

Infant Mortality among Preterm Infants by Race/Ethnicity

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INFANT MORTALITY IN THE UNITED STATES

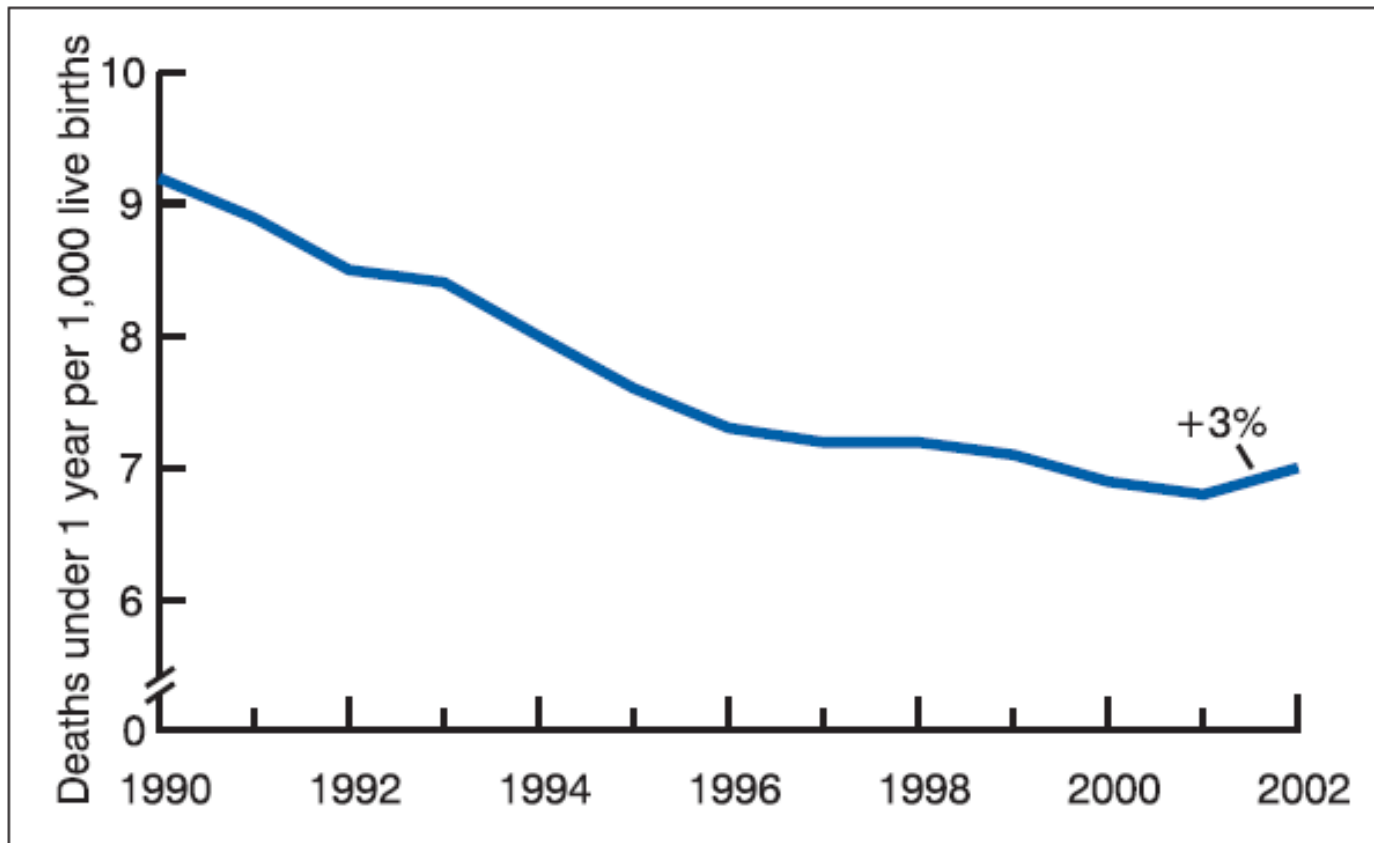
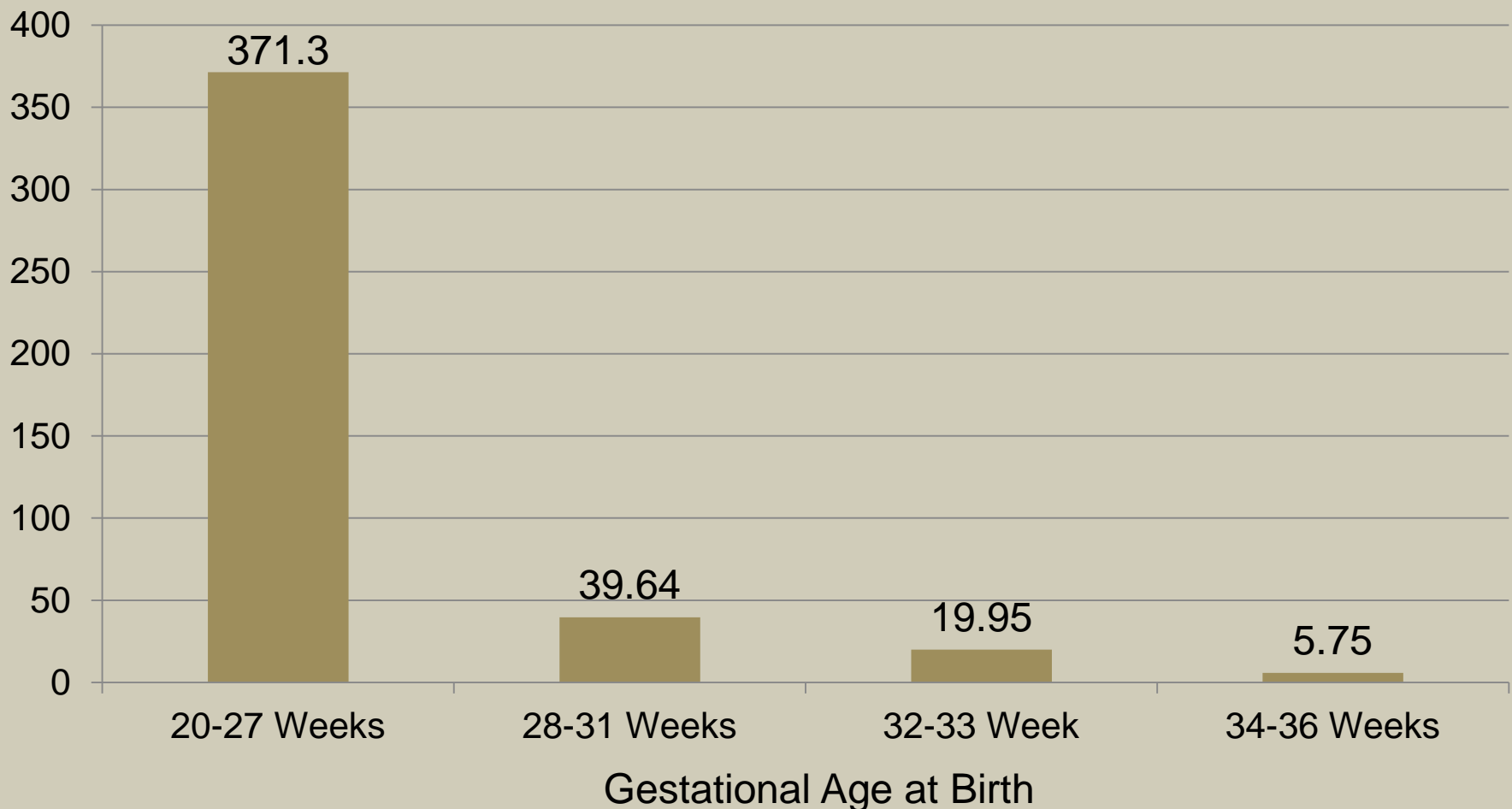


Figure 1. Infant mortality rate: United States, 1990–2002

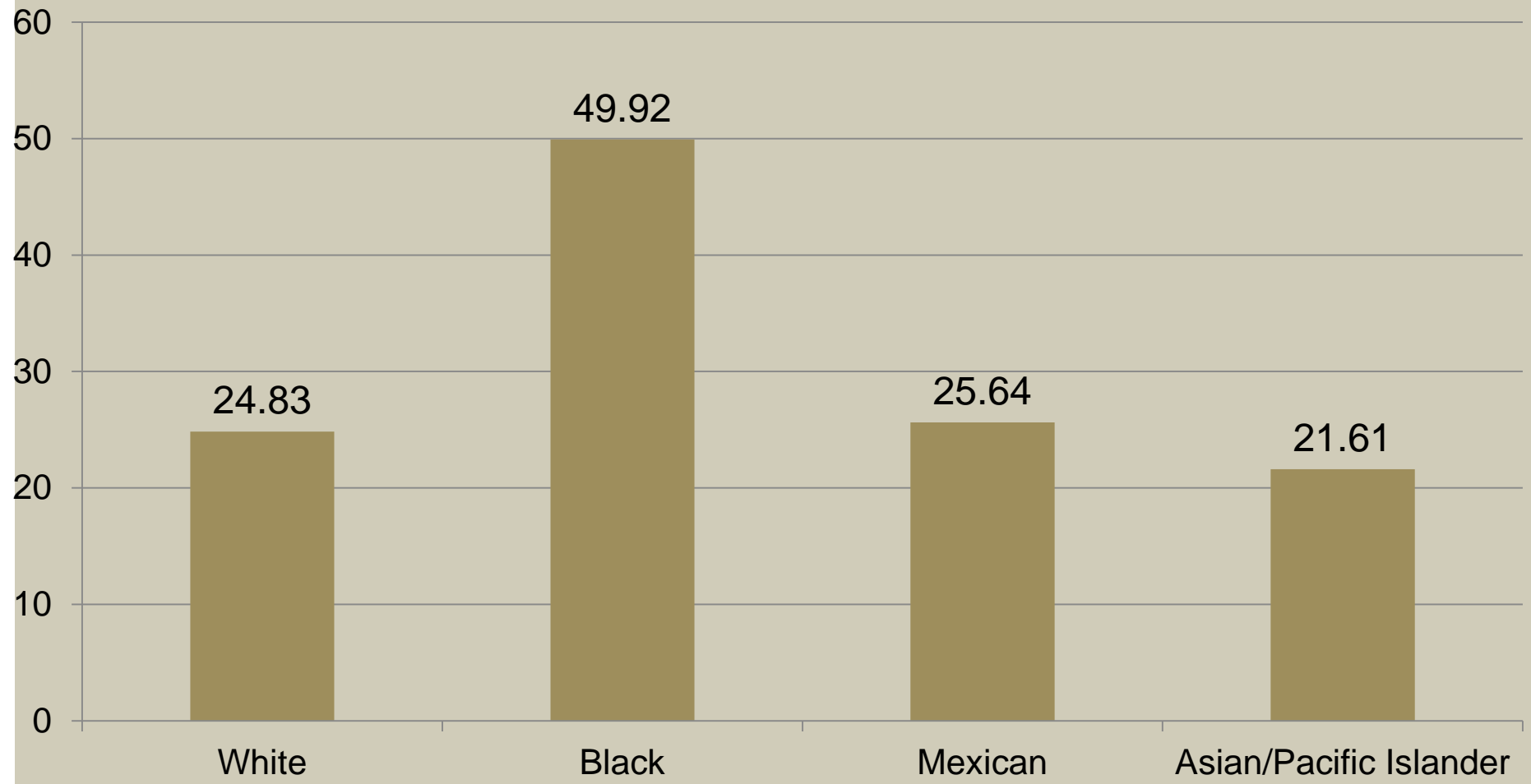
INFANT MORTALITY IN WASHINGTON STATE

Mortality Rate (per 1,000 live births) in 2007



RACE, PRETERM BIRTH, AND INFANT MORTALITY IN WASHINGTON STATE

Mortality Rate (per 1,000 live births) in 2007



METHODS: PRIMARY ANALYSIS

Washington State Linked Birth and
Death Certificate
1984 - 2009

Cases:
Identified
through Death
Certificates

Controls:
Frequency
matched on
gestational age
and year of birth

24-26 Weeks

All cases and controls

24-26 Weeks

27 – 32
Weeks

2:1 Ratio

27 – 32
Weeks

33 – 36
Weeks

2:1 Ratio

33 – 36
Weeks

VARIABLES

■ Exposure:

- Infant Race/Ethnicity
 - White
 - Black
 - Hispanic
 - Asian/Pacific Islander
 - Native Indian/Alaska Native

■ Covariates

- A priori: Maternal Age
- Marital Status
- Insurance Status
- Parity
- Adequacy of Prenatal Care

RESULTS

	24-27 Weeks Gestational Age				28-32 Weeks Gestational Age				33-36 Weeks Gestational Age			
	Case	Control	Odds Ratio	CI	Case	Control	Odds Ratio	CI	Case	Control	Odds Ratio	CI
Maternal Race							1					
White	951	1234	1 (ref)	--	688	1271	(ref)	--	958	1900	1 (ref)	--
Black	148	270	0.69	(0.56, 0.86)	83	219	0.69	(0.53, 0.91)	112	194	1.12	(0.88, 1.44)
Hispanic	148	221	0.85	(0.68, 1.06)	117	171	1.25	(0.97, 1.61)	105	282	0.72	(0.56, 0.91)
Asian/Pacific Islander	90	146	0.82	(0.62, 1.09)	70	121	1.11	(0.81, 1.51)	70	211	0.69	(0.52, 0.91)
Native American/Alaskan Native	67	86	0.99	(0.71, 1.38)	51	81	1.11	(0.77, 1.61)	80	116	1.32	(0.98, 1.78)

METHODS: SECONDARY ANALYSIS

Cases of Infant Mortality between
1984-2009

Cases:
Post-Neonatal
Mortality

24-26 Weeks

27 – 32
Weeks

33 – 36
Weeks

Controls:
Neonatal
Mortality

24-26 Weeks

27 – 32
Weeks

33 – 36
Weeks

RESULTS: RACE AND LIKELIHOOD OF NEONATAL MORTALITY

	24-27 Weeks Gestational Age		28-32 Weeks Gestational Age		33-36 Weeks Gestational Age	
	Odds Ratio	CI	Odds Ratio	CI	Odds Ratio	CI
Maternal Race						
White	1 (ref)	--	1 (ref)	--	1 (ref)	--
Black	2.15	(1.46, 3.17)	1.51	(0.94, 2.44)	1.30	(0.87, 1.94)
Hispanic	1.1	(0.70, 1.72)	0.79	(0.51, 1.24)	0.57	(0.37, 0.87)
Asian/Pacific Islander	1.24	(0.79, 2.27)	0.79	(0.44, 1.42)	0.71	(0.42, 1.19)
Native American/Alaskan Native	1.23	(0.67, 2.28)	1.48	(0.82, 2.69)	2.11	(1.29, 3.45)

DISCUSSION



African American infants in Washington State



Evidence of the Hispanic Paradox?



The Native Indian/Alaska Native Group



Impact of Race on time-to-death

CONCLUSIONS



Interventions

Degree of
Preterm Birth



Race/Ethnicity



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THANK YOU,
QUESTIONS?



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