

# Social Determinants of Health and Infant Mortality

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# What is Health and What Determines Health?



- What is health?
- What determines our health?

# Social Determinants of Health

- The social determinants of health are the conditions in which people are born, grow, live, work and age
- Health starts in our homes, schools, workplaces, neighborhoods and communities

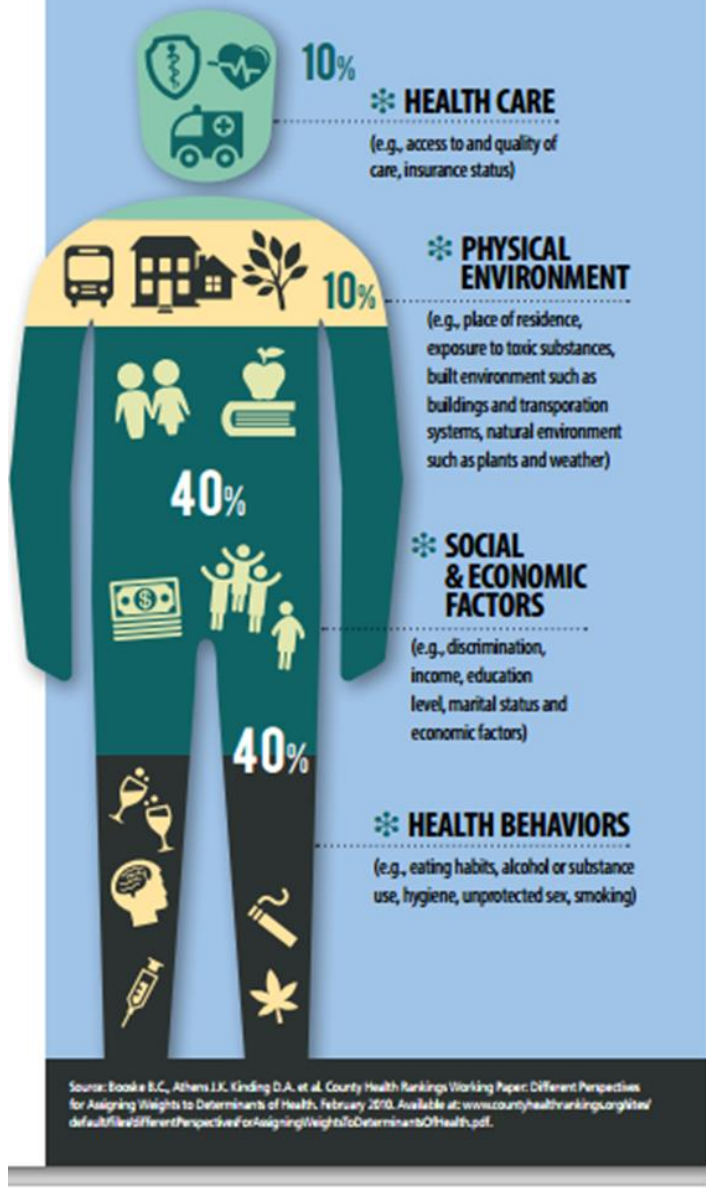
World Health Organization: [http://www.who.int/social\\_determinants/en/](http://www.who.int/social_determinants/en/)

Healthy People 2020: <http://www.healthypeople.gov/2020/topics-objectives/topic/social-determinants-health>

# Social Determinants of Health

- Access to social and economic opportunities
- Resources and supports available in our homes, neighborhoods and communities
- Quality of schooling
- Safety of our workplaces, schools, neighborhoods
- Cleanliness of water, food, air
- Housing
- Access to Care
- Educational Attainment
- Income
- Physical environment
- Involvement with criminal justice system
- Access to transportation
- Discrimination
- Insurance Status
- Stigma
- Stress
- Trauma

# PERCENTAGE CONTRIBUTING TO OVERALL HEALTH



# Social Determinants of Health and Health Equity

- Health Inequity
  - Unfair and avoidable differences in health status
- Social determinants of health are mostly responsible for health inequities

World Health Organization:

[http://www.who.int/social\\_determinants/sdh\\_definition/en/](http://www.who.int/social_determinants/sdh_definition/en/)

# CDC's Impact Pyramid: Factors that Affect Health



# Infant Mortality

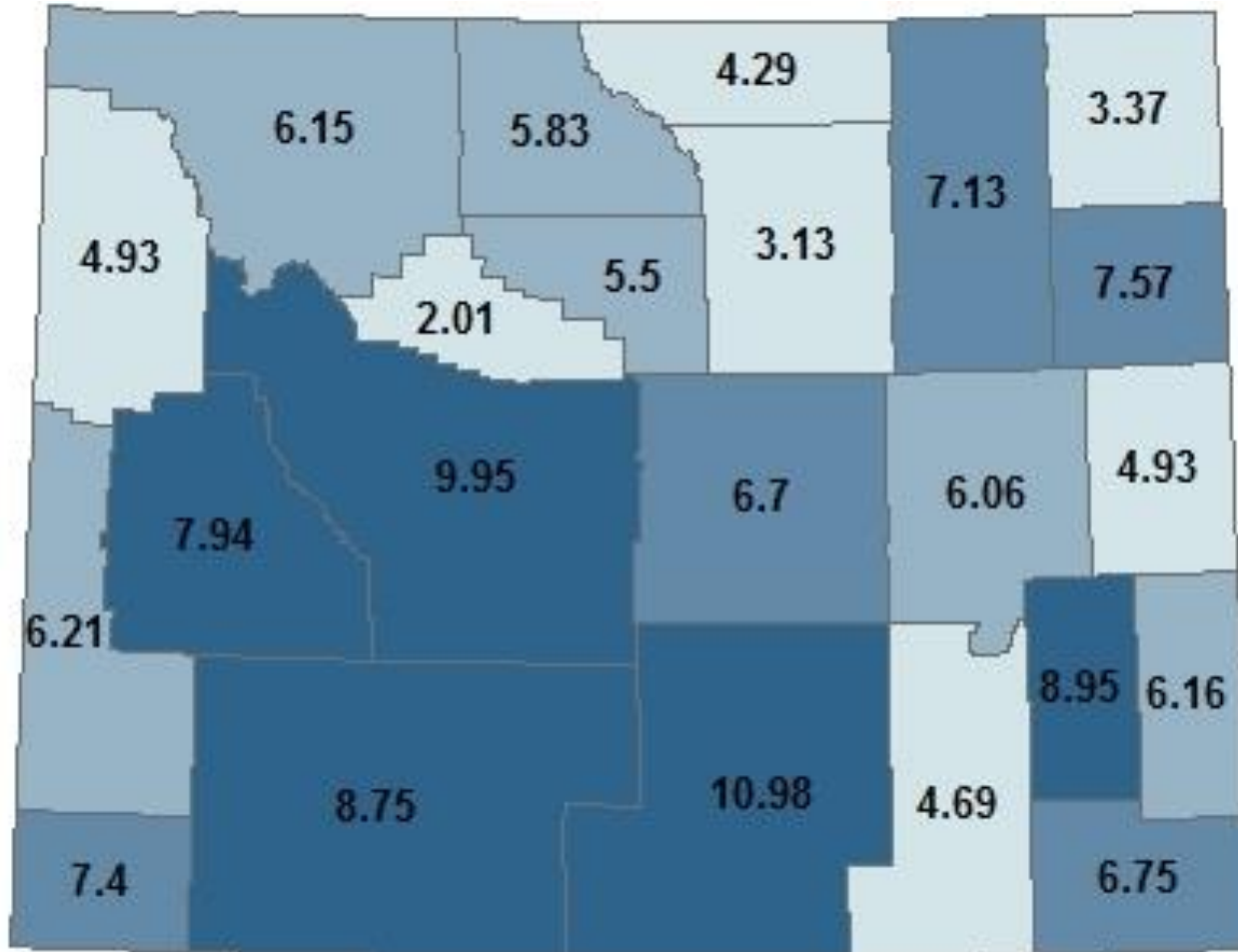
- Often used as indicator to measure health and well being of a nation (state, county, city)
  - Factors affecting the health of entire populations can also impact the mortality rate of infants
    - Poverty, nutrition, safety, tobacco use, access to care...
- Community Impact
- Family Impact



# Infant Mortality in Fremont County

- State received questions about higher rates of infant mortality in Fremont County and specifically among Native American infants
  - Health Disparities workgroups
  - County Health Officer
  - Tribal Health Directors
- What do we know about infant mortality?
  - Data analysis
    - County level
    - Maternal race

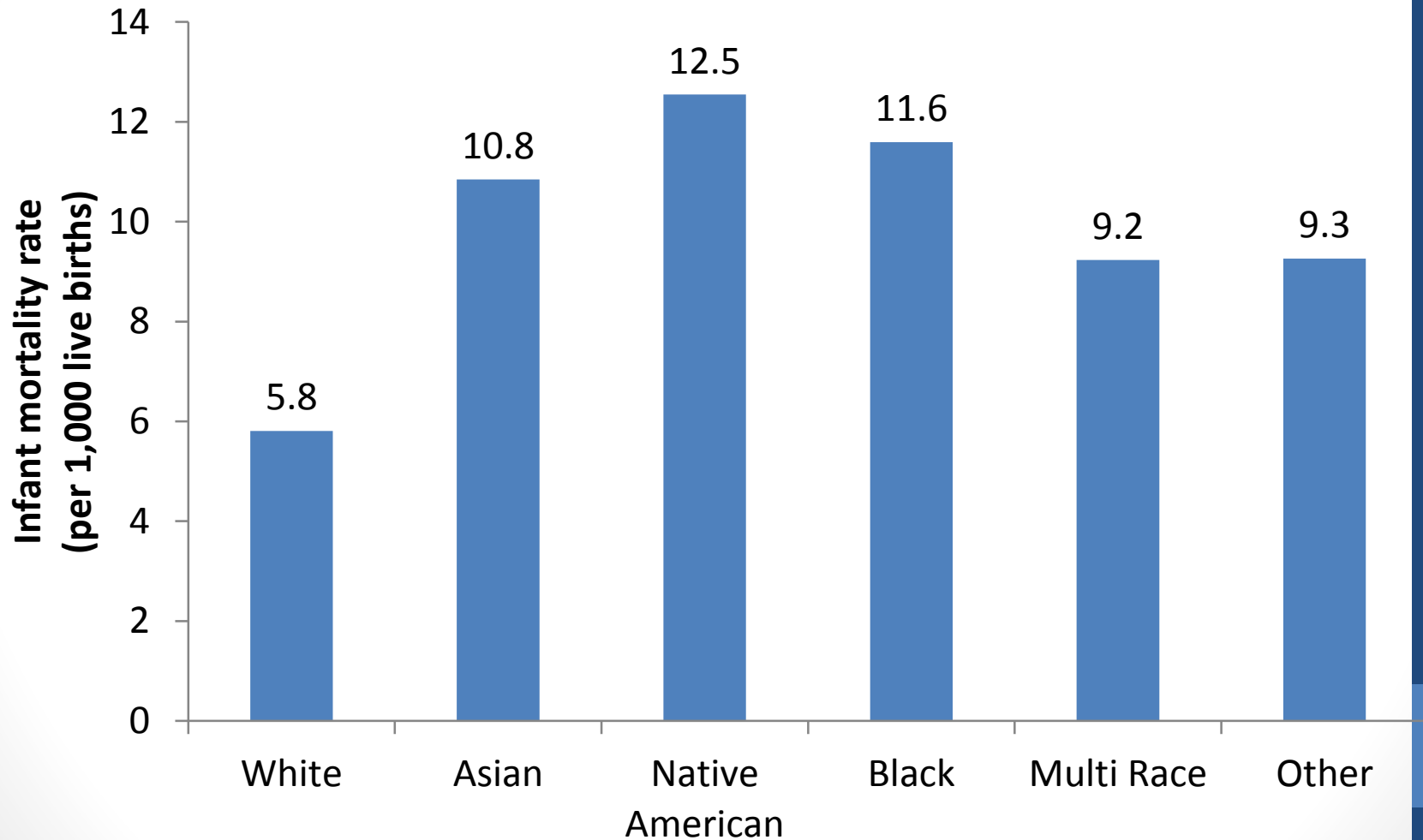
# Infant mortality rate, Wyoming, 2001 – 2011



WY Infant  
Mortality Rate:  
**6.89/1,000 live  
births**

Data Source: Wyoming Vital Statistics Services

# Infant mortality rate by maternal race, Wyoming, 2006 – 2011



Data Source: Wyoming Vital Statistics Services

# Infant Mortality by Infant Age, Wyoming 2006-2011

## Infant Mortality

### Neonatal Days 0-27

Wyoming: 61.9%  
Fremont: 52.5%  
Native American & Fremont: 47.4%

#### Leading Causes of Death

Congenital Malformations  
Short Gestation/low birth weight  
Infections specific to perinatal period

### Post-neonatal Days 28 - 364

Wyoming: 38.1%  
Fremont: 47.5%  
Native American & Fremont: 52.6%

#### Leading Causes of Death

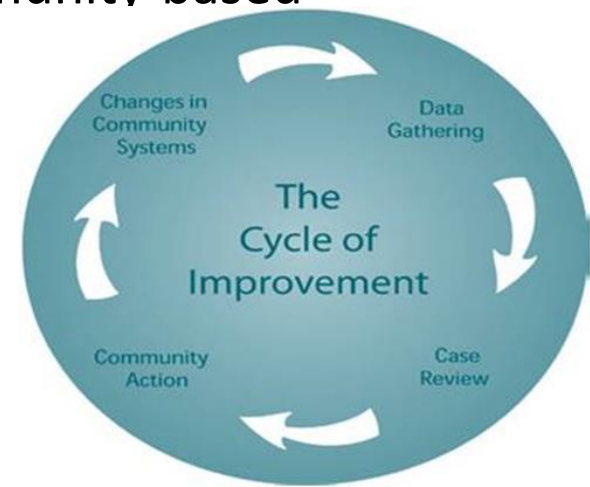
Homicide/ Assault  
Unintentional Injury  
SIDS

# What are we doing?

- Build upon existing partnerships, make new partnerships
- 2013 State hosted Infant Mortality Summit
  - Overview of infant mortality
  - In depth look at Fremont County data
  - What's missing?
    - Next step – Fetal Infant Mortality Review Committee
- FIMR Planning Committee first meeting Jan 2014
  - Planning Pilot Project to learn more about why infants die in Fremont County
  - State facilitated, but local level
  - Membership: Eastern Shoshone Tribal Health, Northern Arapaho Tribal Health, IHS, county corner, county public health, hospitals, liaisons

# Fetal Infant Mortality Review (FIMR)

- Purpose: To develop an action-oriented community process that continually assesses, monitors, and works to improve service systems and community resources for women, infants, and families.
- Examine significant social, economic, cultural, safety, and health systems factors through review of cases
- Plan interventions and policies that address those factors to improve service systems and community resources
- Participate in the implementation of community-based interventions and policies
- Assess the progress of interventions
- FIMR is not fault finding



# FIMR in Fremont County

- The charge: Take national model and make it work in Wyoming, Fremont County, WRIR
- The Process:
- Case Review Team
  - Medical, public health, social services, law enforcement records review
  - Opportunity for family to tell their story through the maternal interview
  - Make recommendations for prevention
- Community Action Team
  - Prioritize case review recommendations
  - Mobilize change

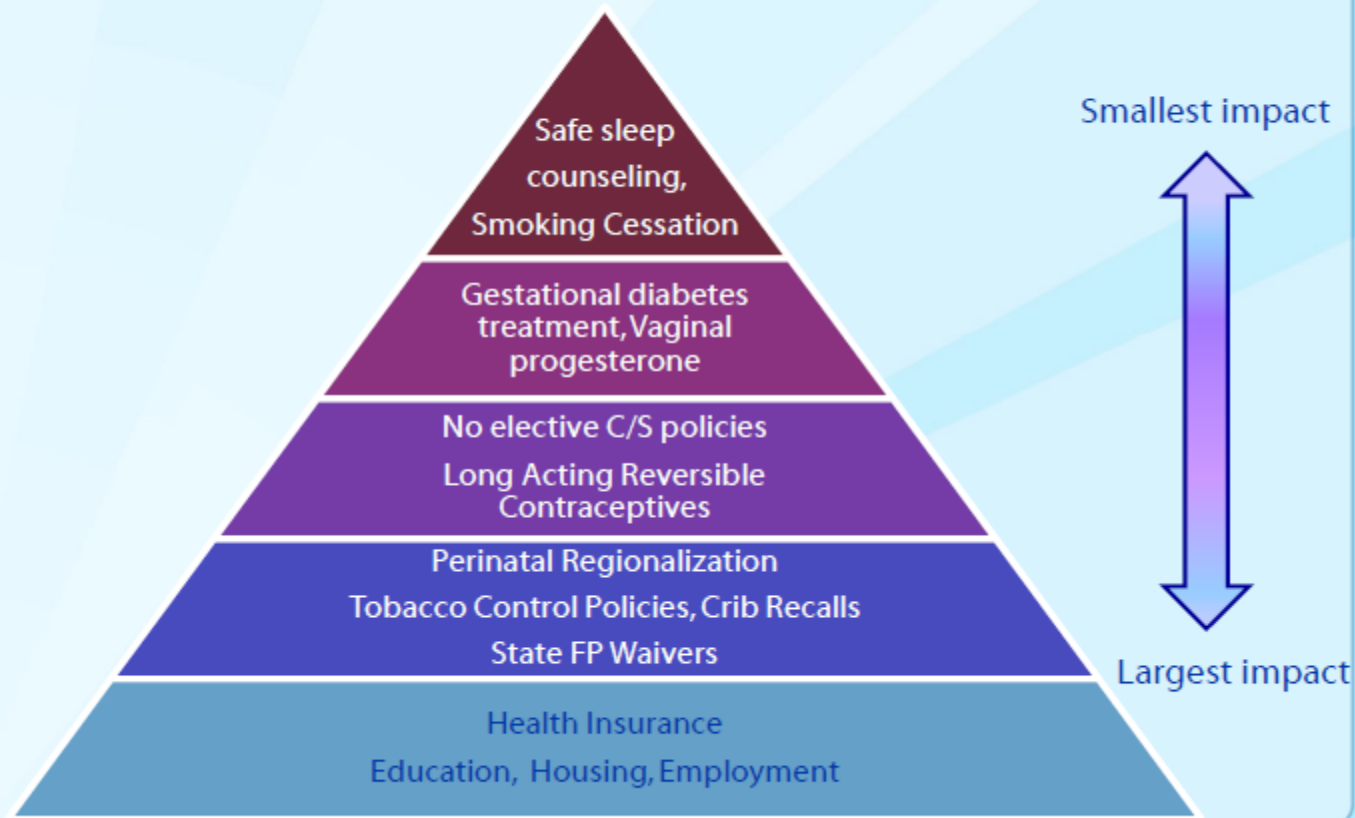
# FIMR Progress So Far

- Active planning committee
- Letters of Support
  - Northern Arapaho, Eastern Shoshone, County Public Health, County Coroners, SageWest, IHS
- Protocol developed
- Community Meetings recruited team members for CRT and CAT
- National FIMR training in Fremont County June 30, CWC
- Case reviews should start this fall



# Where do we want to be?

## Illustration: Impact Pyramid for Infant Mortality Prevention



Source: Frieden TR. A framework for public health impact: The health impact pyramid. AJPH 2009

# Biggest challenges

- Obvious but not easy
  - Eliminating poverty
- Framing of Social Determinants of Health
- Complicated, multiple systems
- Time – staffing, infrastructure
- Awareness
- Small numbers
- Wyoming “values”
  - Pull yourself up by boot straps
  - Personal Choices – vs public health
- Capacity
- Politics

# Necessary Elements for Change

- Collaboration across systems
- Teamwork
- Increased Awareness
  - Impacts of policies and economics
  - Inequality in health reflects more than genetics and personal choice
- Expanding our focus
  - Clinical to community
- Multi-disciplinary teams
- Investments in prevention/upstream factors
- Lifecourse perspective
  - Today's experiences and exposures determine tomorrow's health
    - Health Across the Lifespan

# Questions?

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