



The Role of Vital Statistics at the Health Resources and Services Administration, Maternal and Child Health Bureau

Michael D. Kogan, PhD
Director, Office of Epidemiology and Research
US Department of Health and Human Services
Health Resources And Services Administration
Maternal And Child Health Bureau



Maternal and Child Health Block Grant

- The Maternal and Child Health Block Grant is the oldest continuous public health program in the US.
- The Maternal and Child Health Block Grant supports the improved health of America's children and families in all 50 States, District of Columbia (D.C.), and the territories.
- The Block Grant serves more than **50 million** mothers and children annually, including:
 - **1/2** of all pregnant women
 - **1/3** of all infants and children
 - **4 million** children with special healthcare needs

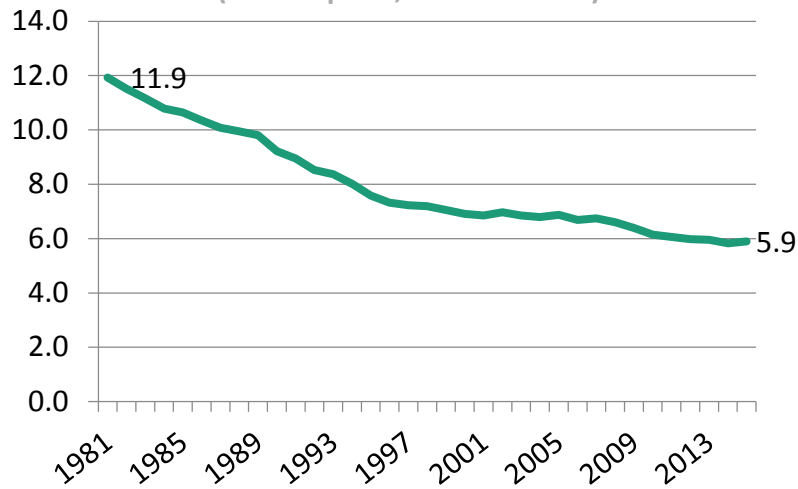


Maternal and Child Health Block Grant

- The program was redesigned as a block grant in 1981.
- It has helped States reduce infant mortality by **51%**, and child mortality by nearly **53%**.

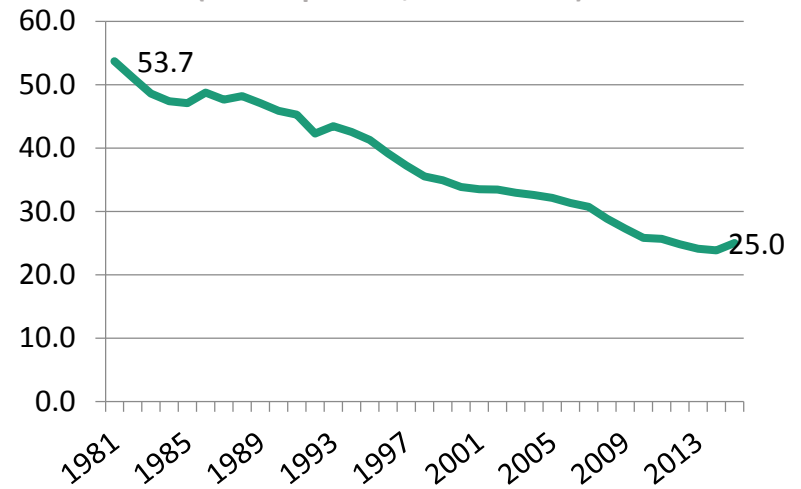
Infant Mortality Rate

(Deaths per 1,000 live births)



Child Mortality Rate

(deaths per 100,000 children)



Maternal and Child Health Block Grant

- The Block Grant gives States **flexibility** in meeting the health needs of their children and families.
 - States are required to provide a three dollar match of non-Federal funds for every four dollars allocated.
 - MCHB assures **accountability** through performance measurement and technical assistance.
- The legislation stipulates that information should be collected on maternal and infant health
- Vital records have formed the bedrock for that data collection
- States also use vital statistics data to monitor progress on state priorities through state performance measures.



Title V Measurement Framework



Evaluation Logic Model



National Outcome Measures

#	Short Title	Data Source
1	[REDACTED]	NVSS
2	Severe maternal morbidity	HCUP-SID
3	[REDACTED]	NVSS
4.1-4.3	[REDACTED]	NVSS
5.1-5.3	[REDACTED]	NVSS
6	[REDACTED]	NVSS
7	Early elective delivery	Hospital Compare
8	[REDACTED]	NVSS
9.1-9.5	[REDACTED]	NVSS
10	Drinking during pregnancy	PRAMS
11	Neonatal abstinence syndrome	HCUP-SID
12	Newborn screening timely follow-up	APHL
13	School readiness	NSCH
14	Tooth decay/cavities	NSCH
15	[REDACTED]	NVSS
16.1-16.3	[REDACTED]	NVSS
17	CSCHN, CSHCN systems of care, autism, ADD/ADHD	NSCH
18	Mental health treatment	NSCH
19	Overall health status	NSCH
20	Overweight/obesity – 2-4 years, 10-17 years, grade 9-12	WIC, NSCH, YRBSS
21	Uninsured	ACS, NSCH
22.1-22.5	Vaccination – infant, flu, HPV, Tdap, meningitis	NIS

National Performance Measures

#	Short Title	Data Source	MCH Population Domain
1	Well-woman visit	BRFSS	Women's/Maternal
2	[REDACTED]	NVSS	
3	[REDACTED]	NVSS + AAP	Perinatal/Infant
4A,B	Breastfeeding – initiation and exclusive through 6 months	NIS	
5	Safe sleep position	PRAMS	
6	Developmental screening	NSCH	Child
7	Injury hospitalization – 0-9 years and 10-19 years	HCUP-SID	Child and/or Adolescent
8	Physical activity – 6-11 years and 12-17 years	NSCH, YRBSS	
9	Bullying – perpetration and victimization	NSCH, YRBSS	Adolescent
10	Adolescent well-visit	NSCH	CSHCN
11	Medical home	NSCH	
12	Transition	NSCH	
13A,B	Preventive dental visit – during pregnancy, childhood	PRAMS, NSCH	Cross-cutting/Life course
14A,B	[REDACTED] household	NVSS, NSCH	
15	Adequate insurance	NSCH	

Healthy Start

- Works with local and community-based organizations to improve birth outcomes in communities with infant mortality rates 1.5 times the national average.
- Supports at-risk mothers and infants from entry into prenatal care through two years after birth.
- The program's **100** grantees serve more than **80,000** clients in **200** counties in **37** states and D.C.
- In 2015, the infant mortality rate among Healthy Start participants across 159 counties was 16% lower than the overall infant mortality rate in the same counties (5.2 vs. 6.2 per 1,000 live births).¹



Healthy Start

- **Use of vital statistics to determine IMR for eligibility or HS applicants**
- **Used to compare HS data against national data for CJ, OMBJ, HHSJ, and the national evaluation**



Infant Mortality Collaborative Improvement and Innovation Network

- The Collaborative Improvement and Innovation Network to Reduce Infant Mortality (IM ColIN) uses vital records as a key source of data to track progress in the initiative.
- Six ColIN-wide measures that all participating states are asked to submit into a shared, online data dashboard using quarterly provisional vital records data. (i.e., using provisional vital records data for quality improvement (QI) purposes).
- The main outcome measures include rates of infant mortality, neonatal mortality, postneonatal mortality, sudden unexpected infant death (SUID), preterm-related mortality, and preterm birth.
- In addition, specific strategy-focused Learning Networks within the IM ColIN use vital records data to track progress in meeting their QI aim.



Maternal, Infant, and Early Childhood Home Visiting Program

- Provides voluntary, evidence-based home visiting services to support at-risk pregnant women & parents with young children
- Builds upon decades of scientific research showing that home visits during pregnancy and in the first years of a child's life improves the lives of children and families
 - Prevents child abuse and neglect
 - Supports healthy behaviors and responsible parenting
 - Improves child development and school readiness
 - Promotes family economic self-sufficiency



Maternal, Infant, and Early Childhood Home Visiting Program

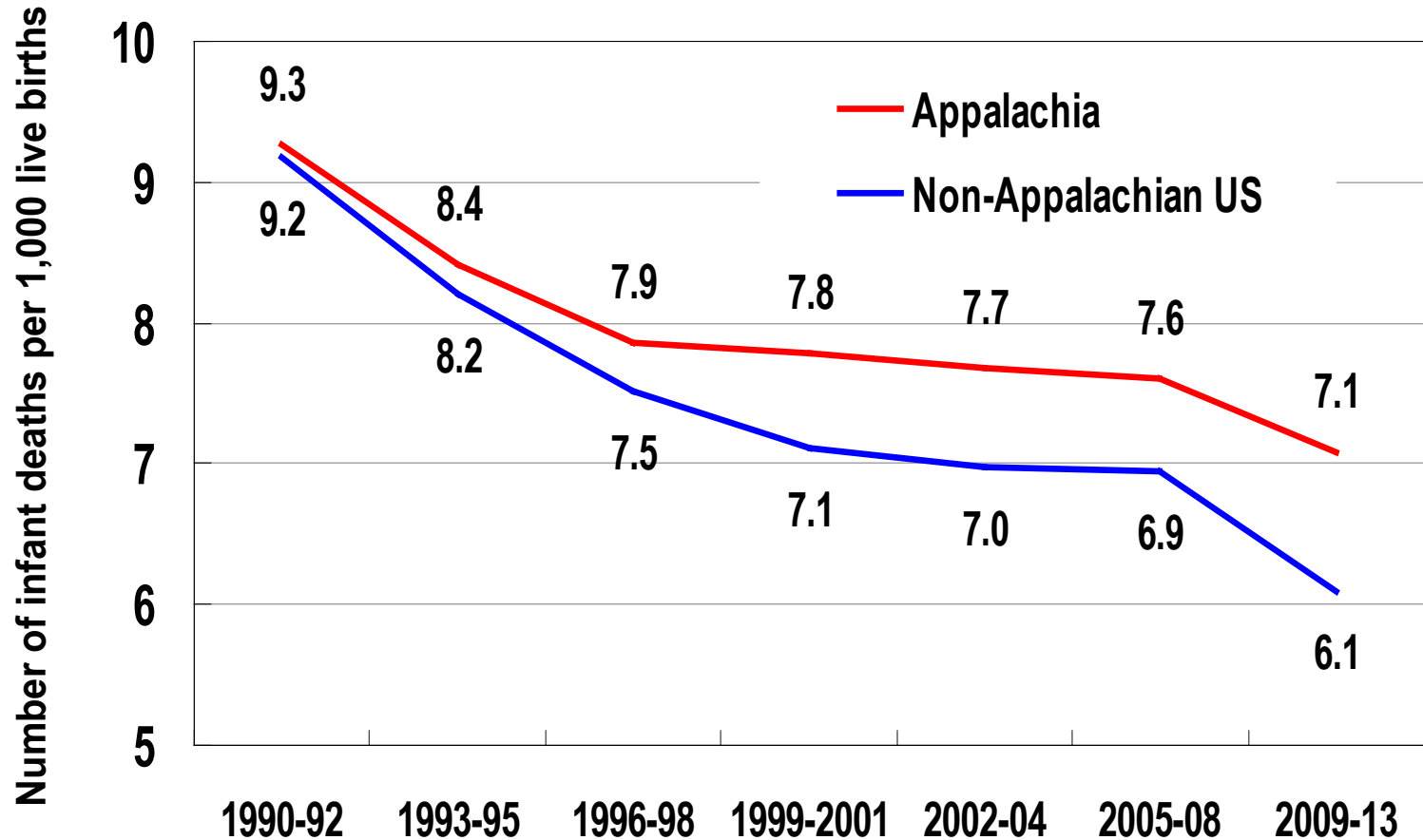
- **MIHOPE and MIHOPE-Strong Start collected individually-identifiable vital records (birth and fetal death certificates) from 17 states participating in the studies to measure impacts on selected outcomes and covariates.**
- **States provided these data by matching sample members' information to their data systems to return information on the following key outcomes:**
 - a) the health of the baby at birth, such as birth weight and gestational age;
 - b) mother's health behaviors, such as tobacco use during pregnancy, gestational weight gain, and adequate prenatal care;
 - c) breastfeeding at discharge from the hospital.
- **The vital records data are combined with other data sources, such as Medicaid data, family baseline survey data, U.S. Census data, home visiting service delivery data, and 15-month follow-up survey data (for MIHOPE only).**



Research



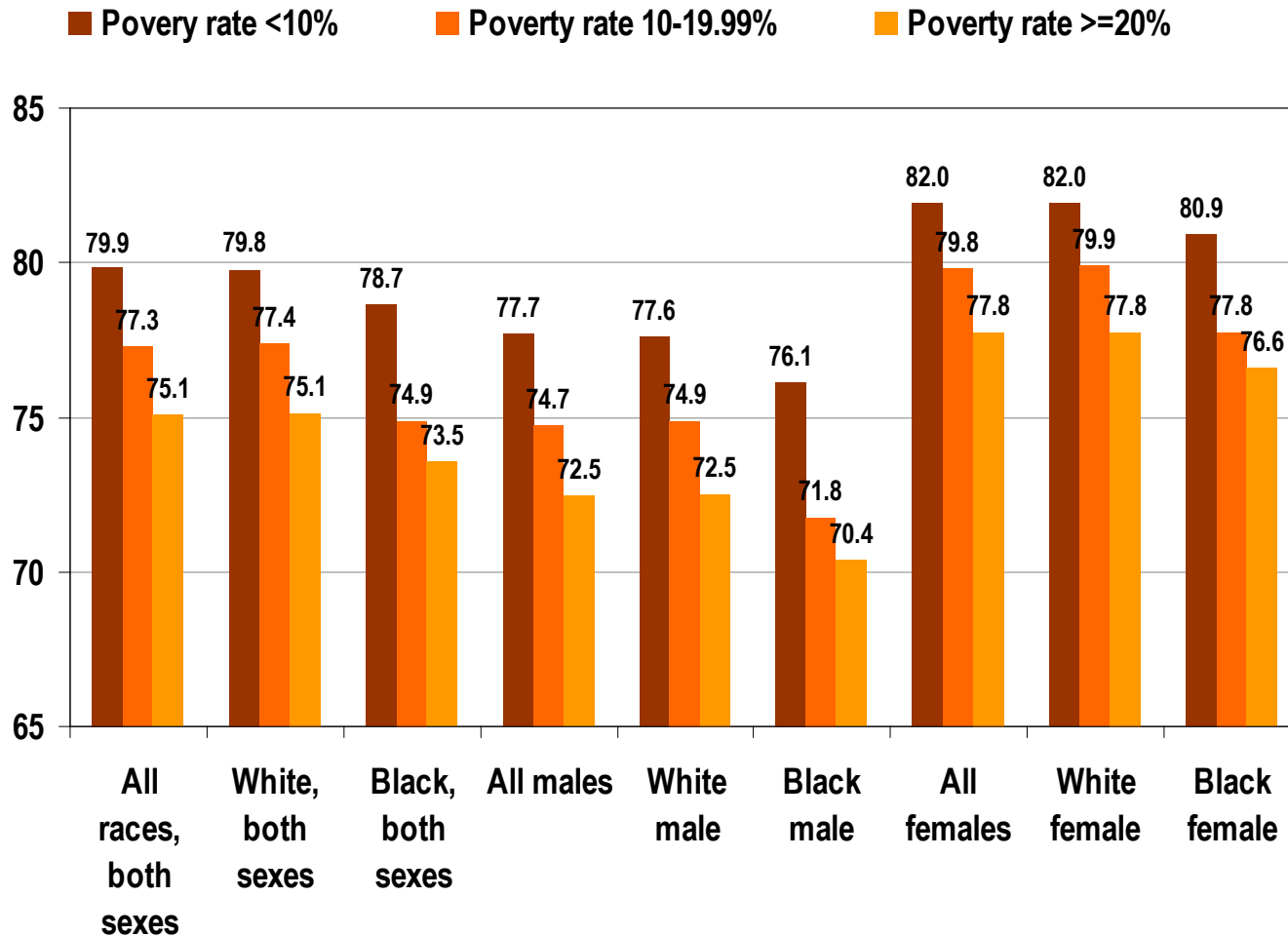
Infant Mortality Rates in Appalachia and the Non-Appalachian United States, 1990-2013



Source: Singh GK, Kogan MD, Slifkin RT. *Health Affairs*. 2017;36(8):1423-1432.



Life Expectancy at Birth (in Years) by County Poverty Level in Appalachia, 2009-2013



Source: Singh GK, Kogan MD, Slifkin RT. Health Affairs. 2017;36(8):1423-1432.



Contact Information

Michael Kogan

mkogan@hrsa.gov

301-443-3145

