Improving Birth Outcomes in Alaska Approaches, Activities and Challenges

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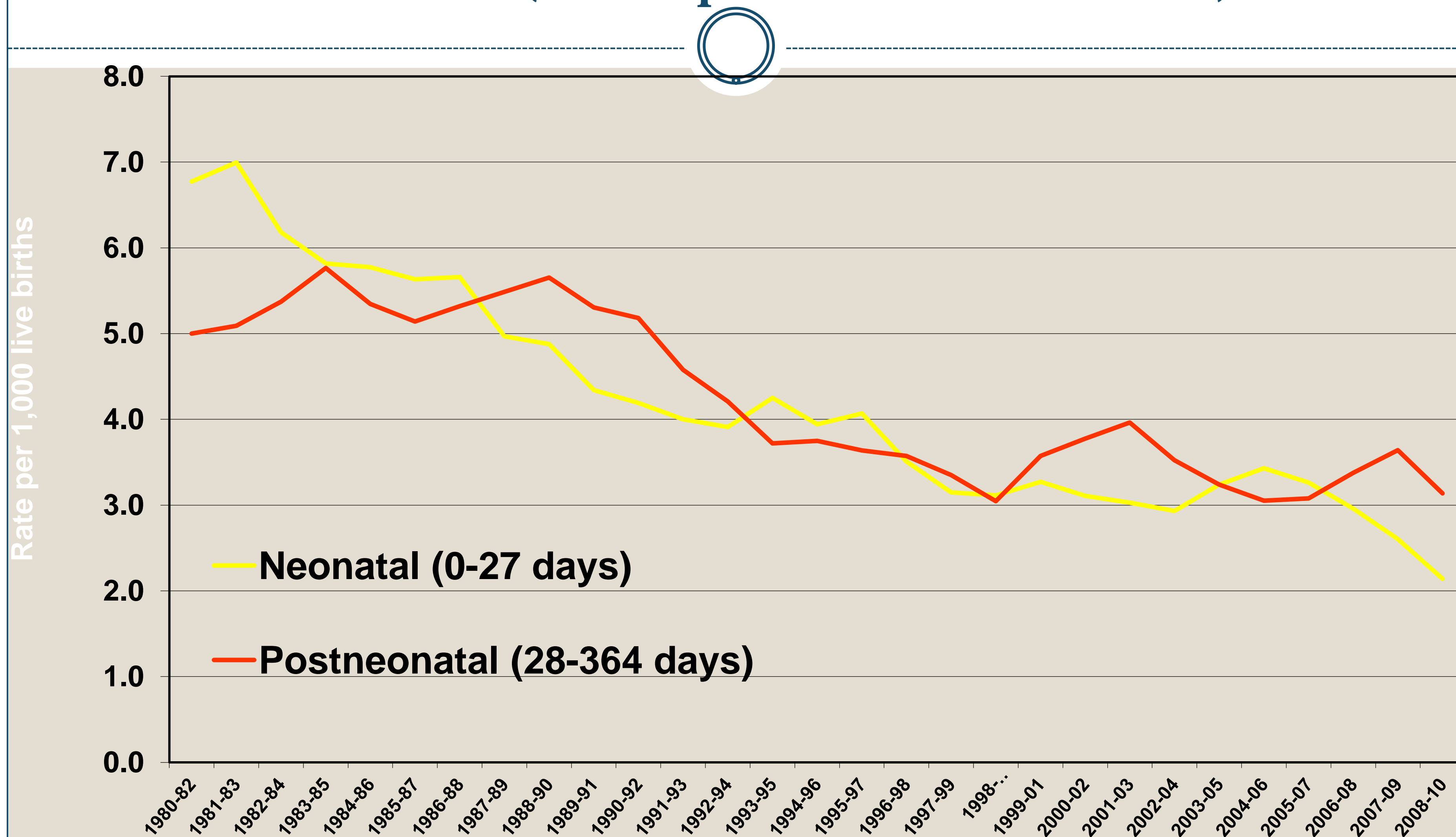
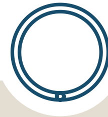
Alaska postneonatal and neonatal mortality rates, 1980-2010 (Rates per 1,000 live births)



Neonatal and Post-neonatal Mortality Rates

AK Bureau of Vital Statistics and National Center for Health Statistics at the Centers for Disease Control and Prevention.



Neonatal and post-neonatal mortality rates, Alaska and United States, 1992-2008

Disparities in Alaska

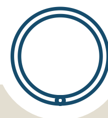
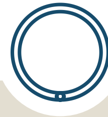


Figure 3. Neonatal and postneonatal mortality rates for Alaska Native and non-Native infants, 1992-2008

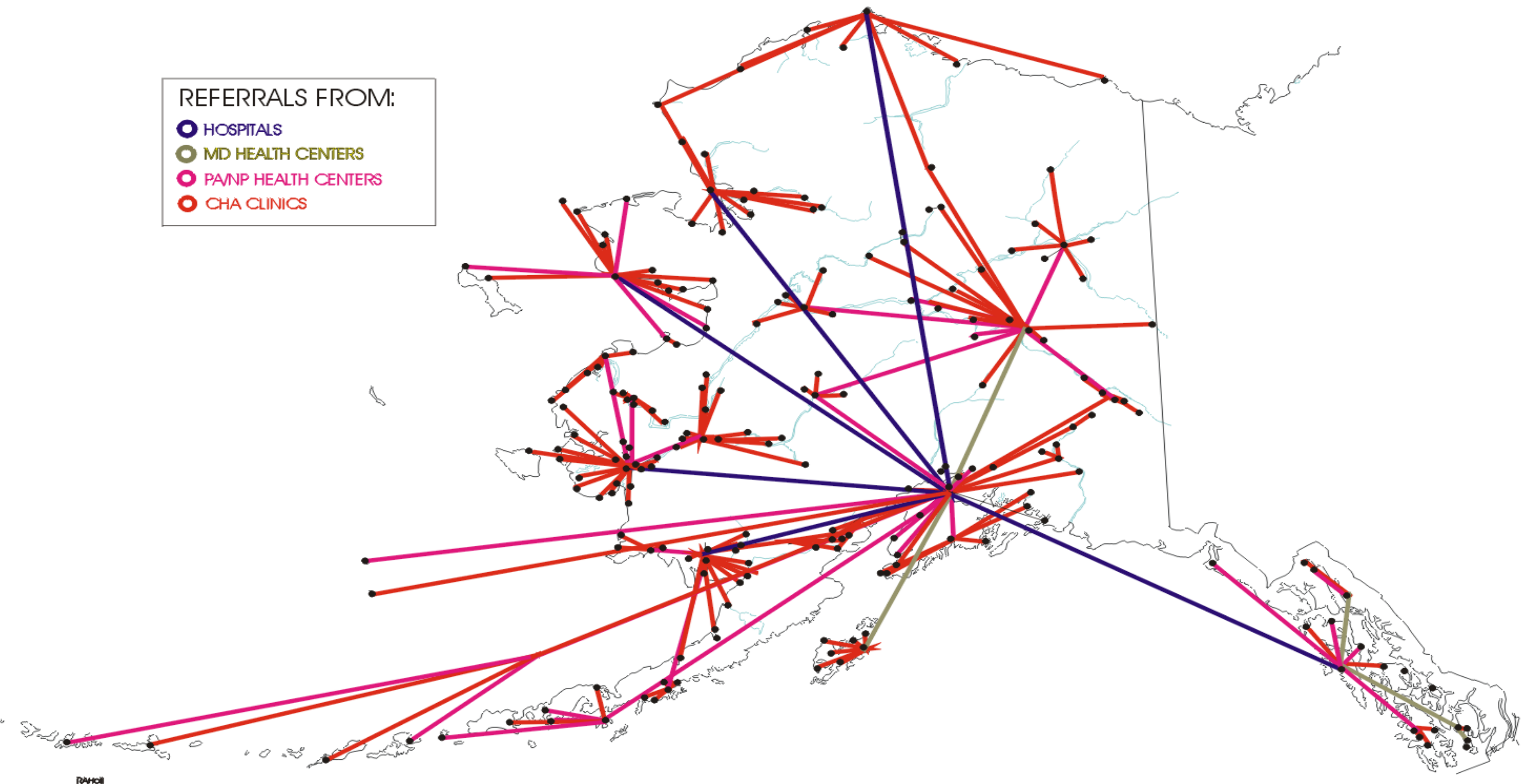
History in Alaska



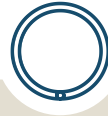
- Early 1980's Alaska was at the bottom of all states in Infant mortality with particularly high rates of neonatal and post neonatal mortality.
- Level III had just opened and was staffed with one neonatologist and rotating fellows. Two other facilities attempting to develop Level II NICU's
- No infrastructure for early identification or transport
- No maternal fetal medicine
- No roads to most of Alaska-air travel was developing
- High rates of drug and alcohol abuse and isolation complicated by challenges with access to health care

THE ALASKA NATIVE HEALTH CARE SYSTEM

Typical Referral Patterns

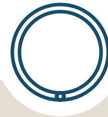


Approaches : System Changes



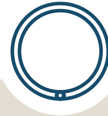
- Guidelines for Perinatal Care-AAP/ACOG served as the framework to guide the regionalization of care
- Healthy Babies Project-funded by Title V MCH federal dollars-regional outreach and training
- Equipment-stabilization boards, warming beds and resuscitation
- Development of a neonatal air and ground transport system
- Late 80's –addition of maternal transport training and implementation
- Implementation of maternal homes for tribal health beneficiaries-meant leaving village at 36 weeks to live in a hub community until delivery

Systems Changes: Perinatal Care



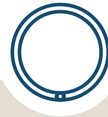
- Hospitals- acceptance statewide of one neonatal/ perinatal regional center
- Development and enhancements in support of two Level II NICU's.
- Joint recruitment of perinatologists, neonatologists and neonatal nurse practitioners
- Hospital support for training stipends
- Title V funded continuing education for physicians and nurses
- Intentional Quality Improvement work-joining the Vermont Oxford Network

Strategies for Perinatal Success: "39 Weeks Campaign"



- Collaborative effort between AMCHP, ASTHO and the March of Dimes to reduce non medically indicated inductions or cesarean sections prior to 39 weeks of completed pregnancy and reduce pre term births
- Statewide effort-most of the larger hospitals are involved. Coalition led by the MOD and the All Alaska Pediatric Partnership
- "Hard Stops" initiated at two of the larger birthing facilities with a planned initiation at the states regional perinatal/neonatal facility in November 2012.

CoIN-HRSA MCHB



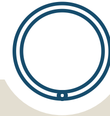
A CoIN, or Collaborative Innovation Network, has been described as a cyber-team of self-motivated people with a collective vision, enabled by the Web to collaborate in achieving a common goal by sharing ideas, information, and work.[1]

- **Key Elements of a COIN** are:
  - Being a "cyberteam" (i.e. most COIN work will be distance-based)
  - Innovation comes through rapid and on-going communication across all levels.

- Describes ***how*** individuals will work (and learn) collaboratively to develop, implement, and evaluate strategies to reduce infant mortality.

- **Adapted to reflect focus on both innovation <u>and improvement</u> Collaborative Improvement & Innovation Network to Reduce Infant Mortality (COIN).**

CoIN



- Born out of January 2012 Infant Mortality Summit in New Orleans, LA for Regions IV and VI.

- Designed to meet stated needs related to:
  - Common evidence-based strategies to reduce infant mortality;
  - Shared, collaborative learning and action *across* states.

- Initiated March 2012 as a mechanism to support the adoption of collaborative learning and quality improvement principles and practices to reduce infant mortality and improve birth outcomes.

- Developed in partnership with ASTHO, AMCHP, March of Dimes, CityMatCH, CMS, and CDC.

CoIN Structure

Strategy Teams

Strategy Teams focused on common state-identified priorities:

1. Reducing elective deliveries <39 weeks (ED);
2. Expanding interconception care in Medicaid (IC);
3. Reducing SIDS/SUID (SS);
4. Increasing smoking cessation among pregnant women (SC);
5. Enhancing perinatal regionalization (

Teams

Teams

- 2-3 **Leads** (Topical Experts);
- **Data** and/or **Methods Experts** (as needed);
- 2 **Staff** from MCHB and Partner Organizations;
- Self-selected M**embers** from each of the 13 states in Regions IV and VI.

Teams average 25-30 members.

State delegations range from 7-13 members.

Post Neonatal Mortality

Figure 6. Cause-specific mortality rates, Alaska 1992-2005, 3-year moving averages

Rate per 1,000 live births

3.0
2.5
2.0
1.5
1.0
0.5
0.0

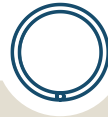
1992-1994
1993-1995
1994-1996
1995-1997
1996-1998
1997-1999
1998-2000
1999-2001
2000-2002
2001-2003
2002-2004
2003-2005

SIDS/SUID/asphyxia
Preterm birth
Congenital anomalies
Infections
Perinatal events or conditions
Injury
Unknown
Other

Contributing Factors to Post Neonatal Mortality: Sudden Unexplained Infant Deaths and Asphyxia

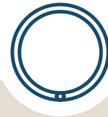
- SUID or asphyxia in a sleep environment was the most common determination made by the MIMR/CDR committee.
- Known risk factors: suffocation related to unsafe sleep environments (sleeping prone; non standard sleep surfaces, bed sharing with an impaired person and exposure to prenatal tobacco or environmental tobacco smoke.

Strategies to reduce Post Neonatal Morality



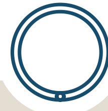
- Creation of an Infant Safe Sleep Task Force
- Division Position Statement on Infant Safe Sleep-reflects the revised AAP position statement
- Social Marketing evaluation on safe sleep information
- Tool Kit development and education for nursing
- Engagement of hospital nursing staff and health care providers on messaging consistent information about safe sleep practices
- Home Visiting programs – MIECHV and Healthy Start

Future challenges: Improving Birth Outcomes



- Reducing the effects of alcohol and drug abuse – limited treatment facilities for pregnant and parenting mothers
- Tobacco cessation programs for pregnant and postpartum women
- Child maltreatment prevention-new attention in our state
- Reducing the rates of preventable congenital anomalies-increase in folic acid intake; abstinence from alcohol and drug use
- Better management of intrapartum and neonatal infections

Other Resources: AMCHP



- **Forging a Comprehensive Initiative to Improve Birth Outcomes and Reduce Infant Mortality** *(AMCHP Compendium on Improving Birth Outcomes, July 2012)*
- This compendium presents a series of policy and programmatic options state agencies and their partners can use to accelerate progress in improving birth outcomes, reducing prematurity and infant mortality and narrowing glaring health disparities. Click here to access the full compendium.
- To access specific sections of the AMCHP Compendium on Improving Birth Outcomes click below:
  - Introduction, Methodology, Conceptual Framework and Initial Considerations (11 pages).
  - Recommendations, Action Steps and Program/Policy Examples (44 pages).
  - Seven State Case Studies (18 pages).
  - Appendices (22 pages).
- http://www.amchp.org/programsandtopics/womens-health/infant-mortality/Pages/default.aspx

Thank you
For more information: Stephanie.birch@alaska.gov