.9 (-0.50 - 0.50 Std. Dev.)
- 5.9-6.9 (0.50 - 1.5 Std. Dev.)
- 6.9-8.0 (1.5 - 2.5 Std. Dev.)
- >8.0 (> 2.5 Std. Dev.)

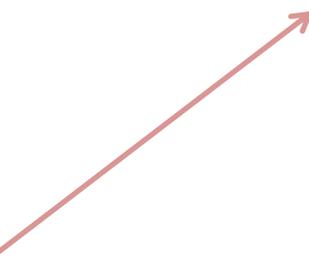
**National Rate: 5.2**  
**Ohio ranks #38**

# IMR: USA 2000 c/w 2010, **White** IMR State Rankings

(worst to best)

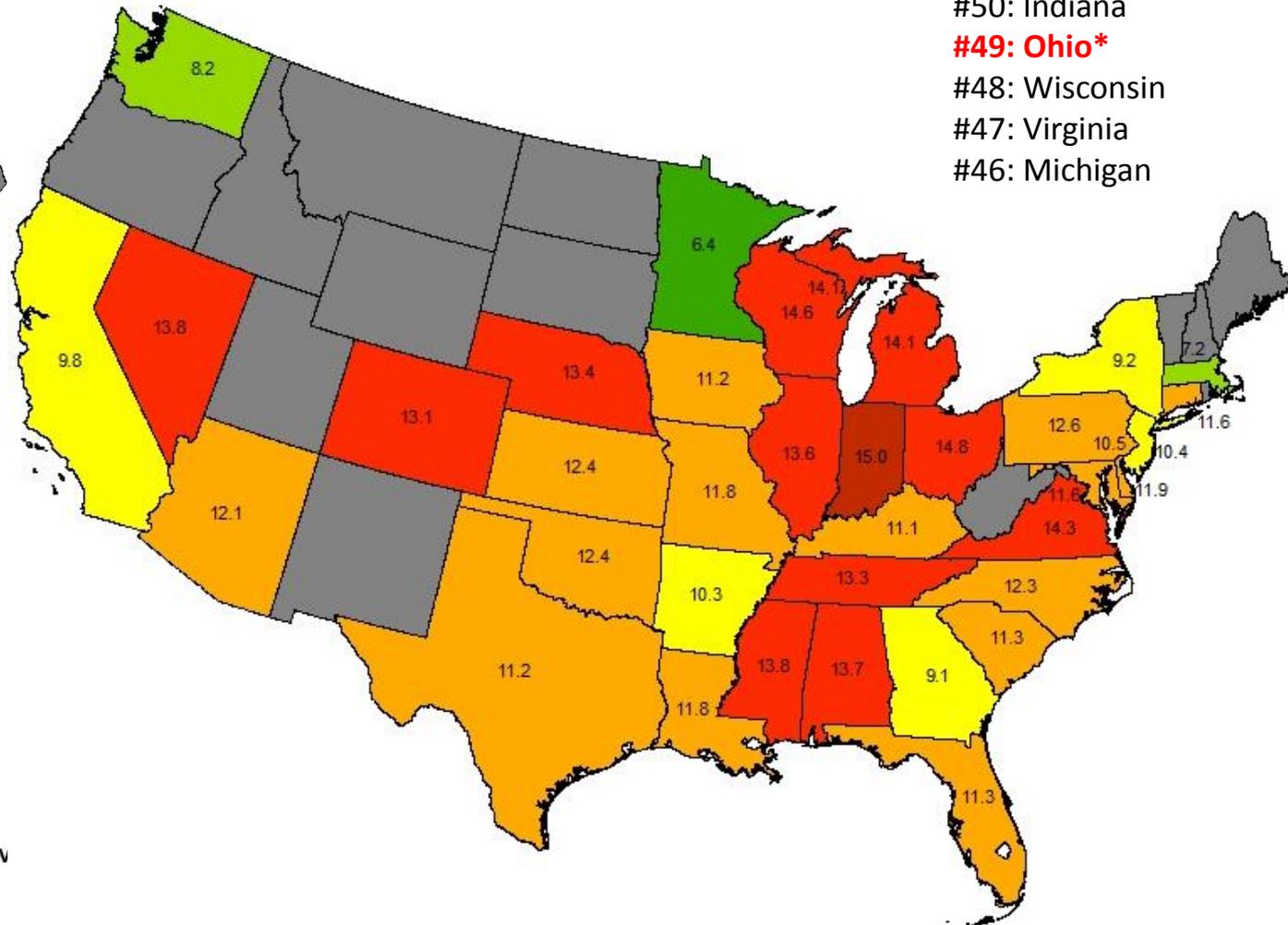
White:

<b>USA/2000</b>	<b>5.7</b>	<b>USA/2010</b>	<b>5.2</b>
#50: Delaware	7.9	#50: W. Virginia	7.08
#49: Oklahoma	7.9	#49: Rhode Island	6.67
#48: Idaho	7.5	#48: Arkansas	6.66
#47: N. Dakota	7.5	#47: Indiana	6.65
#46: W. Virginia	7.4	#46: Alabama	6.63
#45: Arkansas	7.0	#45: Mississippi	6.61
#44: Indiana	6.9	#44: Tennessee	6.55
#43: Mississippi	6.8	#43: Louisiana	6.43
#42: Tennessee	6.8	#42: Wyoming	6.37
#41: Kentucky	6.7	#41: Delaware	6.36
#40: Alabama	6.6	#40: Oklahoma	6.28
#39: Illinois	6.6	#39: Pennsylvania	6.28
#38: Wyoming	6.5	<b>#38: Ohio</b>	<b>6.27</b>
#37: Hawaii	6.5		
#36: Kansas	6.4		
#35: Nebraska	6.4		
#34: New Mexico	6.3		
<b>#33: Ohio</b>	<b>6.3</b>		



# 2010 Black Infant Mortality Rate, United States

#50: Indiana  
**#49: Ohio\***  
 #48: Wisconsin  
 #47: Virginia  
 #46: Michigan



National Rate: 11.6

## Black Infant Mortality Rate (Standard Dev)

- <6.7 (< -2.5 Std. Dev.)
- 6.7-8.7 (-2.5 - -1.5 Std. Dev.)
- 8.7-10.8 (-1.5 - -0.50 Std. Dev.)
- 10.8-12.8 (-0.50 - 0.50 Std. Dev.)
- 12.8-14.9 (0.50 - 1.5 Std. Dev.)
- >14.9 (1.5 - 1.5 Std. Dev.)
- Counts too small to calculate rate

# IMR: USA 2000 c/w 2010, **Black** IMR State Rankings

(worst to best)

Black:

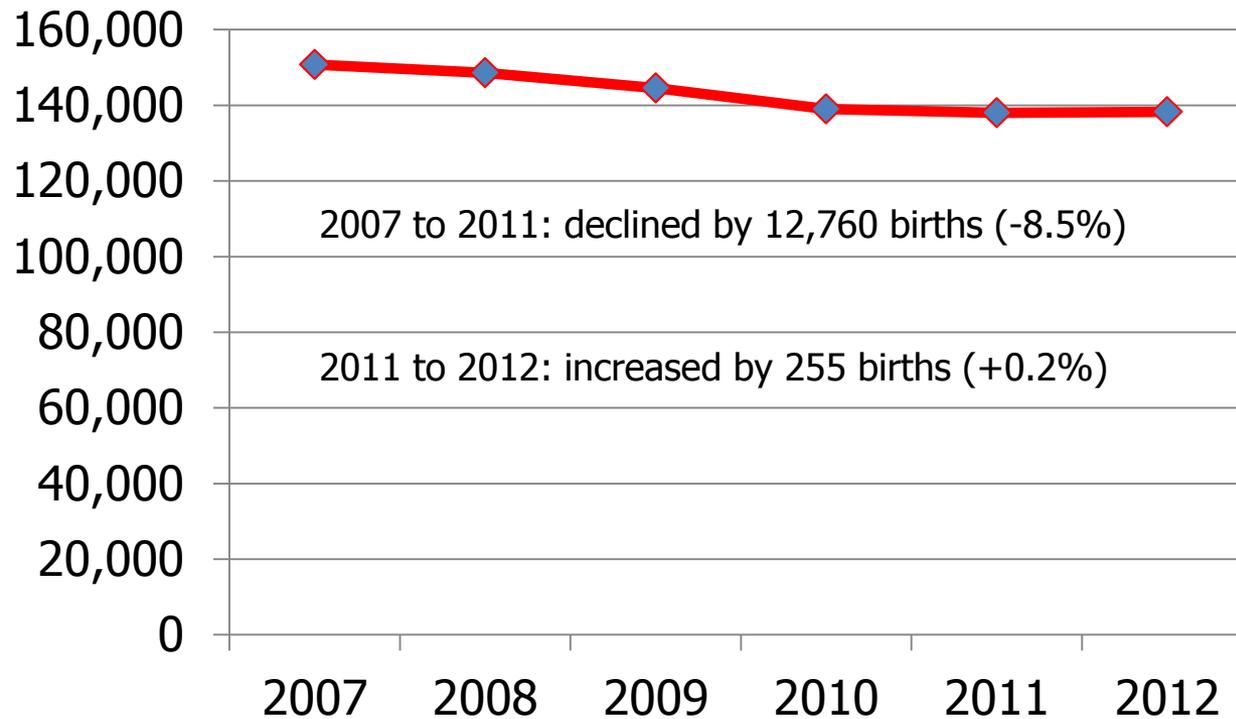
<b>USA/2000</b>	<b>14.1</b>	<b>USA/2010:</b>	<b>11.63</b>
#50: Iowa	21.1	#50: Indiana	14.96
#49: Nebraska	20.3	<b>#49: Ohio</b>	<b>14.78</b>
#48: Colorado	19.5	#48: Wisconsin	14.61
#47: Michigan	18.2	#47: Virginia	14.27
#46: Tennessee	18.0	#46: Michigan	14.08
#45: Arizona	17.6		
#44: Wisconsin	17.2		
#43: Illinois	17.1		
#42: Oklahoma	16.9		
#41: Indiana	15.8		
#40: N. Carolina	15.7		
#39: Pennsylvania	15.7		
#38: Alabama	15.4		
<b>#37: Ohio</b>	<b>15.4</b>		

# Ohio's 2012 Infant Mortality Data

Prepared by John Paulson  
Vital Statistics, ODH

The number of Ohio resident births has stabilized after declining over past 5 years

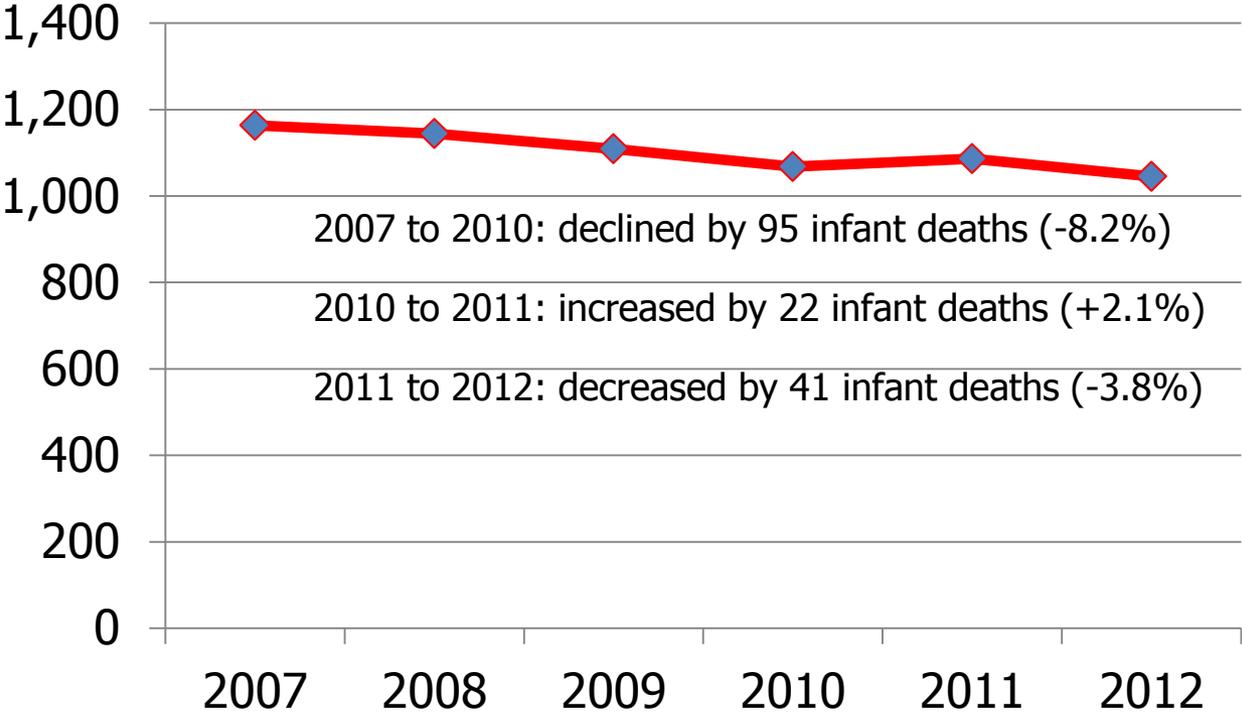
## Births



Source: Live birth certificates, Office of Vital Statistics, Ohio Department of Health

The number of Ohio resident infant deaths is slowly declining over time from 1,163 in 2007 to 1,045 in 2012

### Infant deaths



Source: Death certificates, Office of Vital Statistics, Ohio Department of Health

## Infant mortality, Ohio residents, 2007-2012

Year	Infant deaths	Births	Infant Mortality Rate
2007	1,163	150,784	7.71
2008	1,144	148,592	7.70
2009	1,109	144,569	7.67
2010	1,068	139,034	7.68
2011	1,086	138,024	7.87
2012 (provisional)	1,045	138,279	7.56

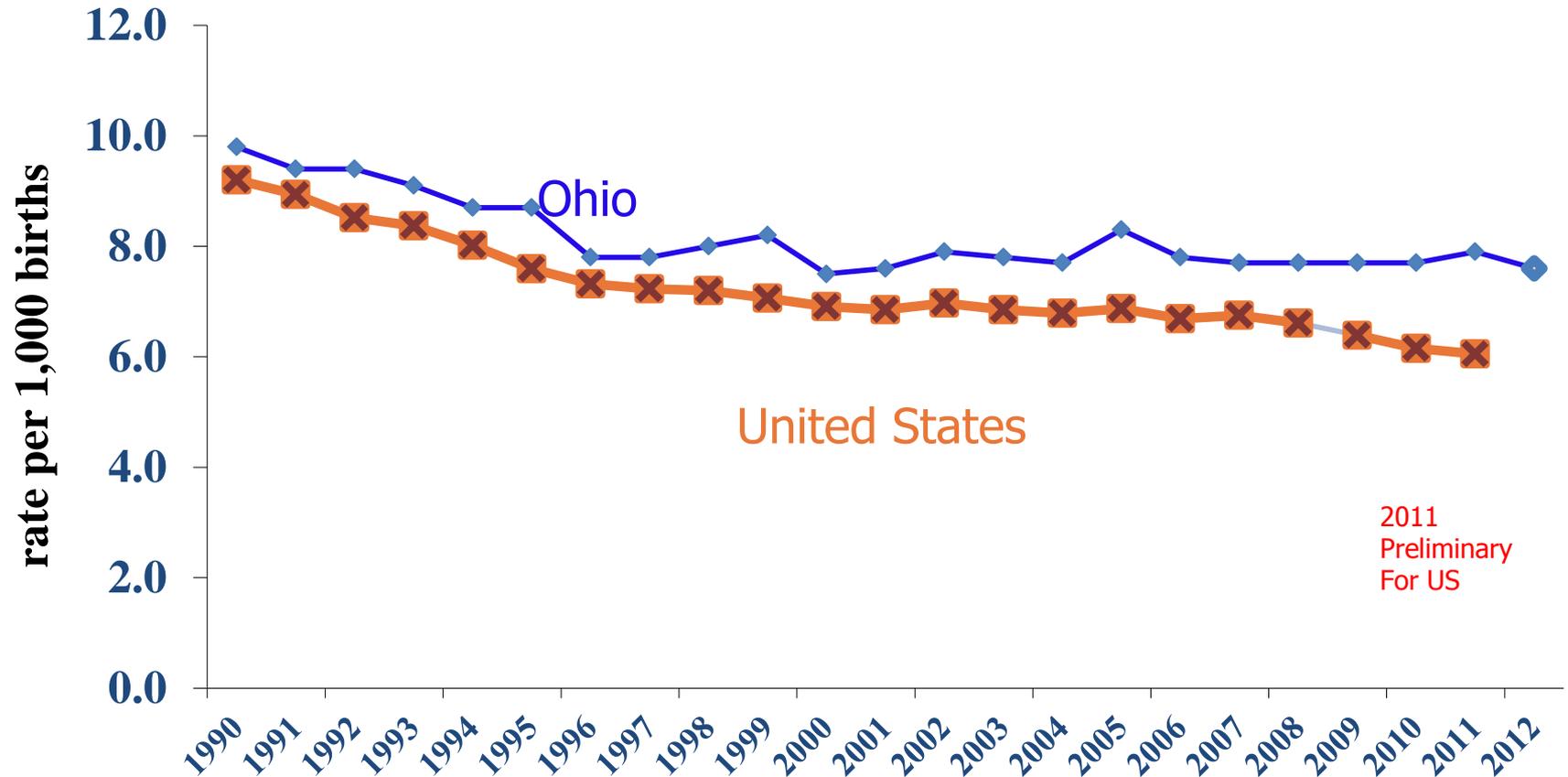
-3.9%  
Rate  
decrease



Source: Office of Vital Statistics, Ohio Department of Health

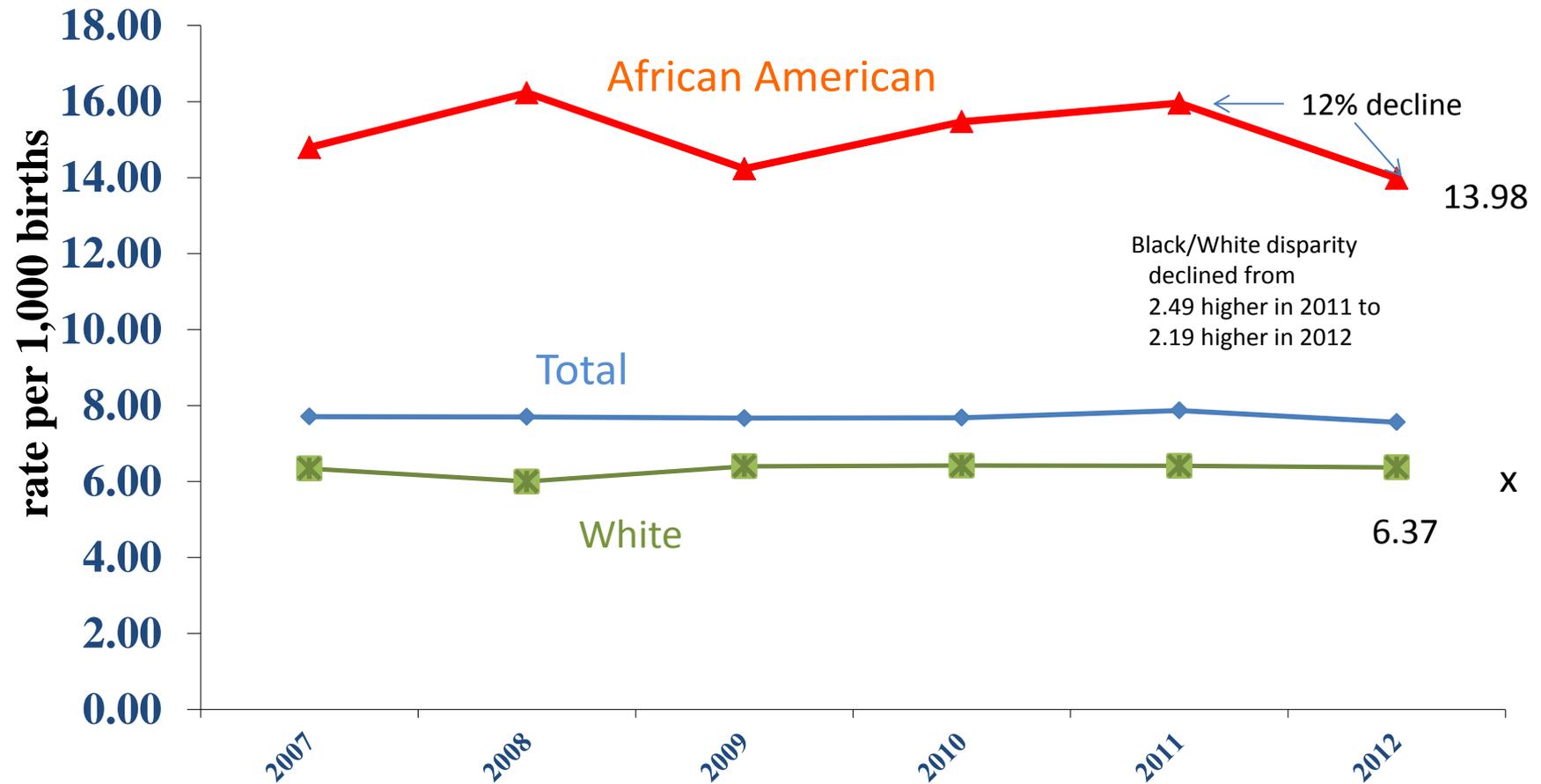
$$\text{IMR} = (\# \text{ infant deaths} / \# \text{ live births}) \times 1,000$$

# Infant mortality rates, Ohio and US, 1990-2012



Source: Office of Vital Statistics, Ohio Department of Health

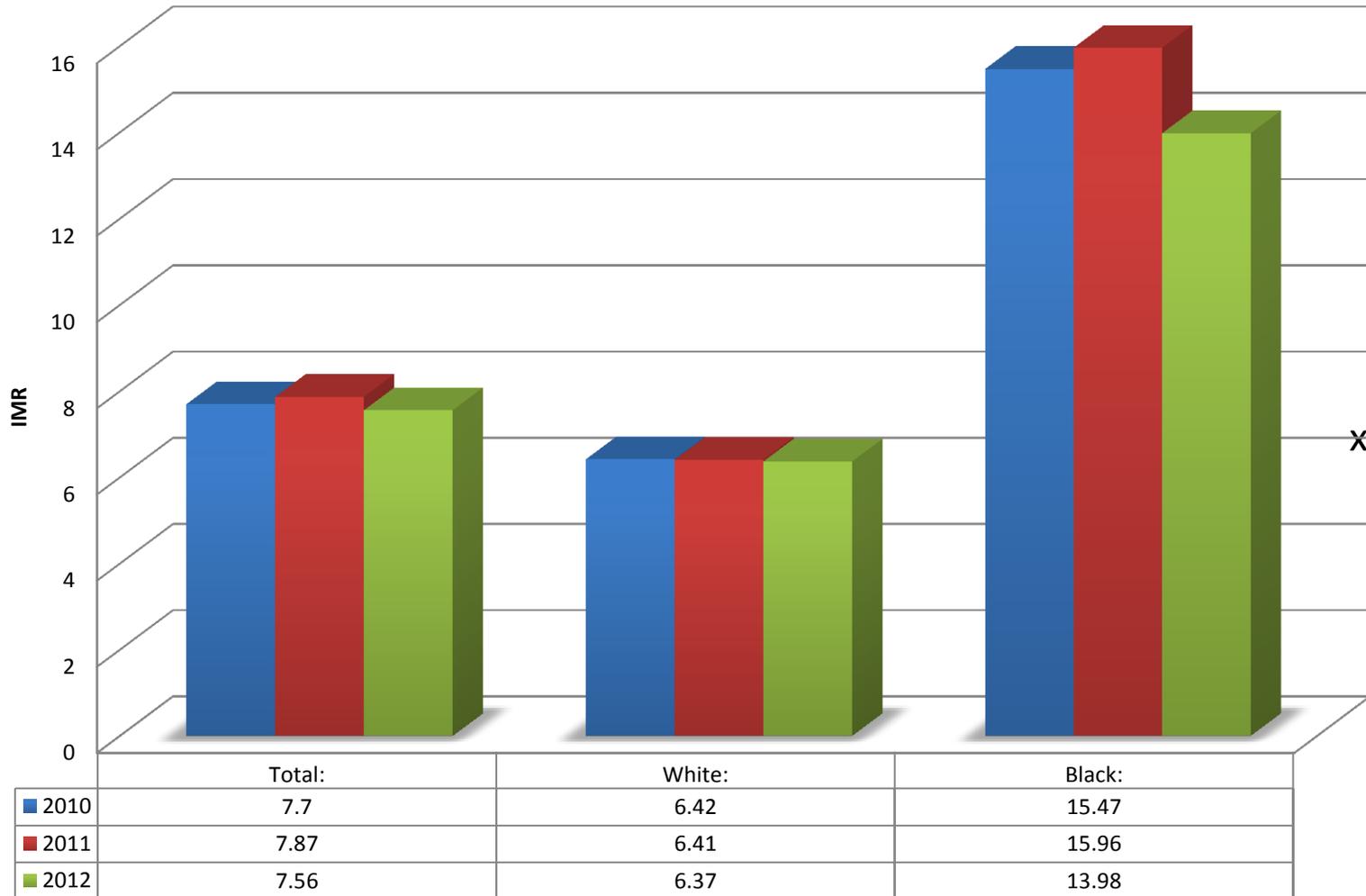
# Infant mortality rates by race, Ohio residents, 2007-2012



Source: Office of Vital Statistics, Ohio Department of Health

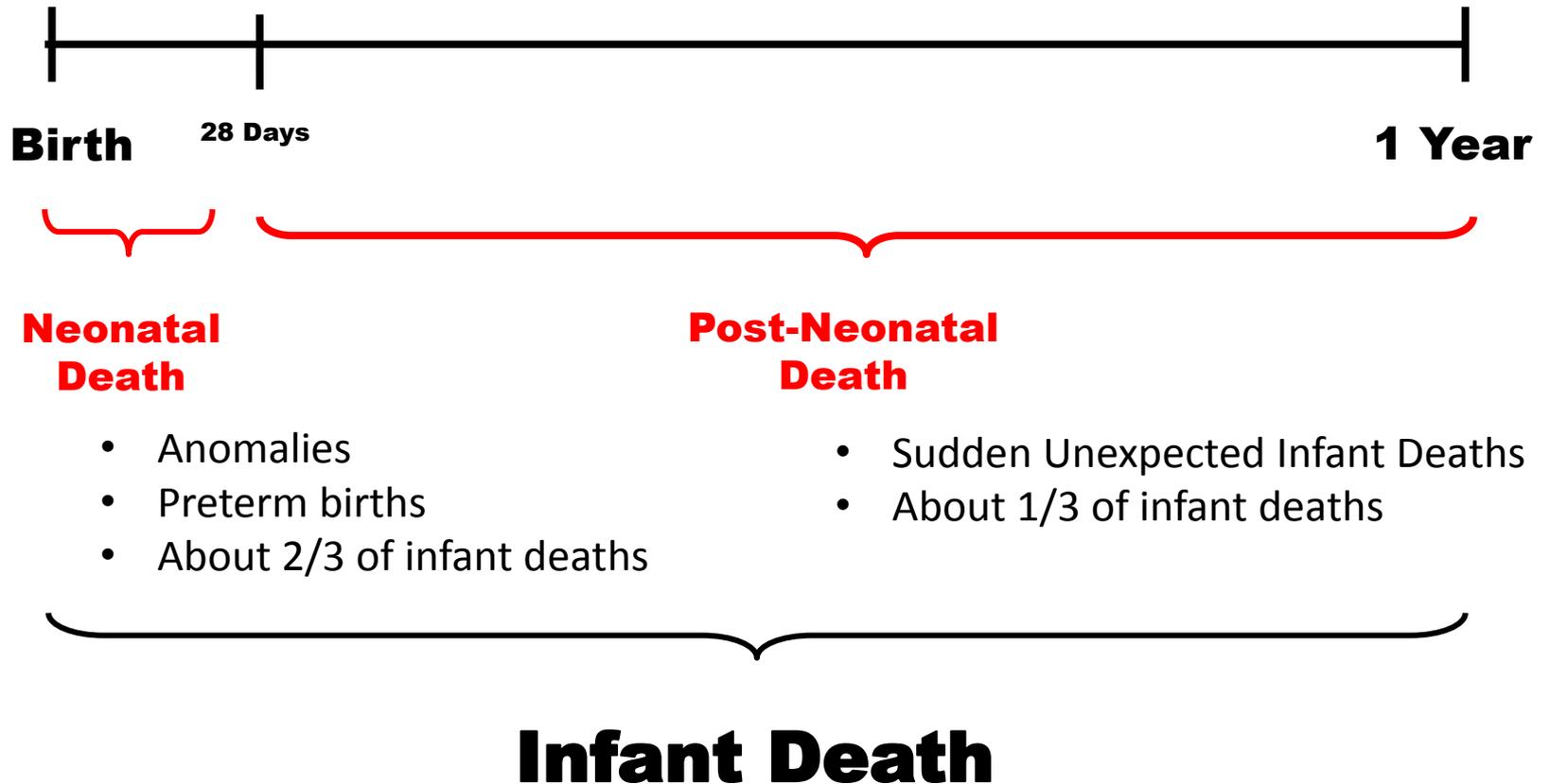
X = HP 2020: IMR Rate Goal = 6

# Ohio Infant Mortality Rates, 2010-2012, Total, White, Black:



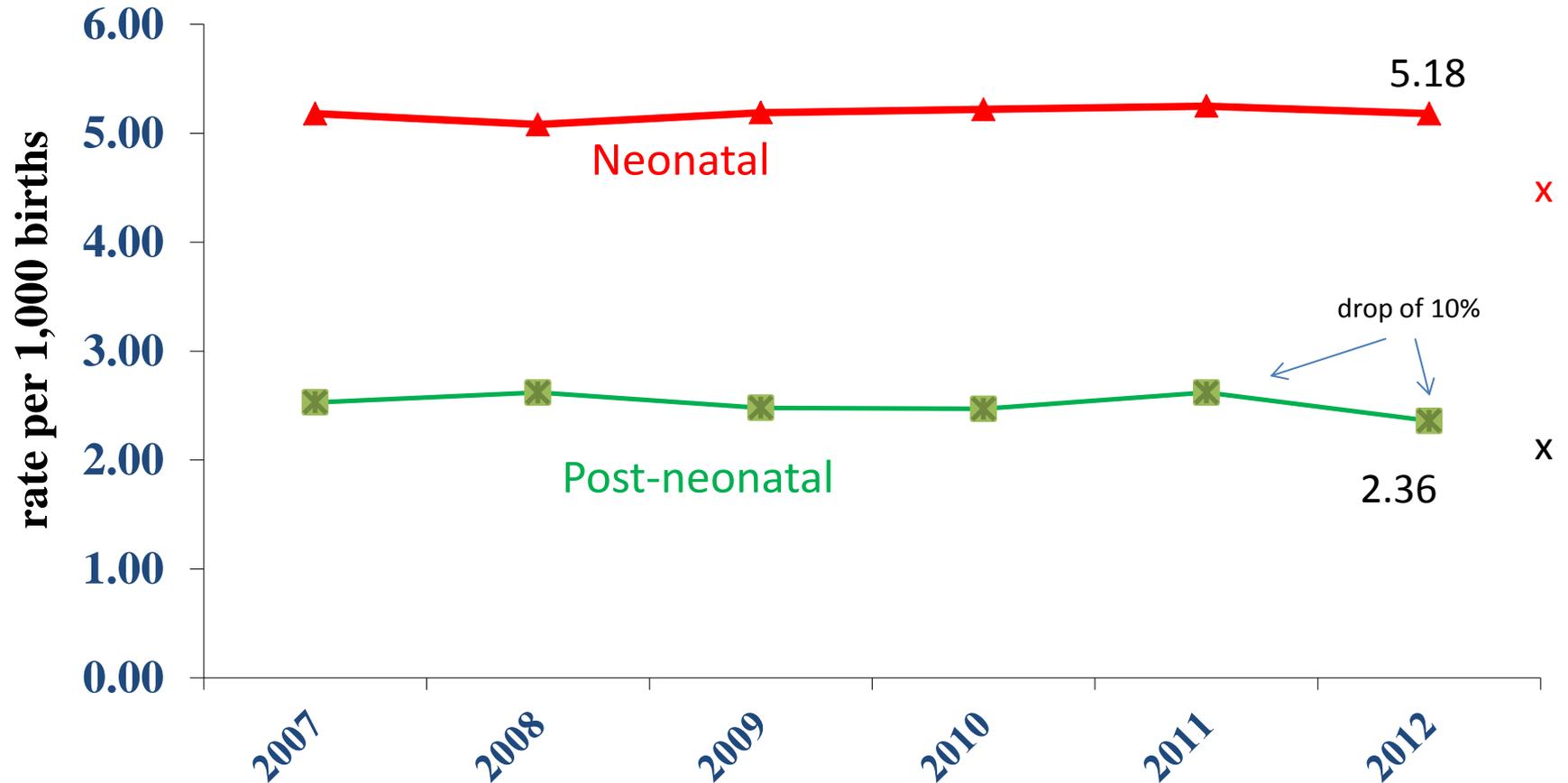
Source: Office of Vital Statistics, Ohio Department of Health, HP 2020 Goal for IMR = 6.0

# Definitions and Timeline of Infant Mortality



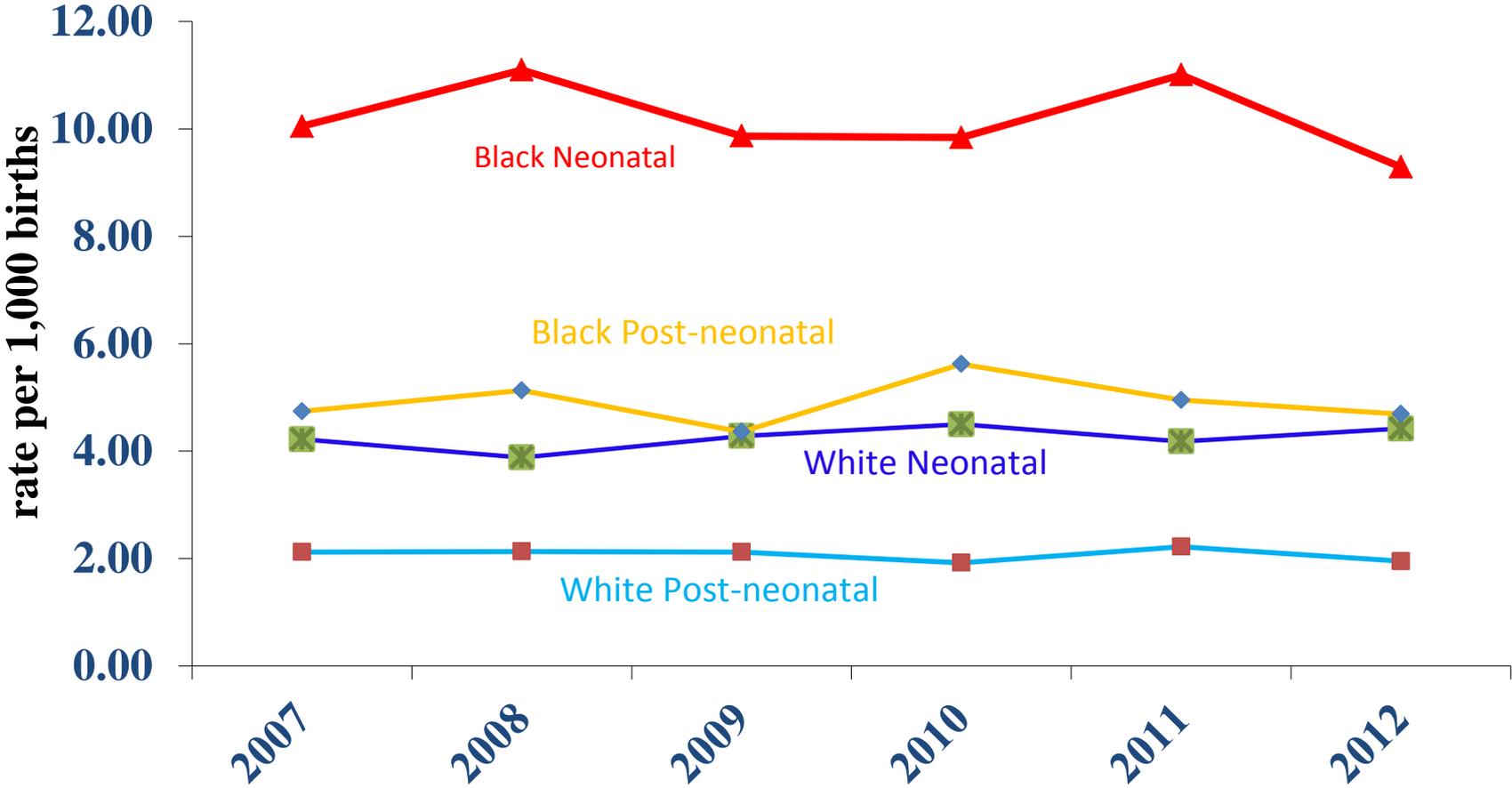
[2/3 of all Childhood deaths (deaths between birth and 18yo) occur during the first year of life: infant mortality]

# Neonatal and Post-neonatal mortality rates, Ohio residents, 2007-2012



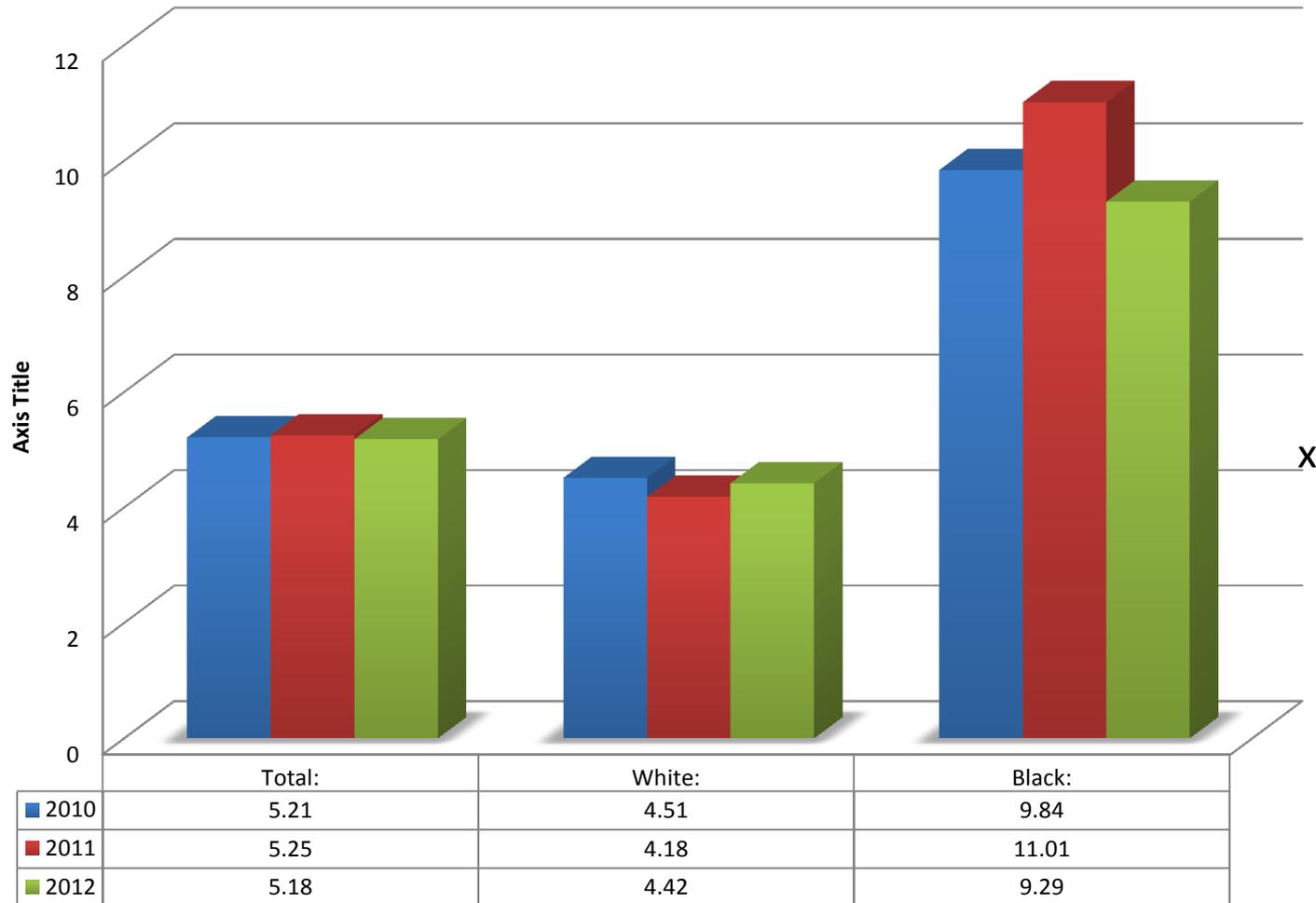
Source: Office of Vital Statistics, Ohio Department of Health  
HP 2020 goals: x = NMR of 4.1, x = PNMR of 2.0  
(NMR USA, 2011 = 4.04, PNMR USA, 2011 = 2.01)

# Neonatal and Post-neonatal mortality rates by race, Ohio residents, 2007-2012



Source: Office of Vital Statistics, Ohio Department of Health  
HP 2020 goals: NMR of 4.1, PNMR of 2.0

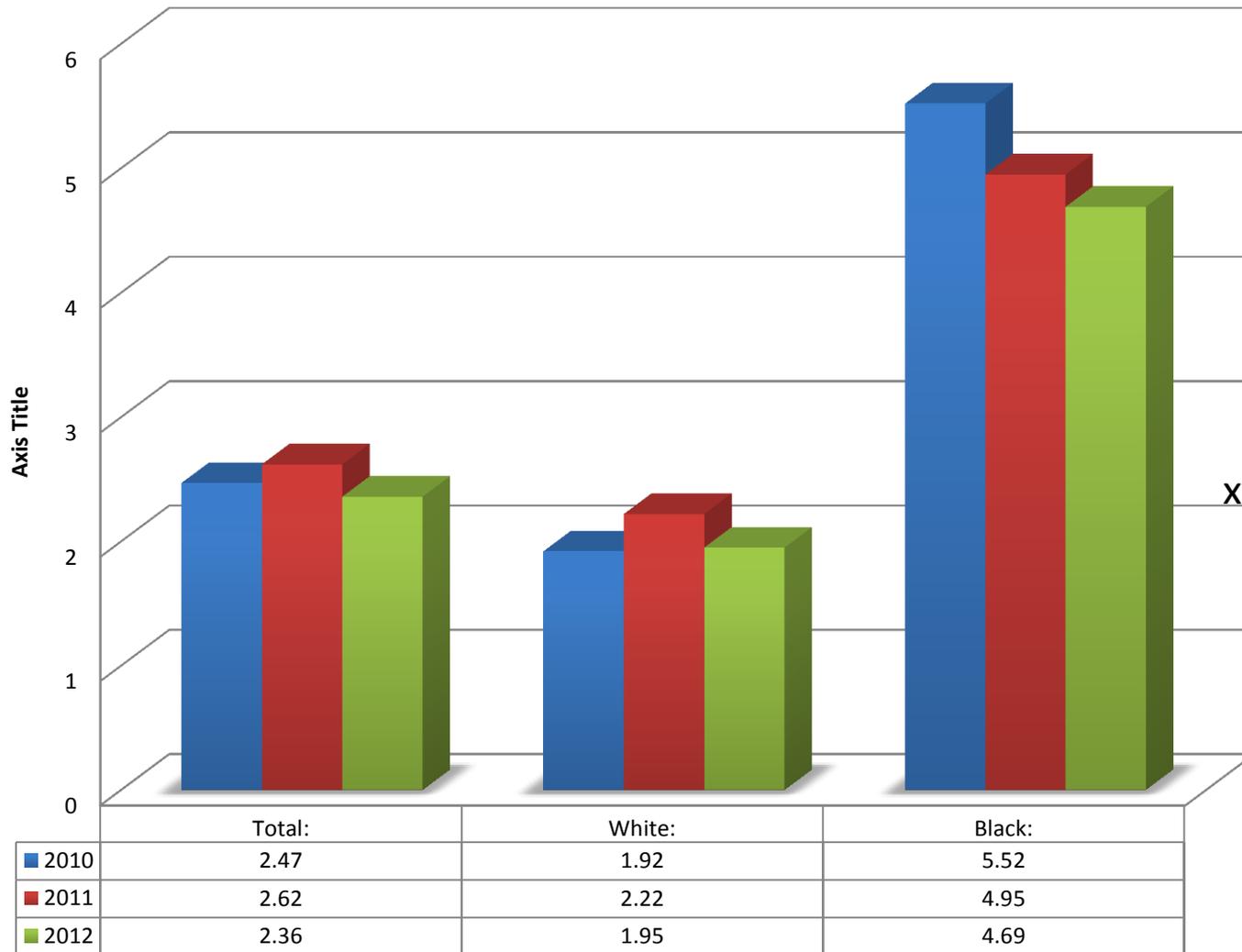
# Ohio Neonatal Mortality Rates, 2010-2012, Total, White, Black:



The NMR is down 1.3% for all races with a 5.7% increase among whites and a 15.6% decrease among blacks.

Source: Office of Vital Statistics, Ohio Department of Health, x = HP 2020 Goal for NMR of 4.1

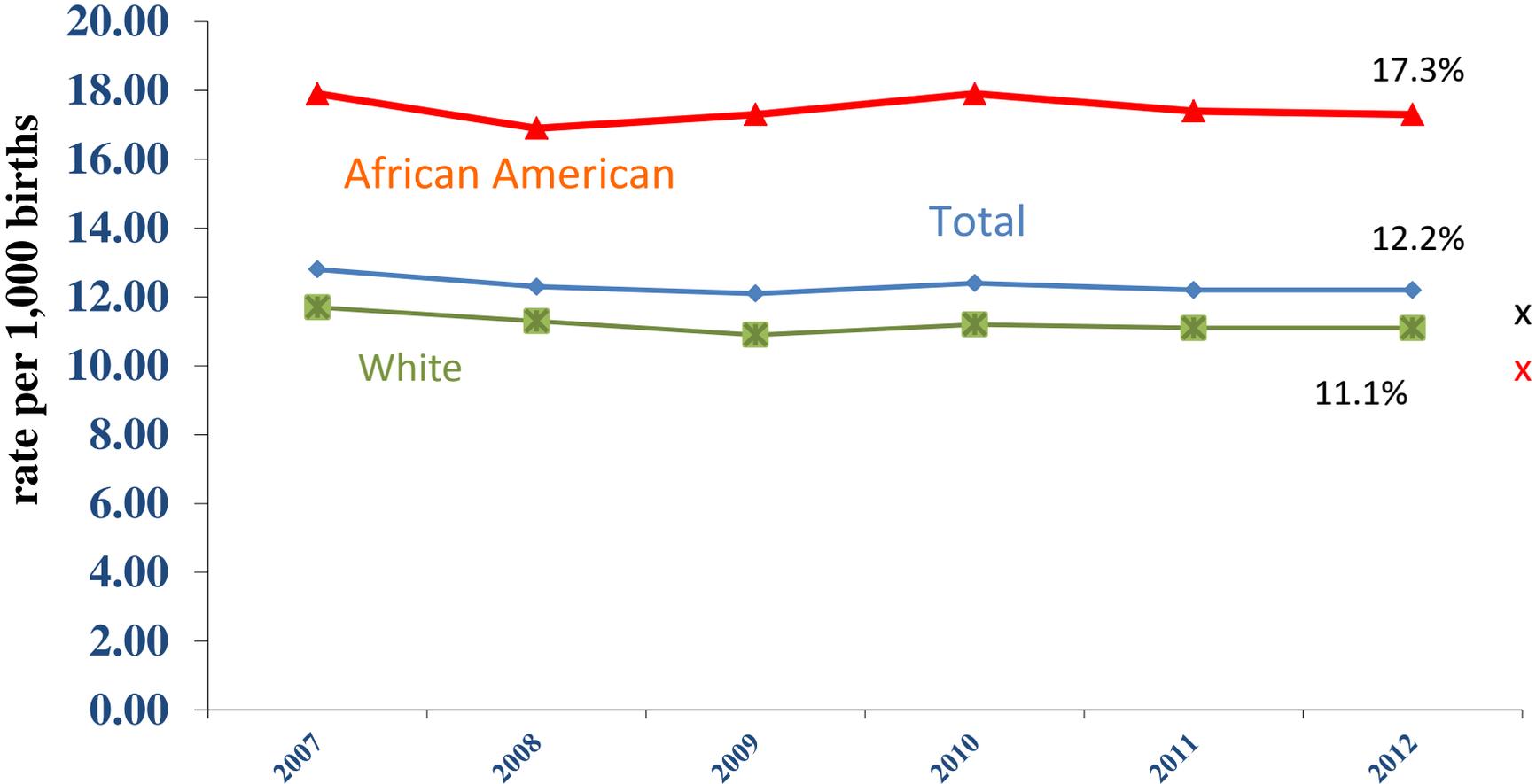
# Ohio Post-Neonatal Mortality Rates, 2010-2012, Total, White, Black:



The PNMR is down 9.9% for all races with a 12.2% decrease for whites and a 5.3% decrease among blacks.

Source: Office of Vital Statistics, Ohio Department of Health x = HP 2020 Goal: PNMR = 2

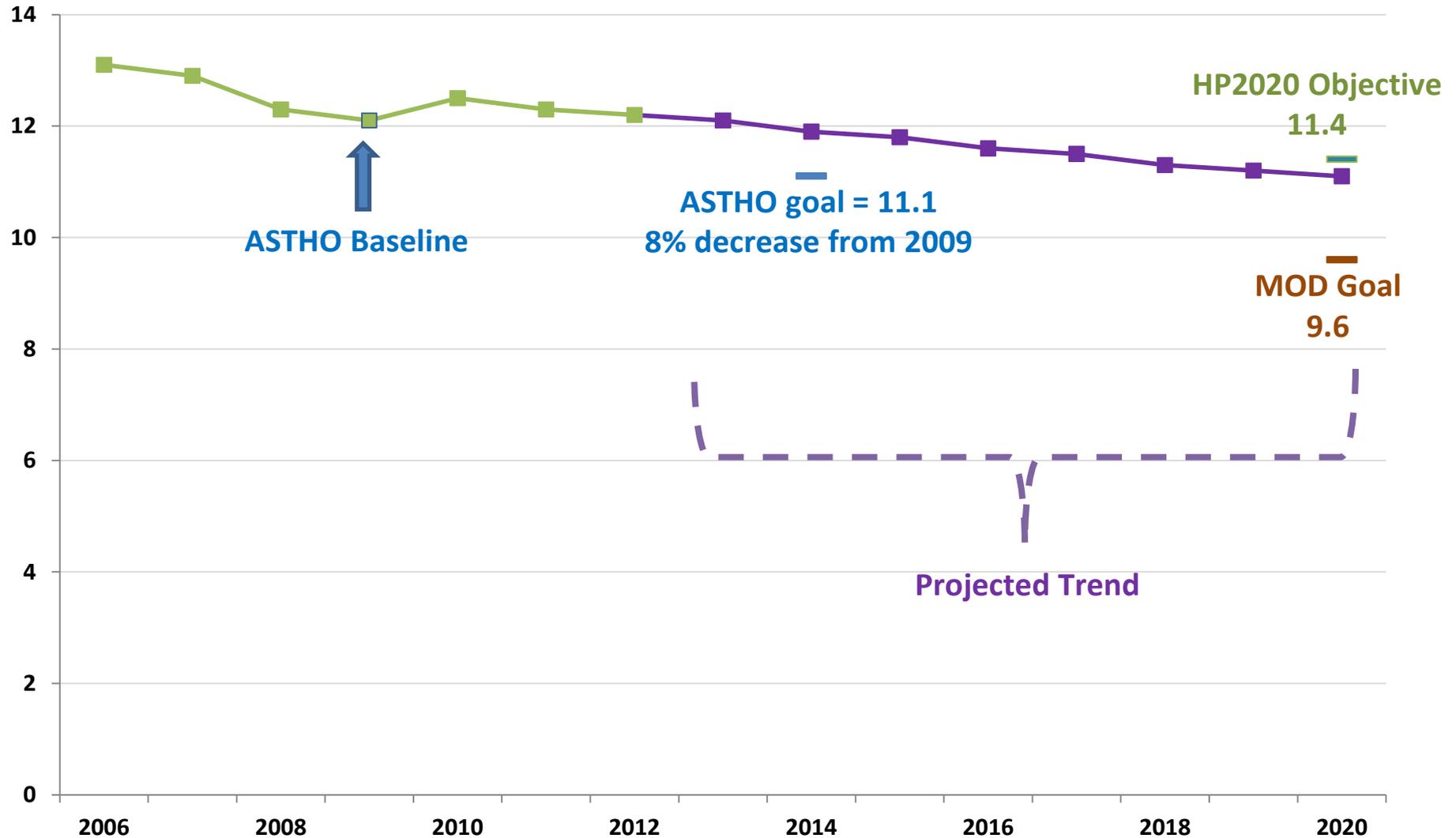
# Pre-term birth rates by race, Ohio, 2007-2012



Source: Office of Vital Statistics, Ohio Department of Health

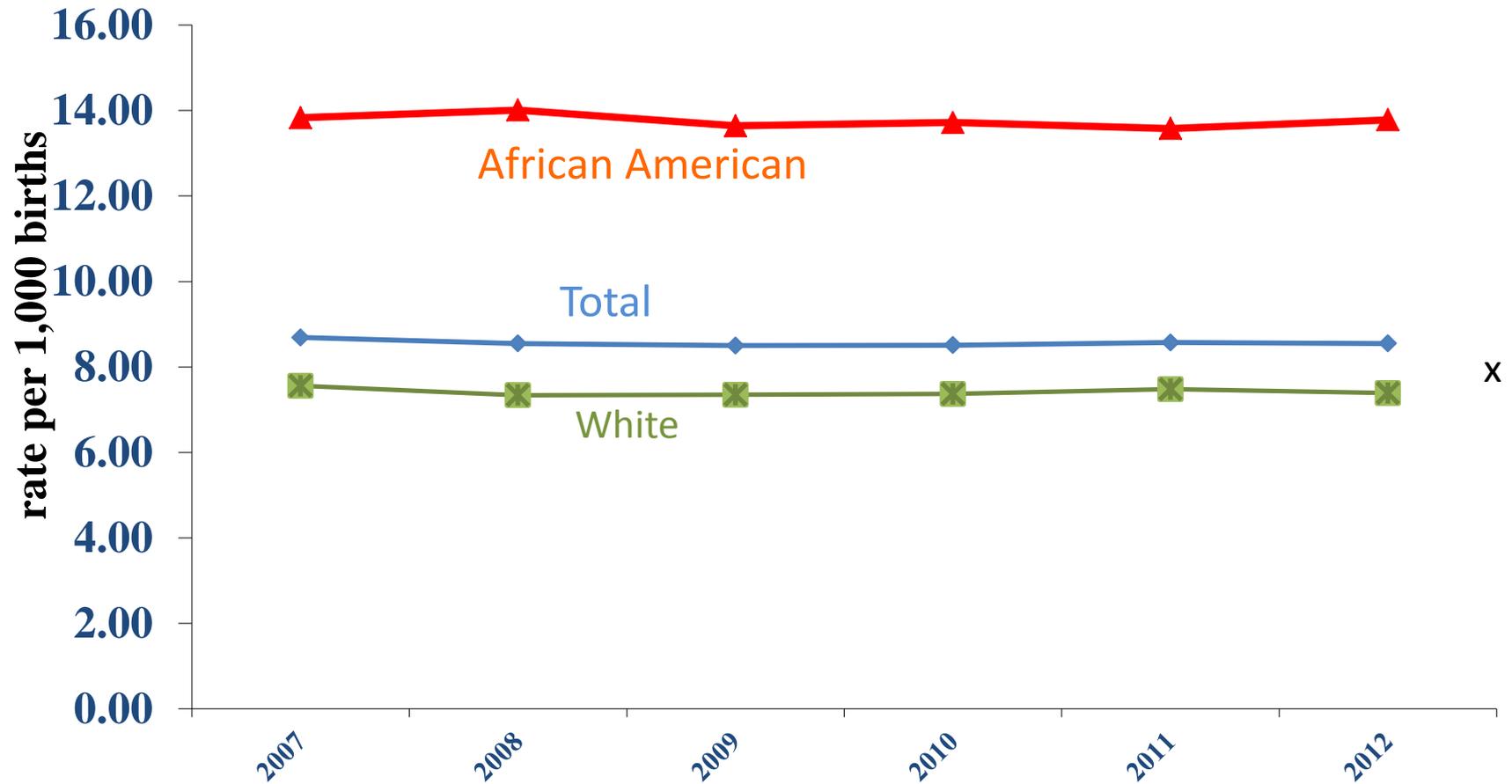
2020 Goals:  
 X = MoD: 9.6%  
 X = HP: 11.4%

# Ohio prematurity rates 2006-12 and projected rates 2013-20 compared to goals and objectives



Data Source: Ohio Vital Statistics (slide provided by Dr. Beth Conrey)  
2013 -2020 data are projected from the linear trend measured from 2006 through 2012

# Low birth weight rates by race, Ohio, 2007-2012



Source: Office of Vital Statistics, Ohio Department of Health

X = HP 2020 Goal: 7.8%

# “Peek” at 1<sup>st</sup> 6 months of 2013:

Age	2012	2013
Neonate	350	353
Postneonate	167	145

Source: Office of Vital Statistics, Ohio Department of Health



Turning up  
the Volume

on Infant Mortality

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*Every Baby Matters!*

Thank You

