

Infant Mortality

A Community Perspective

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- How Do We Define Infant Mortality?

It is the number of infants who die per year prior to their first birthday (12 months of life) per 1,000 live births.

IM Rate As A Health Indicator

- Insight into the value a nation places on health
- Reflects the priorities given to health care
- Sensitive measure of quality and access to medical care, maternal health, socioeconomic conditions and public health practices

Overall U.S. Infant Mortality Rate



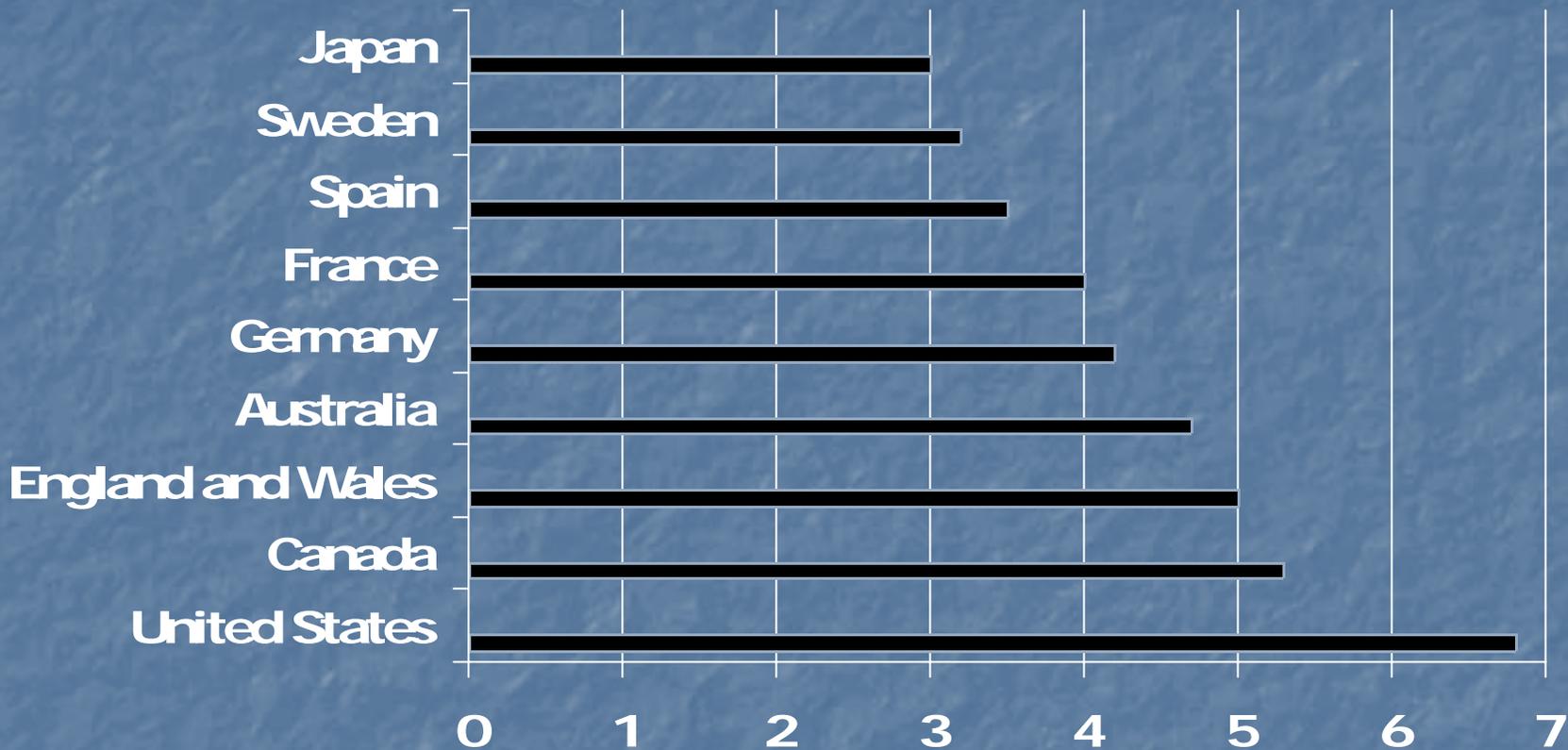
Delaware's National Ranking

- 1. District of Columbia 12.3
- 2. Mississippi 10.4
- 3. Alabama 9.6
- 4. Louisiana 9.5
- 5. South Carolina 9.3
- 6. Delaware 9.1

■ 1998-2002

U.S. Worldwide Ranking

- 27th -29th
- Relative ranking has continued to decline
 - 12th in 1960
 - 23rd in 1990
 - 29th in 2004
- Highest among developed countries
- Currently tied with Poland and Slovakia

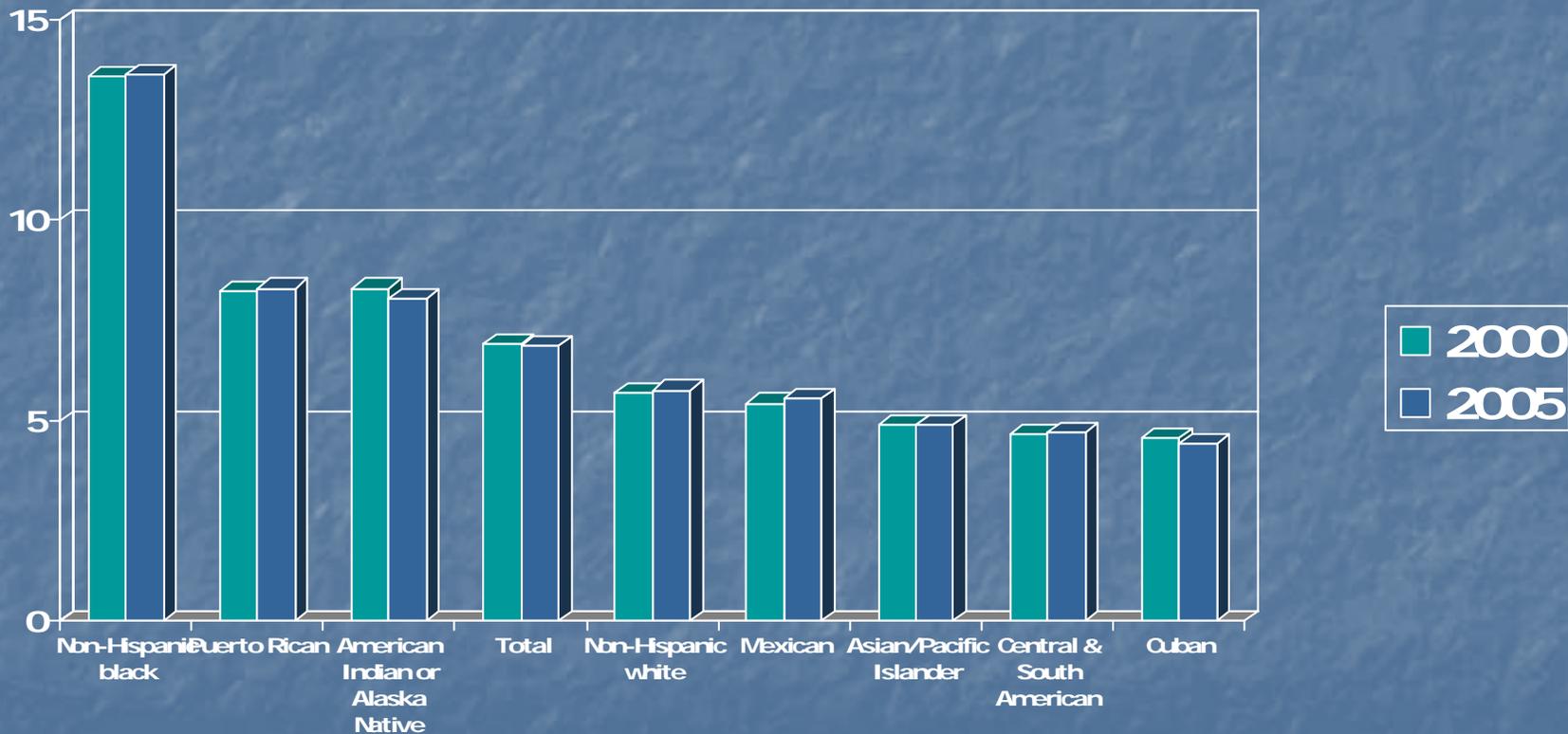


Rates per 1,000 live births

Factors Associated With Infant Mortality

- Maternal Age
- Overall Health and Chronic Illness
- Multiple Gestation
- Birth Defects
- Pregnancy Interval
- Nutrition
- Stress
- Substance Abuse/Use
- Preterm Births

Racial Disparities in IM Rates



Healthy People 2010 Target Goal

- Infant mortality rate of 4.5 deaths per 1,000 live births
- The U.S. will need to see a 50% decrease in its current rate

Disturbing Trends

- 1. Racial Disparity
- 2. Despite dramatic decrease in U.S. rate in the 20th century, it has leveled off during first few years of 21st century
- 3. Decreasing international ranking for the U.S.

NICU Costs

- Level 1 \$1120/day Healthy newborn with low risk for complications
- Level 2 \$2250/day Step down, requires oxygen, IV, thermoregulation
- Level 3 \$2780/day Intensive care, chest tube, intubated, medication drips

Monthly Analysis of NICU Admissions

- January, 2008

Admissions: 72 babies

GA: 24-41 weeks (avg 36.6 wks)

Weight: 505-4070 gms (avg 2418)

Mother's Age: 16-37 (avg 27.7 yrs)

LOS: 1 day-41 days (avg 12 days)

Total days in NICU (all babies): 870

Cost for Level 1 $\$1120/\text{day} \times 870 = \$974,000$

Cost for Level 2 $\$2250/\text{day} \times 870 = \$1,97,500$

- February, 2008

Admissions: 80

Total days spent: 999

Avg LOS: 12.5 days

Cost Level 1 \$1,118,800

Cost Level 2 \$2,247,750

- March, 2008

Admissions: 73 babies

Avg LOS: 16.8 days

Total Days: 1229

Cost Level 1: \$1,376,480

Cost Level 2: \$2,765,250

- April, 2008

Admissions: 95 babies

Avg LOS: 19.27 days

Total Days: 1831

Cost Level 1: \$2,050,720

Cost Level 2: \$4,119,750

- May, 2008

Admissions: 79 babies

Avg LOS: 15 days

Total Days: 1190

Cost Level 1: \$1,332,800

Cost Level 2: \$2,677,500

- June, 2008

Admissions: 77 babies

Avg LOS: 13.73 days

Total Days: 1057

Cost Level 1: \$1,183,840

Cost Level 2: \$2,378,250

NICU Costs for 6 Months

- Admissions: 476 babies
- Avg LOS: 14.9 days
- Total Days: 7,176

- Cost Level 1: \$8,037,120
- Cost Level 2: \$16,146,000

Prenatal Care Costs in Delaware

- Estimated annual births: 12,000
- Generous Prenatal Package: \$4,000 per
- Total Cost: \$48,000,000

Cost Comparison NICU vs Prenatal Care

- NICU Costs: 32 Million Dollars for 950 babies
- Total Prenatal Care for every pregnancy in Delaware: 48 Million Dollars
- OR use 32 Million to provide care for 8,000 women in our State

Private Practice Model

- Limitations for successful reduction in IM

Patient's access to services

Lack of adequate office services

Lack of full understanding of patient's
needs

Poor coordination of referral services

FQHC and Clinic Model

- Limitations

Patient access

Sometimes impersonal

Potential lack of confidentiality

Lack of continuity of care at times

Solutions

- Targeted Population
- Team Approach
- More Effective Use of Limited Resources
- Collaboration - Private and Public Effort
- Multidisciplinary Strategies

