

Protecting Moms and Babies During Public Health Emergencies: Gaps and Solutions



Public health emergencies – including disease outbreaks, natural and man-made disasters, and large-scale exposures to hazardous substances – pose unique risks for pregnant women, infants, and children. Gaps in emergency preparedness and response may leave pregnant women, infants, and children especially vulnerable.

Gaps

DATA

Solutions

- Maternal and child health (MCH) epidemiology workforce and surveillance systems vary across states and territories and lack capacity for rapid response data collection and dissemination.
- Fragmentation and limited connectivity of existing datasets impede the ability to track emerging threats to moms and babies and monitor short- and long-term health outcomes.
- Support the development and expansion of flexible public health surveillance systems that:
 - link maternal, infant, and child data;
 - provide accurate, reliable, real-time data;
 - enable long-term assessment and follow-up; and
 - can be adapted to various emerging public health threats.

Gaps

COMMUNICATION

Solutions

- MCH programs and workforce are not consistently connected with emergency preparedness and response teams.
- Coordination and communication are inadequate within and between local, state/territorial, and federal partners and with health care providers.
- Establish mechanisms for multi-agency, multi-disciplinary coordination within and across jurisdictions, engaging maternal and child public health, clinical, and family stakeholders at all levels.
- Create multi-agency communication plans for consistent messaging to state/territorial and local public health stakeholders, health care providers, and the public about MCH-specific needs.

Gaps

INVESTMENT

Solutions

- Current funding levels for public health infrastructure are insufficient to develop and maintain preparedness to address the unique vulnerabilities of MCH populations during public health emergencies.
- Provide funding that is flexible and consistent to enable our nation to respond rapidly to a variety of health threats that have unique impacts on MCH populations.

Protecting Moms and Babies During Public Health Emergencies: Solutions in Action



A new CDC initiative, “**Surveillance for Emerging Threats to Mothers and Babies**,” is investing in public health data systems to better monitor and respond to the unique risks and needs of pregnant women, infants, and children during public health emergencies.

A new proposal to modernize our nation’s public health surveillance systems, “**Data: Elemental to Health**,” would further strengthen capacity to respond to emerging threats to moms and babies by bringing antiquated data systems up to 21st century standards of quality and security.

Surveillance for Emerging Threats to Mothers and Babies

CDC’s National Center on Birth Defects and Developmental Disabilities



- Monitors emerging public health threats to mothers and babies using longitudinal, linked data to inform clinical guidance and public health action
- Leverages existing birth defects surveillance systems to monitor adverse infant outcomes linked to emerging public health threats, providing real-time, evidence-based, actionable information that helps save and improve lives



- Builds on lessons learned in response to the 2016 Zika virus outbreak to better integrate maternal and child health workforce and programs and emergency preparedness and response teams



- Invests in public health infrastructure to build systems capacity in selected states to detect the effects of health threats on moms and babies
- At the fiscal year 2019 funding level of \$10 million, supports 13 jurisdictions to continue surveillance of the more than 7,000 infants and children impacted by Zika virus infection during pregnancy and/or adapt the Zika mother-baby surveillance platform to respond to other infectious diseases, including syphilis and hepatitis C
- With increased funding, could scale to monitor and inform response to additional public health threats to moms and babies – such as other infectious diseases, environmental hazards, and exposures to harmful substances like opioids – in additional jurisdictions across the country

Data: Elemental to Health



- New investments in the public health data systems that form the backbone of our nation’s surveillance efforts could: replace slow, paper-based reporting methods with automated, electronic data transmission; increase interoperability and integration of data systems; upgrade security; and develop the skilled data science workforce needed to use and maintain these systems.



- Modernization of our nation’s public health data systems would provide more complete, accurate, and timely population-level monitoring, enable better use of data to improve health, and protect health information from cybersecurity threats.