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HHS Maternal-Child Health Emergency Planning Toolkit

May 2021



HHS MATERNAL-CHILD HEALTH EMERGENCY PLANNING TOOLKIT

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Introduction

Purpose and Audience

The purpose of the U.S. Department of Health and Human Services (HHS) Maternal-Child Health (MCH) Emergency Planning toolkit (this toolkit) is to improve the capacity of health care, public health, and social services providers to address maternal and child health in emergency preparedness, response, recovery, and mitigation activities.¹ This toolkit outlines basic planning steps, highlights key resources and promising practices, and explains critical data and information on maternal and child health for integration across the emergency management cycle.

This toolkit is intended for providers serving MCH populations, however the information is also relevant to other stakeholder groups (see **Table 1**). Additional MCH partners are referenced in **Figure 6: Example MCH Partners and Stakeholders**.

Table 1: Audiences for the HHS MCH Emergency Planning Toolkit

PRIMARY AUDIENCE	SECONDARY AUDIENCE
<ul style="list-style-type: none">• Health Care Providers• Public Health Officials• Social Services Providers• Title V Maternal and Child Health Services Block Grantees and Related Federal Grantees• Direct Service Providers for MCH Populations• Community Health Workers/Promotores de Salud	<ul style="list-style-type: none">• Community Partners and Organizations• Emergency Managers• Home Visitors• Individuals and Families

Improving maternal health is a core public health goal of the U.S. government. HHS issued [an Action Plan](#) in December 2020 that provides a roadmap for addressing risk factors prior to and during pregnancy and improving the quality of and access to maternal and postpartum care. The Action Plan outlines three specific targets to improve the nation’s maternal health outcomes by 2025, including *reducing the maternal mortality rate by 50 percent*.² The U.S. Surgeon General issued a corresponding [Call to Action to Improve Maternal Health](#), emphasizing the stark racial, ethnic, and geographic disparities in the current state of maternal mortality and morbidity.

Although substantial progress has been made in improving the health and well-being of all Americans, inequities between population groups and geographic areas have persisted and remain marked. The term “equity” means the consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.³

Due to these disparities, this toolkit highlights additional health care and planning considerations underserved communities may require throughout the emergency management cycle. The term “underserved communities” refers to populations sharing a particular characteristic, as well as geographic

¹ This toolkit was developed by the HHS/ASPR At-Risk Individuals Program in collaboration with the federal interagency and other partners in the public health, maternal-child health, and emergency management fields.

² U.S. Department of Health and Human Services. (2021). [HHS Outlines New Plans and a Partnership to Reduce U.S. Pregnancy-Related Deaths](https://www.hhs.gov/about/news/2020/12/03/hhs-outlines-new-plans-to-reduce-us-pregnancy-related-deaths.html). <https://www.hhs.gov/about/news/2020/12/03/hhs-outlines-new-plans-to-reduce-us-pregnancy-related-deaths.html>

³ The White House (Pres. Joseph R. Biden). Exec. Order No. 13985, January 20, 2021, [Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government](https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/). <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/>

communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, as exemplified by the list in the preceding definition of “equity.”⁴

TITLE V MCH SERVICES BLOCK GRANT PROGRAM

The Title V MCH Services Block Grant Program, administered by the Health Resources and Services Administration (HRSA), is a federal-state partnership with 59 states and jurisdictions to improve maternal and child health. The program provides funding to address current and emerging health needs of MCH populations.

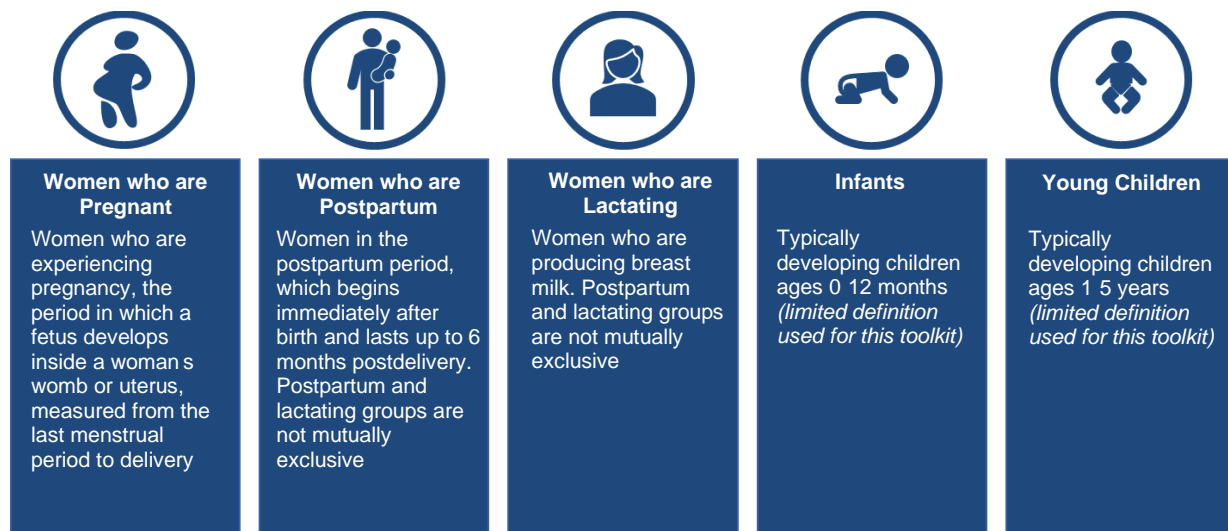
Title V programs partner with federal, state, and local entities to implement five-year State Action Plans. These partnerships include federally administered programs, state and local MCH programs, Tribes and Tribal Organizations, public health and health professional educational programs, and public and private MCH organizations. Each state has a Title V MCH Services Block Grant Coordinator who can provide useful information for emergency planning such as data on MCH populations and other MCH stakeholders to include in preparedness efforts for MCH populations.

Learn more and contact [Your State or Jurisdiction’s MCH Director](#) through the [HRSA MCH Services Block Grant Program Website](#).

Overview of MCH Populations

MCH is a sub-field of public health that focuses on a population susceptible to poor health outcomes that centers around creating equitable systems to support the population. Maternal health is the health of women during preconception, pregnancy, childbirth, and the postpartum periods.⁵ Child health is the physical, mental, emotional, and social well-being of children from infancy through adolescence. Physical, emotional, and social changes occur before, during, and after pregnancy, through infancy and childhood. Due to the inseparability of women who are pregnant, postpartum, and/or lactating and infants and young children as a biological and social unit, this toolkit provides information and resources to support each of these populations. See **Figure 1** for the specific description that this toolkit uses for each of the populations.

Figure 1: MCH Populations in this Toolkit



This toolkit provides guidance and advice to address the needs of women who are pregnant, postpartum, and/or lactating and typically developing infants and young children in emergencies. This toolkit does not provide comprehensive guidance for children over age 5, children with special health care needs, family members, caregivers, women planning to become pregnant, women in the interconception phase, or on

⁴ *Ibidem*.

⁵ U.S. Department of Health and Human Services. (2020). [The Surgeon General’s Call to Action to Improve Maternal Health](https://www.hhs.gov/sites/default/files/call-to-action-maternal-health.pdf). <https://www.hhs.gov/sites/default/files/call-to-action-maternal-health.pdf>

complexities of caring for multiple children. However, limited information will be applicable, and future toolkits and resources may include additional information to support these groups.

The term caregiver is used throughout this toolkit to describe adults responsible for the health, safety, and care of infants and young children. Caregivers can include, but are not limited to, mothers, fathers, grandparents, relatives, legal guardians, and trusted child care providers (e.g., early childhood educator and teacher). Although the terms women who are pregnant, postpartum, and/or lactating are used in this toolkit, not all individuals who are pregnant, postpartum, or lactating identify as a woman and may use pronouns other than she/her, such as he/him or they/them. Nevertheless, the information in this toolkit may be useful for their needs.

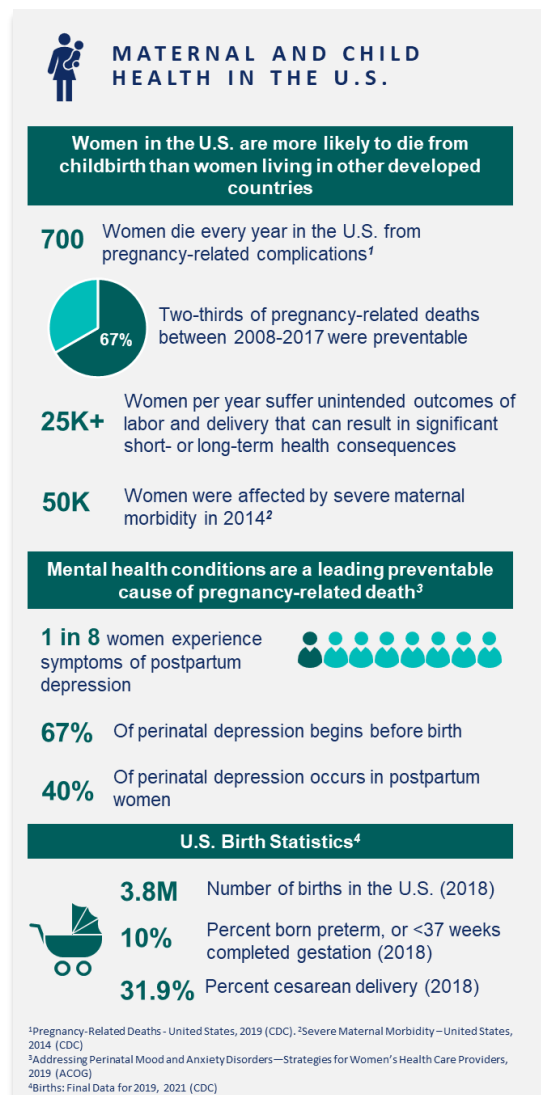
Why Focus on MCH Populations?

Women who are pregnant, postpartum, and/or lactating and infants and young children have specific [access and functional needs](#) that must be taken into account in planning for and providing support during and/or after an emergency. Additionally, the health of women who are pregnant, postpartum, and/or lactating and infants and young children may be significantly impacted by new or emerging threats. Evidence suggests that emergencies, such as natural disasters (e.g., wildfires) and human-caused disasters (e.g., acts of terrorism), cause stress that can result in and/or increase the risks of adverse birth outcomes among women who are pregnant, such as spontaneous miscarriages, preterm births, and low-birth-weight infants. For caregivers with infants and young children, limited access to clean water, electricity, and privacy can disrupt breastfeeding and/or the provision of formula and the ability to feed infants safely. Stress experienced during an emergency can also impact breastfeeding families and they may need additional support.

While an emergency can be devastating for any affected population, women who are pregnant and postpartum require additional considerations given the unique physical and psychosocial needs associated with pregnancy in both non-emergency and emergency scenarios. Women who are postpartum are also at-risk for complications, including infection and heavy bleeding.

Infants and young children are also at-risk during emergencies, with the youngest infants being the most at-risk for illness and death. Infants have specific food and fluid requirements, an immature immune system, are prone to dehydration, and are dependent on others for their care needs. These characteristics interact with environmental conditions associated with emergencies such as poor sanitation, food and water shortages, power shortages, overcrowding, disruption in family functioning, and restricted access to health care, to create situations where infants are at heightened risk for illness and death. It is imperative to consider how to address the needs of this population during every phase of the emergency management cycle, and to engage local, state, and federal partners who may interact with MCH populations in various ways.

Figure 2: Maternal and Child Health in the U.S.



In an emergency, MCH populations may experience, for example:

- Increased susceptibility to infections and illness
- Altered labor and birth plans, particularly if women are separated from their regular health care providers and medical facilities
- Reduced access to care for contraception and reproductive health care
- Increased psychological stress
- Exacerbation of mental health conditions and/or substance use
- Separation from family and support systems, including separation of children from caregivers
- Exposure to gender-based violence
- Exposure to infectious diseases or environmental toxins
- New or worsening food insecurity and access to water
- Challenges in achieving optimum postpartum care for pregnant patients
- Challenges in identifying a health care provider to assume primary responsibility for ongoing care of chronic health conditions in their primary medical home
- Concerns about breastfeeding infants after exposure to chemicals in flood water or when experiencing diarrhea or a food-borne illness
- Clean water concerns for maternal hydration and breast milk supply, for cleaning of infant feeding supplies, and for feeding powdered infant formula
- Delayed access to infant care supplies – either due to loss of home supplies, or from disruption of supply chain
- Disruption in mother/infant contact in order to prevent infant exposure (i.e., infectious disease emergencies)
- Decreased access to well-child and acute care for infants

Women who are pregnant, postpartum, and/or lactating and infants and young children are all sensitive to the stress and pressures of emergency situations. For example, experiencing or witnessing a traumatic event that threatens the life or physical security of oneself or of a loved one can be traumatic, especially for young children. The perinatal period, or the time immediately before and after birth, is ideal for the detection, assessment, and treatment of perinatal mood and anxiety disorders.⁶ The physical and mental health of women who are pregnant, postpartum, and/or lactating also impacts health of infants and young children.



There are stark differences in maternal and child health outcomes across demographic groups and geography (**Figure 3**). Variability in the risk of death by race/ethnicity may be due to multiple factors, including access to care, quality of care, prevalence of chronic diseases, structural racism, implicit biases, and systemic differences in opportunities to obtain information and/or access to and use of offered resources. Socioeconomic factors, such as limited or lack of access to health care, being from diverse cultural and linguistic backgrounds, being from a racial/ethnic minority group, or being a member of a low-income household, worsen the impact of an emergency event on women who are pregnant, postpartum, and/or lactating and infants and young children. Systemic policies may result in disproportionate access to public health services and health care, as well as disparities in



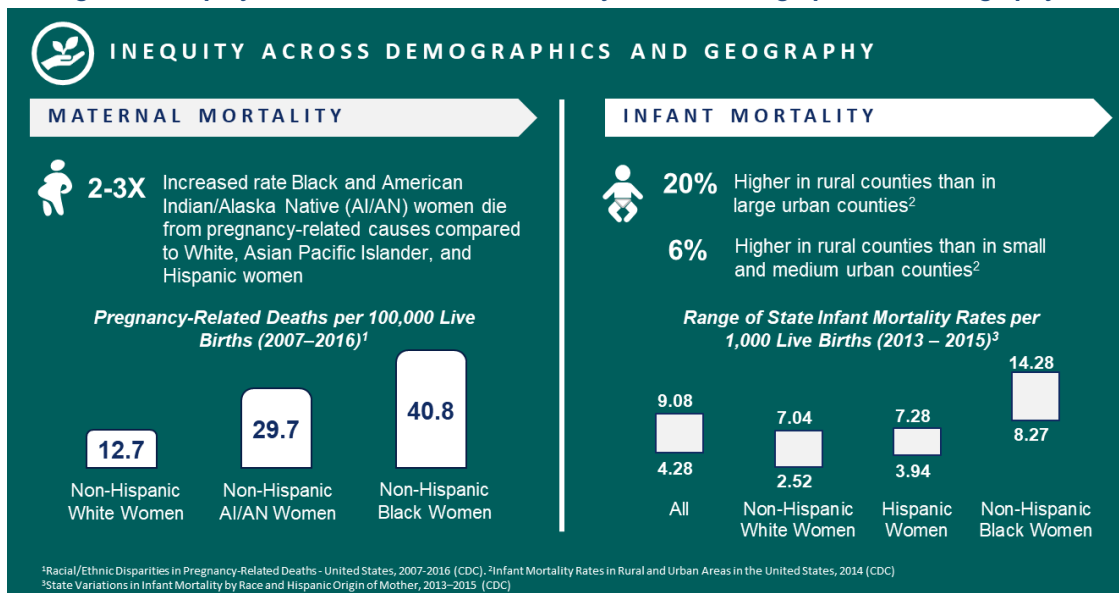
Recommendation for Implementation: Include health equity in emergency planning for by:

- Conducting equity training
- Identifying system gaps and strategies for addressing the needs of MCH populations
- Engaging members of at-risk populations and MCH community partners
- Incorporating community faith, private sector, and community-based organizations into design and planning processes

⁶ The American College of Obstetricians and Gynecologists. (2019). [Addressing Perinatal Mood and Anxiety Disorders-Strategies for Women's Health Care Providers](https://www.acog.org/education-and-events/webinars/addressing-perinatal-mood-and-anxiety-disorders). <https://www.acog.org/education-and-events/webinars/addressing-perinatal-mood-and-anxiety-disorders>

health outcomes. It is important to embed and operationalize health equity into preparedness activities to foster emergency planning that accounts for and works toward addressing inequities.

Figure 3: Inequity in Maternal and Infant Mortality Across Demographics and Geography



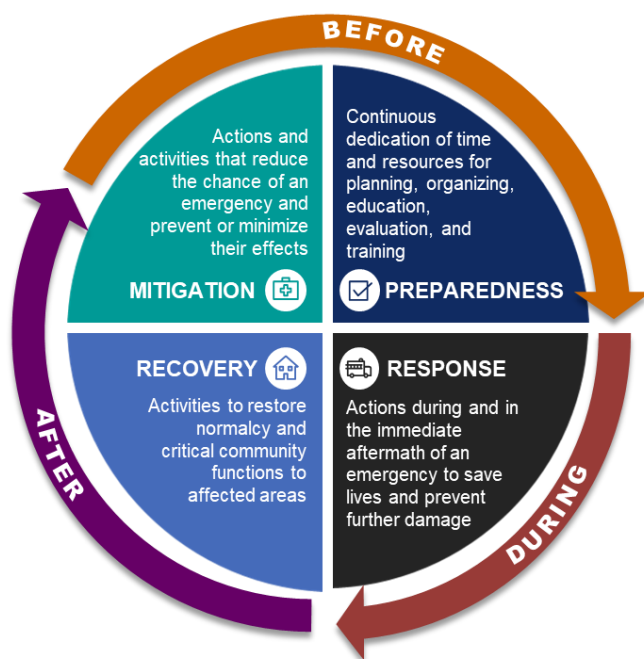
Structure, Frameworks, and Key Concepts

Overall Structure

This toolkit follows the four-phase emergency management cycle, employed by the Federal Emergency Management Agency (FEMA), with distinct modules on preparedness, response, and recovery, and with components of mitigation woven throughout. Each module provides key considerations and information for addressing the needs of women who are pregnant, postpartum, and/or lactating, and infants and young children during the specific phase of this cycle. Planning lays the foundation for all emergency management efforts, and planning to address the access and functional needs of at-risk individuals, such as MCH populations, is critical across the emergency management cycle. *For more information on the Emergency Management Cycle, see **Appendix B: Overview of the Emergency Management Cycle.***

This toolkit is intended to apply to a variety of emergency and all-hazards scenarios and is not specific to any one type of emergency. Within each module, specific information and resources are provided for infectious disease outbreaks, localized emergencies (e.g., failure of municipal services), and natural and human-caused disasters requiring and not requiring evacuation.

Figure 4: Emergency Management Cycle



Given overlap in the information required to address the needs of MCH populations across the emergency management cycle, information may be found in a different section than expected. Explore each section to identify all the relevant resources that can support your work.

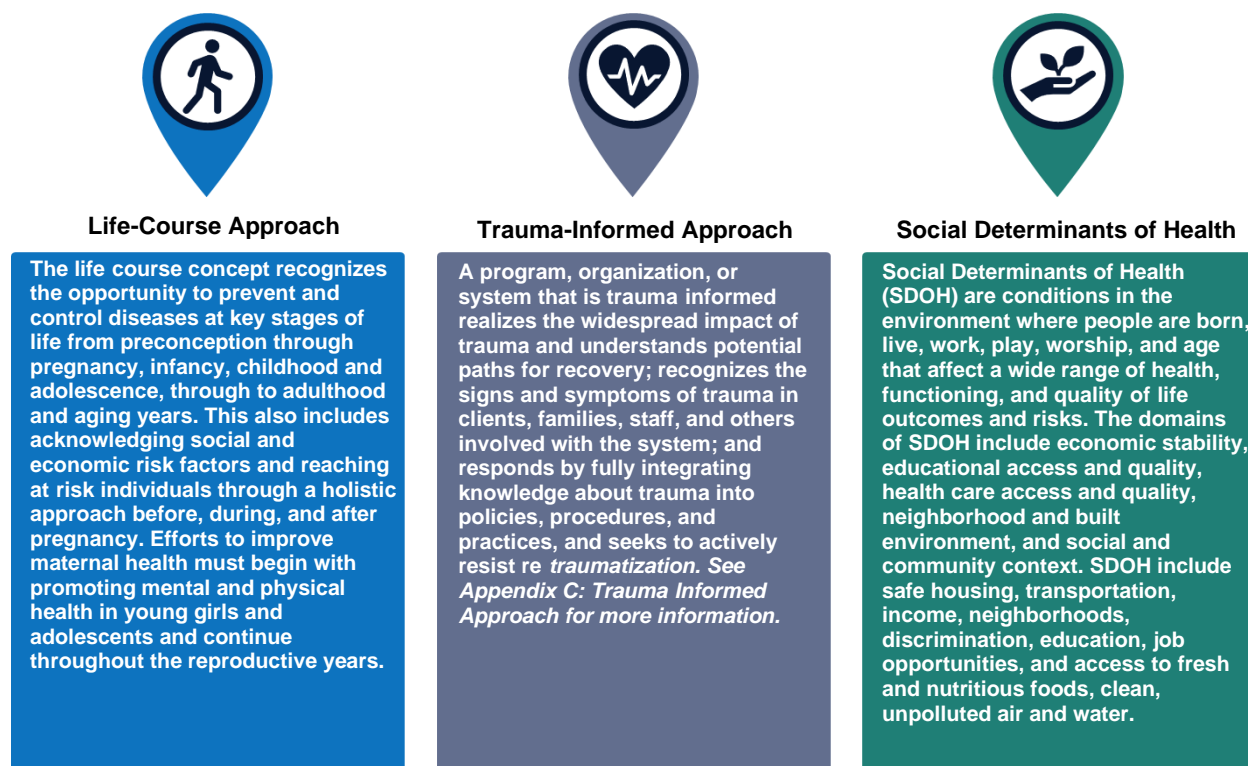


Recommendation for Implementation: Assign a person or small group from your organization to review the contents of this toolkit, circulate relevant information, and work with leadership to determine and implement next steps.

Guiding Frameworks

This toolkit uses three primary frameworks to discuss key MCH considerations: The Life-Course Approach, Trauma-Informed Approach, and Social Determinants of Health. You will see the icons throughout this toolkit when information relevant to the framework is highlighted.

Figure 5: Frameworks for Addressing the Needs of MCH Populations



Key Concepts

The key concepts defined in **Table 2** referenced throughout this toolkit, and included in the [Glossary](#) are foundational to contextualizing and using the information in this toolkit. Review all key concepts to better understand MCH populations, emergency management, health equity, and public health priorities.

Table 2: Key Concepts through the MCH Emergency Planning Toolkit

Concept	Description
At-Risk Individuals	At-risk individuals include infants and children, senior citizens, women who are pregnant or postpartum, and individuals who have access or functional needs and may need additional response assistance in the event of a public health emergency (e.g. individuals with chronic medical conditions, developmental disabilities/intellectual disabilities, limited mobility, mental

Concept	Description
	health conditions, or substance use disorder). ^{7,8} Before, during, and after an incident, at-risk individuals may have additional needs in one or more of the following functional areas: communication, medical care, maintaining independence, supervision, and transportation.
Access and Functional Needs (AFN)	The term “access and functional needs” is inclusive of a wide range of populations who may have additional needs before, during, or after an emergency, and informs comprehensive emergency preparedness, response, and recovery efforts (National Response Framework). Irrespective of a specific diagnosis, status, or label, access and functional needs may interfere with a person’s ability to access or receive medical care or limit a person’s ability to act before, during, or after an emergency. Examples of individuals having access and functional needs include individuals with disabilities, those who live in institutionalized settings, older adults, children, pregnant women, those from diverse cultures, who have limited English proficiency (LEP) or are non-English speaking, those who are transportation disadvantaged, are experiencing homelessness, have chronic medical disorders, and/or have a pharmacological dependency. ⁹ Planning for access and functional needs works towards inclusive planning for the whole community (National Disaster Recovery Framework). For more information on access and functional needs, please refer to the HHS/ASPR: Access and Functional Needs Web-based Training .
CMIST Framework	The CMIST Framework is a recommended approach for integrating the access and functional needs of at-risk individuals who may have additional needs that must be considered in planning for, responding to, and recovering from a disaster or public health emergency. CMIST is an acronym for the following five categories: Communication, Maintaining health, Independence, Support and Safety, and Transportation. The CMIST Framework provides a flexible, crosscutting approach for planning to address a broad set of common AFN without having to define a specific diagnosis, status, or label. ¹⁰
Emergency Management	Emergency Management is the managerial function charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters. It seeks to equip communities with the capacity to cope with hazards and disasters to promote and prioritize the safety of all, especially at-risk individuals, during an emergency or disaster. Emergency Management protects communities by coordinating and integrating all activities necessary to build, sustain, and improve the capability to mitigate against, prepare for, respond to, and recover from emergencies. Public health and social services play a role in Emergency Management and planning by ensuring continuity of services before, during, and after an emergency. FEMA notes that a “Whole Community” approach helps to build a more effective path towards societal security and resilience. This approach is a means by which residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their respective communities and determine the best ways to organize and strengthen their assets, capacities, and interests. ¹¹
Health Equity	Health equity is achieved when every person has the opportunity to attain his or her full health potential and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances. ¹² Substantial disparities by social determinants are found for a number of health indicators, including infant mortality, life expectancy, health care access and utilization, health insurance, disability, mental health, preventive health services, and unintentional injuries. ¹³

⁷ [42 USC 300hh-1\(b\)\(4\): National Health Security Strategy](#). <https://uscode.house.gov/view.xhtml?hl=false&edition=prelim&req=granuleid%3AUSC-prelim-title42-section300hh-1>

⁸ [42 USC 300hh-16: At-risk individuals](#). <https://uscode.house.gov/view.xhtml?hl=false&edition=prelim&req=granuleid%3AUSC-prelim-title42-section300hh-16>

⁹ U.S. Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response (HHS ASPR). [At-Risk Individuals](#). <https://www.phe.gov/Preparedness/planning/abc/Pages/atrisk.aspx>

¹⁰ U.S. Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response (HHS ASPR). [The CMIST Framework](#). <https://www.phe.gov/emergency/events/COVID19/atrisk/discharge-planning/Pages/CMIST-framework.aspx>

¹¹ FEMA. (2011). [A Whole Community Approach to Emergency Management: Principles, Themes and Pathways for Action](#). https://www.fema.gov/sites/default/files/2020-07/whole_community_dec2011_2.pdf

¹² CDC National Center for Chronic Disease Prevention and Health Promotion. [Health Equity](#). <https://www.cdc.gov/chronicdisease/healthequity/index.htm>

¹³ Health Resources and Services Administration Office of Health Equity (HRSA OHE). (2019-2020). [Health Equity Report 2019-2020](#). <https://www.hrsa.gov/sites/default/files/hrsa/health-equity/HRSA-health-equity-report.pdf>

Concept	Description
	This toolkit takes into consideration national standards and goals that work toward achieving health equity and will highlight the cumulative effects of socioeconomic disparities on MCH populations resulting in inequities prior to, during, and after emergencies. Various federal health agencies, including HHS, FEMA, and the Centers for Disease Control and Prevention (CDC), have developed frameworks and programs to propel the goal of reducing health disparities in the U.S., such as the Culturally and Linguistically Appropriate Services (CLAS) Standards, the CMIST Framework, and the Healthy People 2030 SDOH Goals which are discussed in this toolkit.
HHS Office of Minority Health (OMH) Culturally and Linguistically Appropriate Services (CLAS) Standards	<p>Incorporating CLAS standards into emergency preparedness and response means considering cultural health beliefs, preferred languages, health literacy levels, and communication needs. Relevant populations include those with LEP, individuals who are deaf or hard-of-hearing, immigrants, individuals with specific cultural beliefs, and more.</p> <p>CLAS are respectful of and responsive to each person's culture and communication need. Incorporating CLAS Standards into emergency planning will help improve the quality of services provided to all individuals, reducing health disparities. The Principal Standard is to "provide effective, equitable, understandable, and respectful quality care and services that are responsive to diverse cultural health beliefs and practices, preferred languages, health literacy, and other communication needs."¹⁴</p>
Healthy People 2030 SDOH Goals	Healthy People 2030 goals include preventing pregnancy complications and maternal deaths and helping women stay healthy before, during, and after pregnancy. Women's health before, during, and after pregnancy can have a major impact on infants' health and well-being. Each objective is suggested as a possible benchmark. <i>Review Healthy People 2030 Pregnancy and Childbirth Objectives in Appendix A: Healthy People 2030 SDOH Goals.</i>
Trauma	Individual trauma results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being. This toolkit incorporates a Trauma-Informed Approach framework. <i>For more information, see Figure 5.</i>

Relevant Legislation and Regulations

Federal law mandates addressing the access and functional needs of at-risk individuals, including women who are pregnant and children, in the event of a disaster or public health emergency. In 2006, the Pandemic and All-Hazards Preparedness Act (PAHPA) led to the creation of the Office of the Assistant Secretary for Preparedness and Response (ASPR) to lead the nation in preventing, preparing for, and responding to the adverse health effects of emergencies. The Public Health Service Act, as amended by PAHPA in 2006, the Pandemic and All-Hazards Preparedness Reauthorization Act of 2013 (PAHPRA), and the [Pandemic and All-Hazards Preparedness and Advancing Innovation Act of 2019 \(PAHPAIA\)](#), established a variety of requirements for addressing needs of at-risk individuals in public health emergency preparedness and response. These requirements include monitoring emerging issues and concerns as they relate to medical and public health preparedness and response for at-risk individuals, including women who are pregnant and postpartum and children, and disseminating and updating best practices of reaching and caring for at-risk individuals before, during, and after public health emergencies.

The Civil Rights Act, Rehabilitation Act, Americans with Disabilities Act (ADA), and other federal anti-discrimination laws, protect certain groups from discriminatory laws, practices, and policies. Under Federal anti-discrimination laws, these so-called "protected classes" include the following groups: age, race, color, national origin, religious beliefs, gender, disability, pregnancy, and veteran status. It is important to understand these laws and regulations that provide requirements for addressing the needs of at-risk individuals for inclusive community planning.

¹⁴ U.S. Department of Health and Human Services Office of Minority Health (HHS OMH). [National Standards for Culturally and Linguistically Appropriate Services \(CLAS\) in Health and Health Care](https://thinkculturalhealth.hhs.gov/assets/pdfs/EnhancedNationalCLASStandards.pdf). <https://thinkculturalhealth.hhs.gov/assets/pdfs/EnhancedNationalCLASStandards.pdf>

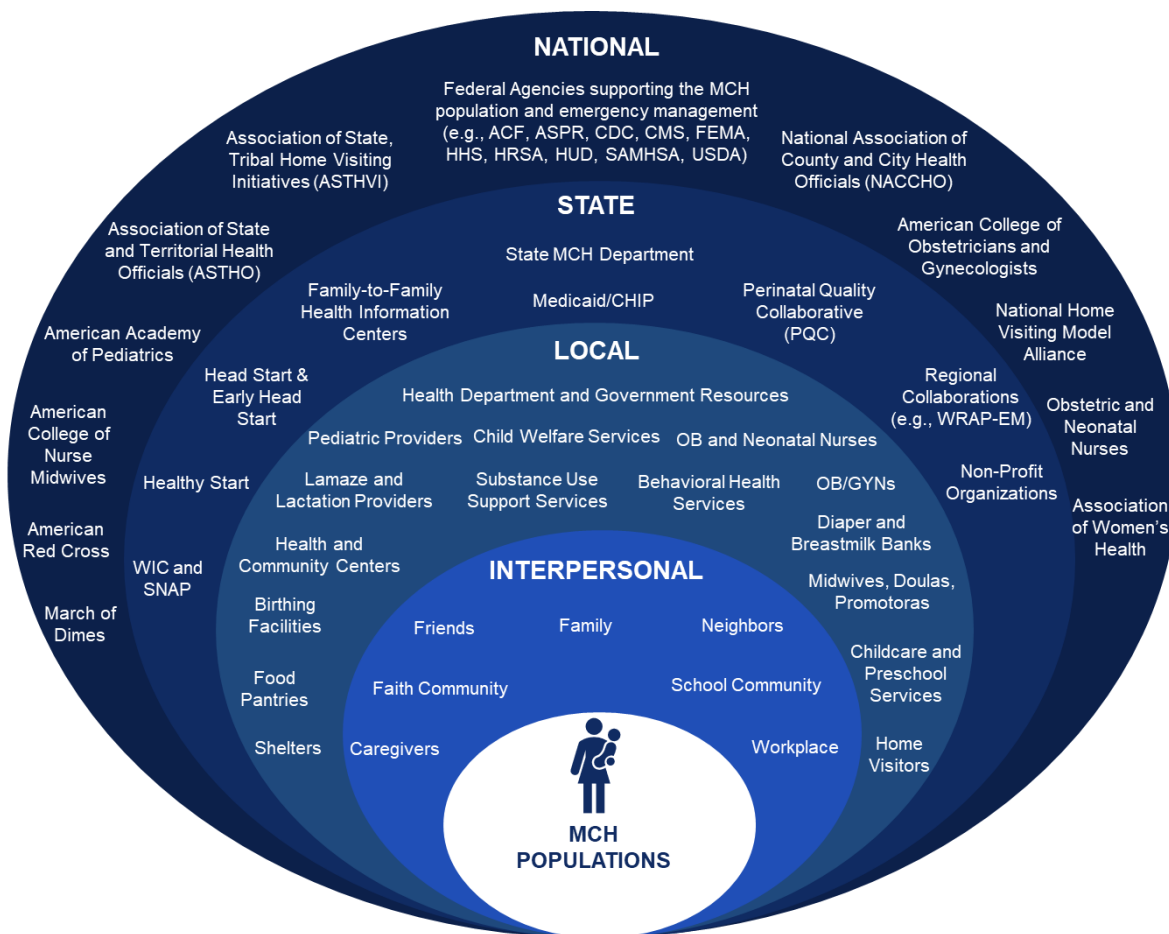
Module 1: Preparedness

Overall Planning Considerations for MCH Populations

Integrate MCH Partners and Stakeholders into Emergency Planning

It is vital to build partnerships, collaboration, and communication between interpersonal, local, state, and national organizations who serve MCH populations to meet the needs of women who are pregnant, postpartum, and/or lactating and infants and young children, in the event of an emergency. Establishing these partnerships before an emergency happens mitigates the impact of emergencies on the community.

Figure 6: Example MCH Partners and Stakeholders¹⁵



Emergency managers should work with health care, public health, and social services providers to engage with multiple stakeholders to learn about and coordinate the services, capabilities, and programs available for MCH populations for referral and collaboration purposes. When these partners work together, they can more rapidly help individuals get referred to the appropriate services and programs at the local, state, and national level.

Public-private partnerships are another valuable relationship that can benefit MCH populations in emergency preparedness and response. [Text4Baby](#), the first free health text messaging service in the U.S., is an example of a joint federal government and private partner resource to help women who are

¹⁵ This is not a comprehensive list of MCH stakeholders and partners.

pregnant, postpartum, and/or lactating learn more about their own health and learn how to give infants the best possible start in life. Additionally, a multiyear partnership between HHS and March of Dimes that began in 2020 addresses the disparity in maternal health outcomes for black women through the implementation of evidence-based best practices to improve health care quality in hospital settings. The partnership improves health outcomes for women nationwide and reduces maternal health disparities.¹⁶

Table 3 provides a sample of federally supported programs and resources at the state level, which increase access to education, nutrition, resources, and more. Visit the program websites in the table for more information and to find programs in your area.



Recommendation for Implementation: Establish a wide support network and understanding of MCH services during steady state. A strong network builds resilience by making it easier to access support and provide referrals during and after an emergency.

Table 3: Federally Supported Programs and Resources Available at the State Level

Program	Information	Learn More
Head Start and Early Head Start	Early Head Start serves women who are pregnant and families with children under age 3, and Head Start programs serve children between 3 and 5 years old. Head Start programs promote the school readiness of infants, toddlers, and preschool-aged children from low-income families. Services are provided in a variety of settings including centers, family child care, and a child's own home. Head Start programs also engage parents or other key family members in positive relationships, with a focus on family well-being. Head Start programs are available at no cost to children ages birth to 5 from low-income families, and programs may provide transportation to the centers. Families and children experiencing homelessness and children in the foster care system are also eligible.	<ul style="list-style-type: none"> • Office of Head Start • Head Start and Early Head Start Overview
Healthy Start	Healthy Start is a federal program operating 101 Healthy Start projects in 34 states, Washington, DC, and Puerto Rico to strengthen the foundations at the community, state, and national levels to help women, infants, and families reach their fullest potential.	<ul style="list-style-type: none"> • Healthy Start Website
Family-to-Family Health Information Centers (F2F)	F2F Health Information Centers are nonprofit organizations, funded by the HRSA, that provide information, education, technical assistance, and peer support to families of children and youth with special health care needs and the providers who serve them.	<ul style="list-style-type: none"> • Information on F2F • Find your State/Territory's F2F
Health Care Coalitions (HCCs)	HCCs, funded by ASPR's Hospital Preparedness Program (HPP), are networks of individual public and private organizations in a defined geographic area that partner to prepare health care systems to respond to emergencies, ultimately increasing local and regional resilience.	<ul style="list-style-type: none"> • Find an HCC near you
Health Centers	Health Centers, funded by HRSA, is one of the largest systems of primary and preventive care in the country that provides care to millions of patients regardless of ability to pay.	<ul style="list-style-type: none"> • Health Centers Website
Maternal, Infant, and Early Childhood Home Visiting Program	The Maternal, Infant, and Early Childhood Home Visiting Program gives women who are pregnant and families, particularly those considered at-risk, necessary resources and skills to raise children who are physically, socially, and emotionally healthy and ready to learn.	<ul style="list-style-type: none"> • Home Visiting Website • State Fact Sheets

¹⁶ March of Dimes. (2020). [March of Dimes signs landmark, multi-year partnership with U.S. Department of Health and Human Services aimed at making the U.S. one of the safest nations in the world for a woman to give birth.](https://www.marchofdimes.org/news/march-of-dimes-signs-landmark-multi-year-partnership.aspx) <https://www.marchofdimes.org/news/march-of-dimes-signs-landmark-multi-year-partnership.aspx>

Program	Information	Learn More
Perinatal Quality Collaborative (PQC)	PQCs are state or multistate networks of teams working to improve the quality of care for mothers and babies.	<ul style="list-style-type: none"> • PQC Website • State-Based PQCs
Temporary Assistance for Needy Families (TANF)	The TANF program provides states and territories with flexibility in operating programs designed to help low-income families with children achieve economic self-sufficiency. States use TANF to fund monthly cash assistance payments to low-income families with children, as well as a wide range of services.	<ul style="list-style-type: none"> • TANF Website

Incorporate Considerations for MCH Populations into Emergency Preparedness Exercises

It is important that the needs of MCH populations are included in emergency plans and preparedness exercises from the local to the federal level. Partners and stakeholders serving MCH populations should be involved in the development and execution of these emergency planning and preparedness exercises, such as tabletop exercises and drills, to ensure the needs of MCH populations are considered. A tabletop exercise is a discussion-based emergency preparedness exercise, conducted by partners involved in emergency management, that involves talking through the actions various stakeholders would take during a specific emergency scenario. Drills involve the actual execution of emergency plans in response to a practice emergency scenario. Preparedness exercises facilitate information sharing and collaboration among emergency management stakeholders and strengthen emergency plans by identifying gaps and areas for improvement and assigning responsibility to mitigate those gaps.

Benefits of incorporating stakeholders who support MCH populations into preparedness exercises include:

- **Participants learn from each other and broaden their network:** Partners and stakeholders serving MCH populations gain better understanding of the emergency management process, and emergency managers learn more about needs of women who are pregnant, postpartum, and/or lactating, and infants and young children in emergencies.
- **Planners identify gaps and areas for collaboration:** Partners and stakeholders serving MCH populations identify gaps in emergency plans, such as newborn screenings and transportation requirements, and help address gaps by connecting planners with resources and points of contact. Emergency exercises also support partners and stakeholders serving MCH populations in considering the information, resources, and support systems required during various scenarios.
- **Participants enhance emergency plans:** Partners and stakeholders serving MCH populations contribute critical information to emergency plans such as supply lists, behavioral and mental health considerations, and scenarios such as childbirth and infant feeding that are critical to addressing needs of women who are pregnant, postpartum, and/or lactating and infants and young children.

Health care, public health, and social services providers serving MCH populations should connect with their local emergency management partners to participate in upcoming preparedness exercises. Partners and stakeholders serving MCH populations can be local champions for preparedness by adding MCH scenarios to existing exercise templates, inviting

Advice from the Field

“Relationships between MCH partners are sometimes built on personal connections rather than official organization or agency level partnerships. Formalized relationships between organizations supports preparedness and mitigation because the partnership does not depend on a single person.”

Child and Adolescent Health Specialist

[**Local FEMA Emergency Office Locator**](#)

members of MCH populations to participate in exercises, and/or by helping to organize emergency preparedness exercises in their community.

Support the Development of Individual Emergency Plans

Health care, public health, and social services providers should work with women who are pregnant, postpartum, and/or lactating and caregivers to develop individual emergency plans. Providers can help these populations prepare for an emergency by having discussions about possible emergency scenarios, actions to take and who to contact for additional support, and how to care for their physical and behavioral health needs in the event of an emergency.

Providers should understand the network of what some consider non-traditional health care workers who can be engaged to provide additional support or address gaps in available health care providers, such as midwives, lactation support providers, and community health workers (e.g., Promotores de Salud), who are trained to support women who are pregnant, postpartum, and/or lactating and infants and young children. Providers should identify points of contact and communication partners within these networks, which is commonly done through lists of registered individuals or by word of mouth. State Perinatal Quality Collaboratives (PQCs) are also a useful resource to build local and regional connections.

Providers can empower women who are pregnant, postpartum, and/or lactating and caregivers of infants and young children to develop emergency plans that take into consideration:

- Specific needs based on whether a woman is pregnant, postpartum, and/or lactating
- Individuals involved in birth plans, such as midwives, doulas, partners
- Child care considerations, especially if the caregiver is caring for multiple children
- Individual health risks and health profiles
- Language and cultural considerations
- Behavioral health needs, including resources for postpartum depression, perinatal anxiety, virtual care assessments, substance use, and continuity of care
- Natural disasters, if any, that are common based on geographic location (e.g., hurricanes, tornadoes, wildfires, floods, earthquakes)
- Current or expected infectious disease outbreaks (e.g., influenza)
- Localized emergencies

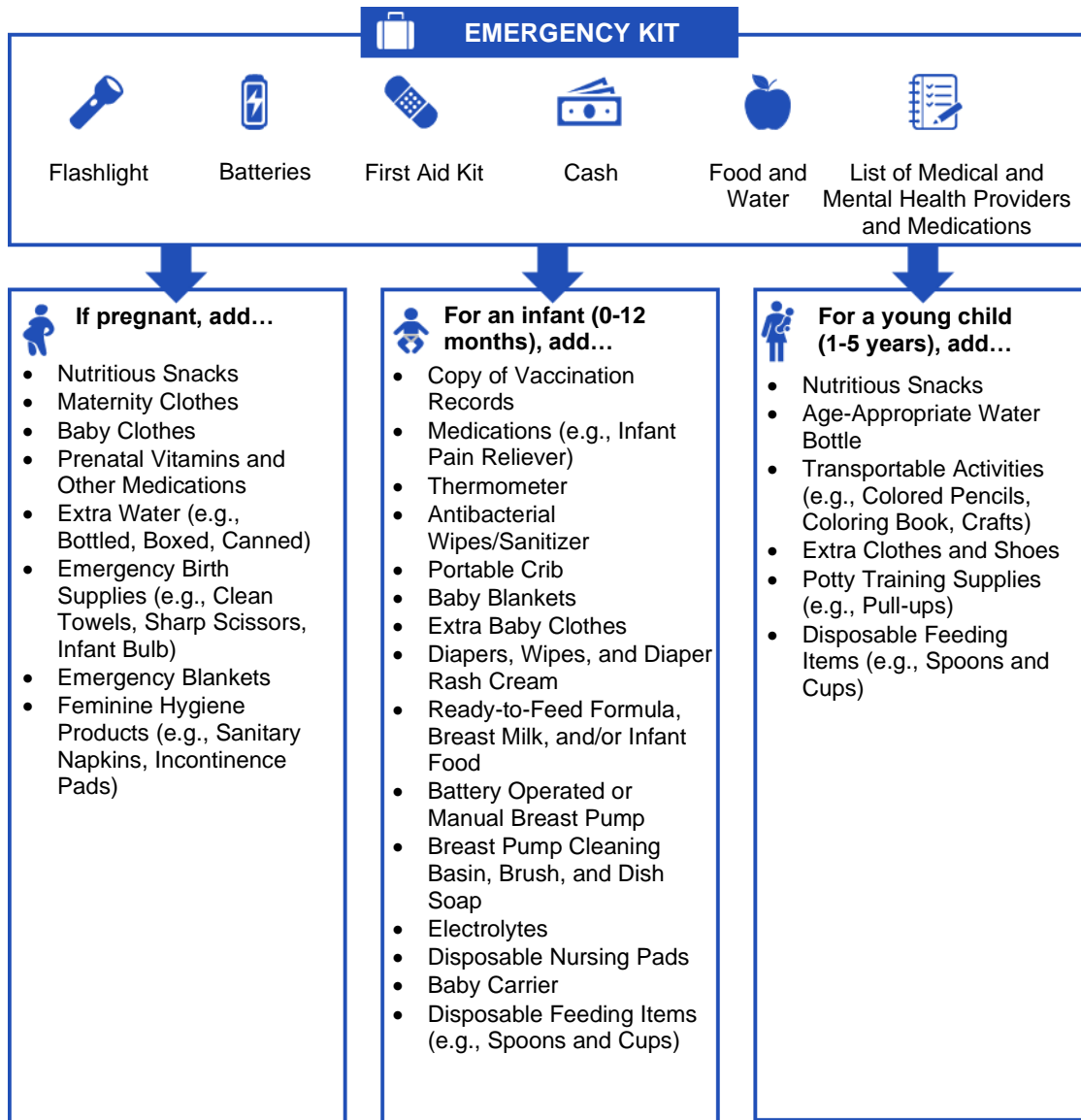
Providers may need to support women who are pregnant in altering their birth plans in the event of an emergency due to obstructed infrastructure, infectious disease restrictions, unavailable care providers, facility closures, and more. For

example, during the 2020 COVID-19 pandemic some women arrived to give birth only to find the medical facility closed. When considering potential changes to birth plans, include all aspects of an individual's plan, including support from midwives and doulas, and nontraditional locations, such as at home and birthing centers. Health care, public health, and social services providers should develop plans for facility closures that impact birth plans, including communications with women who are pregnant.



Providers may consider encouraging women who are pregnant, postpartum, and/or lactating and caregivers to access secure clinical apps that contain medical information for easier access to medical records in the event of an emergency. Additionally, providers should encourage individuals and families to create an at-home emergency kit, which includes supplies for everyone in the household, and update it based on changing needs during pregnancy, the postpartum period, and child development (**Figure 7**). Remind women who are pregnant, postpartum, and/or lactating and caregivers to bring their emergency kit when evacuating and alert shelter staff if they are pregnant or are caring for an infant or young child.

Figure 7: At-Home Emergency Kit



Low-income households may have challenges creating and maintaining at-home emergency kits. Local MCH community-based organizations can support individuals with acquiring additional supplies. Those who have specific needs, such as a type of infant formula that is not widely available, may consider gradually stocking up on those items.

Plan for Continuity of Operations and Access to Services

Continuity of Operations is commonly used in government, often with mandated directives for federal and state agencies, to describe guidance and plans for personnel, communications, and facilities in the event of an emergency. A Continuity of Operations Plan (COOP) builds resilience and mitigates effects of an emergency on an organization and the people it serves. Create agreements among partners to share information or resources in the event of an emergency and reinforce the COOP. Most of the following planning considerations are specific for service delivery sites.

Figure 8: Preparing for Continuity of Operations

Preparing for Continuity of Operations	
<p>COMMUNICATIONS</p> <ul style="list-style-type: none"> Plan for multiple communication methods, such as text message, email, social media, radio, and TV alerts, to contact MCH populations during an emergency. Encourage subscription to relevant communications before an emergency Incorporate CLAS standards into messaging to account for individuals that respond to different channels and messaging based on language, age (consider pregnant, postpartum, and lactating teenagers and older caregivers), and geography Establish relationships with partners serving MCH populations and other supporting operations to amplify communications 	<p>POWER DEPENDENCY</p> <ul style="list-style-type: none"> Consider MCH populations that rely on power to operate equipment such as durable medical equipment (DME), breast pumps, and other supplies or to maintain viability of supplies including refrigeration for expressed breast milk Deploy charging stations or individual chargers for mobile devices that can be used at community centers, during home visits, or in emergency shelters Develop and socialize plans for continuous access to medical, behavioral health, substance use, and other treatment records in the event of a power outage Prepare for power loss at facilities for an extended amount of time
<p>ACCESS</p> <ul style="list-style-type: none"> Identify essential functions to continue operations and document minimum personnel requirements to fulfill those essential functions Develop procedures to sustain operations for at least 30 days after an emergency (e.g., create partnerships, identify back-up vendors) Develop plans to continue services when an office or service site cannot be used or accessed, such as how providers used telehealth and other procedures for safe continuity of operations during the COVID-19 pandemic 	<p>PERSONNEL</p> <ul style="list-style-type: none"> Develop a protocol for deploying potentially limited staff to women who are pregnant, postpartum, and/or lactating and infants and young children in need of services Develop agreements with organizations serving MCH populations to supplement the essential workforce if and when needed Develop a plan to communicate with staff serving MCH populations during an emergency that includes a primary method of communication, taking into consideration the potential for a loss of electricity and telecommunications
<p>SAMPLE SITUATIONS TO CONSIDER FOR MCH POPULATIONS</p> <ul style="list-style-type: none"> Obstetric and pediatric facility procedures Infant food storage and preparation; cleaning of infant feeding supplies Telehealth, tele-behavioral health, in-person doctor's appointments (e.g., prenatal visits, postpartum care, infant screenings) Disruption of birth plans Infant and toddler food supply (e.g. food storage, clean water access, food with specific nutritional requirements) Limited-to-no access to records 	



Recommendation for Implementation: Hospitals may develop the following emergency plans and protocols to build resilience, in coordination with local [HCCs](#) that support members' pediatric emergency planning.

- Obstetrics, Maternity, Pediatric, and Neonatal Intensive Care Unit Triage Algorithms
- Obstetrics, Maternity, Pediatric, and Neonatal Intensive Care Unit Evacuation and Transfer Protocols
- Family Reunification Plans (e.g. a caregiver and child are in separate wings, are in different hospitals)

Health Equity Considerations During Emergency Preparedness



Planning for women who are pregnant, postpartum, and/or lactating and infants and young children experiencing health disparities and inequity may include addressing challenges with various SDOH, such as lack of infrastructure maintenance, poor access to health care for higher levels of care, and poor communication channels. Health care, public health, and social services providers and emergency responders who work with MCH populations should prioritize trainings and education on health equity and SDOH to ensure health equity in emergencies.

Individuals with access and functional needs, including rural residents, people with disabilities, people experiencing homelessness, and people who speak English as a second language (ESL), may require specific considerations during emergencies. Women with disabilities remain at heightened risk for pregnancy-related health complications.

Approximately 12 percent of women of reproductive age have some type of disability.¹⁷ They may face challenges accessing appropriate health care and support before, during, and following their pregnancies. For example, prenatal information may be distributed in a manner that is inappropriate and insufficient for women with visual impairment. There is also some evidence that women with hearing impairment receive fewer prenatal visits and have limited access to maternity information. Certain disabilities that do not present physically may also require unique considerations. Improving accessibility of MCH facilities and informational resources and providing training on needs of MCH populations with disabilities are some ways to prioritize and support the health of women with disabilities who are pregnant, postpartum, and/or lactating. Collecting demographic and location data about pregnancy among women with disabilities at the community level helps emergency planners and providers understand resource requirements to meet the needs of these populations in an emergency. See [List of Resources - Preparedness](#) for resources on supporting women with disabilities.

In rural communities there are over 1,300 Critical Access Hospitals which each have a 24/7 emergency room and about 25 acute care inpatient beds per Critical Access Hospital. Research indicates that women living in rural areas and women of racial and ethnic minorities have the highest morbidity and mortality rates. Approximately 40 percent of all people who are Indigenous are rural residents¹⁸, which is a substantially higher percentage than other racial/ethnic groups. Women who are pregnant and Indigenous living in rural areas are at a substantially elevated risk of maternal death or serious complications in childbirth compared with women who are non-Hispanic white or live in urban areas.

It is important to adhere to CLAS Standards when emergency planning for women who are pregnant, postpartum, and/or lactating and infants and young children. CLAS considerations should promote the active involvement and engagement of culturally and linguistically diverse communities to influence understanding of and participation in public health emergency preparedness actions. For example,



The Ramirez Family

Preparing for a Nor'easter Storm

Existing SDOH compound health inequities in the event of an emergency. Follow the Ramirez family before, during, and after an emergency.

The Ramirez family lives on the East Coast in a town commonly impacted by Nor'easter storms, but their town has not been severely damaged in recent decades. The Ramirez family is low-income and gets supplemental food and some supplies for their infant and two young children from a local food bank. Their two young children also receive free school lunches but, due to their Undocumented status, Mr. and Mrs. Ramirez are hesitant to engage with other government benefits programs because they do not want to jeopardize their livelihoods.

See how the Ramirez family responds to a Nor'easter in the next section.



[Critical Access Hospital Locator](#)

¹⁷ Homer-Johnson, W., Darney, B. G., Kulkarni-Rajasekhara, S., Quigley, B., & Caughey, A. B. (2016). [Pregnancy among US women: differences by presence, type, and complexity of disability](#). American journal of obstetrics and gynecology, 214(4), 529.e1–529.e9. <https://doi.org/10.1016/j.ajog.2015.10.929>

¹⁸ Kozhimannil KB. (2020). [Indigenous Maternal Health—A Crisis Demanding Attention](#). JAMA Health Forum. <https://jamanetwork.com/channels/health-forum/fullarticle/2766339>

involving community members in planning who use what some consider nontraditional birthing support, such as community health workers (e.g., Promotores de Salud), will enhance understanding of the practice and help ensure individuals supporting birth have access to emergency birthing facilities.



Cultural Competency Program for Disaster Preparedness and Crisis Response (OMH)

Language services, including interpretation and translation of public health and emergency information, are another important consideration in emergency planning for women who are pregnant, postpartum, and/or lactating and children. For example, plan for interpretation and translation services in shelters and other locations where these groups receive health care.



Ensuring Language Access and Effective Communication during Response and Recovery: A Checklist for Emergency Responders (ASPR)
English Spanish



Recommendation for Implementation: Establish culturally and linguistically appropriate goals, policies, and management accountability, and infuse them throughout planning and operations. This includes making provisions for comprehensive language assistance services, recruiting a workforce representative of the community served, and incorporating CLAS into organizational mission, vision, and long-term strategic plans. Conduct ongoing assessments of the organization's CLAS-related activities and integrate CLAS-related measures into measurement and continuous quality improvement activities.

Other environmental factors impact racial and economic equity during steady state and in emergencies. For example, access to safe water to use with powder formula, proximity to pollutants, and power grid reliability disproportionately impact communities of color and populations that are low-income. These factors impact food safety and security, economic livelihoods, and overall well-being.

The risk an emergency poses to these groups is not isolated and disparities should be viewed together with other ongoing socioeconomic factors. Providers should continue to learn about these issues in their communities and appropriately incorporate them into planning measures to help bridge the health equity gap.



Recommendation for Implementation: Understand inequities in your city or town and ask the following questions when developing emergency plans:

- Which neighborhoods are built in flood plains and require frequent evacuations?
- Where is there a lack of MCH services such as Healthy Start and Home Visiting?
- Which neighborhoods experience the most frequent power outages?

Preparedness for Women who are Pregnant, Postpartum, and/or Lactating

When developing preparedness plans for women who are pregnant, postpartum, and/or lactating, health care, public health, and social services providers and emergency managers should include scenarios that are common or possible in their area (e.g., tornadoes, hurricanes, wildfires) and regularly review local and regional health and vital statistics to develop data-driven plans. Valuable health and vital statistics include:

- Expected numbers of births per unit time
- Population demographics
- Information on where births typically occur (e.g., specific hospitals, birthing centers, home)
- The number of beds available for obstetric patients (including labor and delivery beds, postpartum, antepartum beds, and available obstetric operating rooms)
- The number of births occurring at-home and in birthing centers

Additionally, local, regional, and state MCH partners and stakeholders should draft and sign agreements defining key roles and responsibilities among organizations caring for MCH populations to allow for quick response and coordination in the event of an emergency.



It is important to consider health care disparities among women who are pregnant, postpartum, and/or lactating, especially for those who experience discrimination and those in rural areas, during emergency planning. Less than half of women living in rural areas in the U.S. are within a 30-mile drive of a hospital with obstetric (OB) services. In these areas, women are more likely to have out-of-hospital births and to deliver in hospitals without OB units, as compared to those living in rural counties that maintained hospital-based OB services. Maternal mortality rates in rural areas may be higher in part because health care facilities have limited capacity and experience with OB critical care and emergency situations.



Recommendation for Implementation: Consider convening an emergency preparedness work group, with representatives from different parts of the organization, to develop plans (e.g., key points of contact, responsibilities) for treating women who are pregnant, postpartum, and/or lactating during various emergency scenarios.

State, local, and organization-level emergency plans should consider how to treat women who are pregnant, postpartum, and/or lactating in hospitals and medical facilities that do not typically provide OB services. The emergency department, or another designated department, should be prepared to treat MCH populations in the event of an emergency or if a patient is unable to be transferred to an appropriate facility due to access issues or other emergency conditions (e.g., infrastructure damage, impassable roads, damage to hospitals and medical facilities).



A trauma-informed approach is important for building resilience for women who are pregnant, postpartum, and/or lactating. Developing a diverse health care, public health, and social services workforce during steady state that can support women who are pregnant, postpartum, and/or lactating, particularly those who have experienced past trauma, is critical to serving these populations throughout the emergency management cycle. Providers should educate personnel who may interact with MCH populations about the potential for individuals with a history of trauma or abuse to experience reactivation of stress responses during an emergency so they are prepared to respond appropriately and help these individuals reduce their anxiety and the potential for re-traumatization.

Telehealth and Maternal Health Care



Incorporate telehealth into regular health care protocols for MCH populations to normalize the practice, increase resilience, and promote health equity. Initiating telehealth services and making it available for use at all times, including during steady state, helps providers and patients understand and mitigate barriers before an emergency happens. Maternal and child health equity in telehealth is impacted by broadband access, technology access, and language barriers.



Preparedness Considerations for Women who are Postpartum and/or Lactating Caring for Infants


Women who are postpartum and/or lactating and caring for an infant or young child have both their own physical and behavioral health needs and the needs of their child to plan for in the event of an emergency. For example, postpartum and/or lactating women may require relactation support during or after an emergency due to disruption in breastfeeding. Health care providers should share with women who are late-term pregnant, postpartum, and lactating what to expect after giving birth, emergency guidelines related to birth plans, newborn screenings, postpartum visits, and other scenarios, in addition to points of contact in case of an emergency. It is helpful for the woman and her providers to identify these points of contact prior to

any emergency so they can quickly and efficiently get the support they need.

Providers should establish regional network connections, such as through a local HCC, to identify which hospitals do or could provide OB services in the event of an emergency, including services for women

who are pregnant, women in labor, and women experiencing postpartum complications, a significant contributor to maternal mortality.

Providers should be aware of behavioral health needs that can arise during pregnancy and the postpartum period and identify resources to share with women who are postpartum to build resilience. A CDC study published in 2020 found that nationally 1 in 8 women experience symptoms of postpartum depression.¹⁹ Results of the study showed that postpartum depression rates were highest among women who were aged ≤19 years, identified as AI/AN, smoked during or after pregnancy, experienced intimate partner violence (IPV) before or during pregnancy, self-reported depression before or during pregnancy, or whose infant had died since birth. Emergencies can exacerbate existing behavioral health challenges, cause increased stress or trauma, and disrupt substance use treatment. Women who are postpartum with substance use disorder (SUD) are at high risk for relapse in the first year after birth.



View your state's prevalence of postpartum depressive symptoms using the [Pregnancy Risk Assessment Monitoring System \(PRAMS\)](#)

When preparing for various emergency scenarios, develop plans and speak to women who are pregnant, postpartum, and/or lactating about how to continue infant feeding in the event of an emergency. When possible, infant feeding methods should stay the same during an emergency. Encourage women who are pregnant, postpartum, and/or lactating to add the appropriate infant feeding supplies to at-home emergency kits to support infant feeding methods already in use and to provide back-up options if their primary method is not possible. For example, emergency kits should have clean water and extra batteries for breast pumps to support women who are breastfeeding and extra formula, preferably the same brand already in use, to support formula-fed infants. Store ready-to-feed formula in emergency kits in case safe water to mix formula and clean bottles and nipples is not available. A list of emergency kit supplies can be found in the [Preparedness – Support the Development of Individual Emergency Plans](#) section.

Preparedness Considerations for Women who are Pregnant, Postpartum, and/or Lactating in Various Emergency Scenarios

Emergency plans should include protocols to address the needs of women who are pregnant, postpartum, and/or lactating during a variety of emergencies including infectious disease outbreaks, localized emergencies, natural and human-caused disasters requiring evacuation, and natural and human-caused disasters not requiring evacuation.

Table 4: Preparedness Considerations for Women who are Pregnant, Postpartum, and/or Lactating in Various Emergency Scenarios

Emergency Scenario	Considerations for Women who are Pregnant, Postpartum, and/or Lactating
Infectious Disease Outbreaks	<ul style="list-style-type: none"> • Establish a communications plan for disseminating trusted public health information specifically on impacts to women who are pregnant, postpartum, and/or lactating • Take into consideration the safety concerns of different groups, including medical staff and midwives • Plan for personal protective equipment (PPE) to be available to health care, public health, emergency management, and other personnel who support women who are pregnant, postpartum, and/or lactating in medical settings and otherwise • Encourage women who are pregnant, postpartum, and/or lactating to add items to at-home emergency kits, such as masks or hand sanitizer, that would be important during an infectious disease outbreak • Understand and/or put into place telehealth policies and guidelines to support MCH populations prior to, during, and after an infectious disease outbreak

¹⁹ Bauman, B. L. et al. (2020). [Vital signs: Postpartum depressive symptoms and Provider discussions about perinatal depression – United States, 2018](https://www.cdc.gov/mmwr/volumes/69/wr/mm6919a2.htm?s_cid=mm6919a2_w). https://www.cdc.gov/mmwr/volumes/69/wr/mm6919a2.htm?s_cid=mm6919a2_w

Emergency Scenario	Considerations for Women who are Pregnant, Postpartum, and/or Lactating
	<ul style="list-style-type: none"> • Purchase and plan to distribute equipment to support telehealth care, such as remote monitoring blood pressure cuffs for prenatal patients
Localized Emergencies (e.g. disruption in municipal services such as water, natural gas, roads and transportation)	<ul style="list-style-type: none"> • Identify and develop guidance on back-up transportation routes to hospitals and health care facilities, including facilities with OB and neonatal intensive care unit (NICU) services • Coordinate with MCH partners and stakeholders, including other health care facilities, on preparedness plans for treating women who are pregnant, postpartum, and/or lactating, particularly if the facility does not already have OB services. This includes identifying back-up facilities and power sources in the event of a health care system or power surge, infrastructure failure, or other circumstances that limit a facility’s ability to care for patients • Identify, document, and share contact information for local services that provide food, medicine, and prenatal supplements, such as food banks and Healthy Start, that can support women who are pregnant, postpartum, and/or lactating in case of power loss, water loss, or obstructed infrastructure • Prepare for possible power outages by procuring supplies such as batteries, generators, and carbon monoxide detectors. <i>For more information on power dependency, see Preparedness – Planning for Continuity of Operations and Access to Services.</i>
Natural and Human-Caused Disasters Requiring Evacuation (e.g., hurricanes, wildfires)	<ul style="list-style-type: none"> • Develop relationships and agreements, as needed, with transportation providers that can accommodate the needs of women who are pregnant, postpartum, and/or lactating, particularly those in labor or traveling with a young infant, such as cleanliness, space to transport an infant carrier, and additional space for emergency supplies • Establish medical interpretation and translation services for use in shelters • Develop evacuation and reunification plans that define how to keep familiar caregivers with their newborns, infants, and young children during evacuation and how to reconnect families and familiar caregivers if they are separated. <i>For more information on Reunification, see Preparedness – Planning Considerations for Young Children (1 - 5 Years) and Recovery – Family Separation and Reunification</i> • Encourage women who are pregnant, postpartum, and/or lactating to have an emergency kit and bring it with them during evacuation/rescue • Identify services that evacuees may require, such as behavioral health support and services for survivors of sexual violence or domestic violence, and build relationships for streamlined referrals • Designate a safe location for laboring patients who cannot be transported because of imminent delivery and a protocol for transfer of patient medical records to the receiving facility. Health care facility and shelter plans should include an identified alternative site for delivery if the labor and delivery unit is damaged, in addition to a system to ensure the necessary equipment can be transported quickly to the alternative site. Depending on labor status and medical stability, the team may need to “labor/shelter-in-place” until the patient can be safely evacuated • Review policies that might limit or prevent shelter access for health care and social services providers that serve women who are pregnant, postpartum, and/or lactating (e.g., lactation support providers) • Identify options for connecting women who are postpartum with any required medication during an emergency (e.g., prenatal vitamins, antacids, pain medication, stool softeners, contraception, and emergency contraception), as well as supplies (e.g., feminine hygiene products), keeping in mind low-cost options • Place generators in domestic violence shelters whenever possible so individuals can shelter-in-place in case of power loss
Natural and Human-Caused Disasters Not Requiring Evacuation	<ul style="list-style-type: none"> • Coordinate with service providers such as the Home Visiting and Healthy Start programs and local MCH organizations on how to maintain support for MCH populations in their homes, including making provisions for supplemental food, breastfeeding support, nutrition education, and health care referrals

Preparedness for Infants and Young Children



When developing preparedness plans for infants and young children, it is critical to incorporate child-centric viewpoints and stakeholders, such as pediatric providers and child welfare and social services providers, to ensure the physical, mental, emotional, and social well-being of children. A foundational principle is that the social context and needs of children should be considered in emergency planning. This includes public and private daycare and school emergency plans, providing child care during emergencies, and preserving, as much as possible, public spaces that are important for children’s well-being, such as playgrounds and parks. Emergency planning should leverage systems that serve children and caregivers, such as schools, community centers, and pediatric health care providers, as mechanisms for services supporting children in emergencies. For example, developing plans for accessible child care after emergencies benefits both the child and the caregiver, as it gives the child a return to structure and gives caregivers time to navigate necessary processes such as insurance, social services, and behavioral health support. This may include providing child care at a local elementary school, rather than a temporary structure or a city building in the business district, as it is more accessible and familiar to children and caregivers.

ADVICE FROM THE FIELD

“People care about children. Federal, state, and local agencies and organizations are willing to get on board in emergency planning. However, systems most relevant for MCH well-being, such as social services and MCH health care, are, in many cases, at the margins in terms of inclusion in emergency planning. Those systems need to be engaged as they are pillars of a child’s life.”

- Emergency Management Coordinator

Figure 9: Local Emergency Stockpile Supply List for Infants and Young Children

Local Emergency Stockpile Supply List	
INFANTS (0-12 MONTHS)	YOUNG CHILDREN (1-5 YEARS)
<input checked="" type="checkbox"/> Car seats	<input checked="" type="checkbox"/> Car seats
<input checked="" type="checkbox"/> Ready-to-feed formula	<input checked="" type="checkbox"/> Diapers
<input checked="" type="checkbox"/> Diapers	<input checked="" type="checkbox"/> Wipes
<input checked="" type="checkbox"/> Wipes	<input checked="" type="checkbox"/> Pull-ups
<input checked="" type="checkbox"/> Bottles, nipples, and disposable cups	<input checked="" type="checkbox"/> Disposable cups
<input checked="" type="checkbox"/> Clothing	<input checked="" type="checkbox"/> Child-size equipment such as masks
<input checked="" type="checkbox"/> Infant feeding cleaning supplies (tub, clean water, dish soap, brush)	<input checked="" type="checkbox"/> Child-friendly nutritious snacks, water, and milk
<input checked="" type="checkbox"/> Safety approved cribs and fitted sheets to support safe sleeping	<input checked="" type="checkbox"/> Clothing
	<input checked="" type="checkbox"/> Sensory kits
	<input checked="" type="checkbox"/> Stress relief activities, such as coloring books, colored pencils, toys, and books
	<input checked="" type="checkbox"/> Child-size first-aid equipment, such as backboards, splints & bandages, wheelchairs

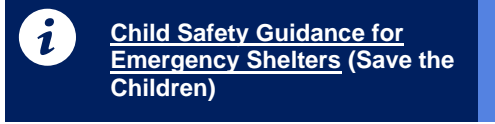
State, local, and organizational stockpiles of equipment and supplies should include those necessary to care for infants and young children with various needs based on age and stage of development (**Figure 9**). Providers can support caregivers in developing individual emergency plans for infants and young children and empower caregivers with knowledge of what to do in emergency situations to care for children. For more information, see [Preparedness – Support the Development of Individual Emergency Plans](#).



Children experiencing homelessness are eligible to receive free meals in all United States Department of Agriculture (USDA) Child Nutrition Programs including the National School Lunch Program, Child and Adult Care Food Program (CACFP), and the Summer Food Service Program. Children in homeless shelters participating in the CACFP are eligible for three free meals per day. Homeless liaisons are available at schools and shelters and can make status determinations.

Planning Considerations for Infants (ages 0 – 12 months) in Emergencies

Infants are particularly at-risk for health challenges during emergencies during the first month of life, including infection, dehydration, and feeding difficulties. Infants also breathe in more air for their size than adults and thus absorb harmful materials from the air more readily. Between 2018 and 2019, CDC reported that the leading causes of infant mortality in the U.S. included maternal pregnancy complications, bacterial and respiratory diseases affecting the newborn, unintentional injuries, and Sudden Infant Death Syndrome (SIDS).²⁰ It is important to include considerations for infants in emergency planning, including how to prevent infections and unintentional injuries and maintain a safe environment for young children to ensure their needs are met by all partners and stakeholders who may come into contact with them and their family during an emergency.



There are several initial concepts that providers and other stakeholders should consider when preparing for the needs of infants during an emergency. Adhering to safe sleeping guidelines during emergencies is critical to the prevention of SIDS, which is the leading cause of death among infants between 1 month and 1 year of age. Health care providers should talk with caregivers about safe sleep, and shelter staff and others caring for infants in an emergency should have training on safe sleep guidelines. These include:

- Lay infants on their backs when sleeping
- Primary caregivers should share a room with, or sleep close to, infants
- Use a firm and flat sleep surface, such as a safety-approved crib, with a fitted sheet
- Keep loose sheets, blankets, pillows, and other soft items that may cover the infant's face and block air to nose and mouth away from the sleeping area
- Dress infants appropriately and do not over-bundle to ensure they do not get too hot while sleeping



Newborn screenings are another important element of care in the first several weeks of life. Newborn screening is critical for early detection and diagnosis of certain conditions which can be potentially fatal. In emergencies, screenings may be missed, records of past screenings and results may be difficult to locate, and individuals may move out of state. Congress passed the Newborn Screening Saves Lives Act of 2007 which mandates contingency planning for newborn screening. Each state has designated points of contact for newborn screening that health care providers can contact to learn about newborn screening emergency plans in their state. It is also important to adhere to immunization schedules. Like newborn screenings, immunizations may be missed, immunization records may be difficult to locate, and relocation of families and individuals can complicate adhering to immunization schedules due to changing pediatricians/medical providers.

²⁰ Center for Disease Control and Prevention. (2020). [Infant Mortality in the United States](https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm).
<https://www.cdc.gov/reproductivehealth/maternalinfanthealth/infantmortality.htm>

Birthing facilities and health care providers can prepare offices and staff for continuity of operations related to newborn screening in an emergency by developing and training staff on standard procedures.



Example Newborn Screening Program for the State of Kentucky

Health care providers can use the following sample questions to guide newborn screening preparedness:

- Who are the key newborn screening program contacts in the state? Do office staff know of ways to contact them in the event of an emergency?
- What is the usual notification process? Are test results provided even when the results fall within normal ranges? Or does follow-up occur only when results are outside of normal ranges? What steps does the screening coordinator (or other state representative) take to notify pediatric offices or family members?
- What are the state procedures or typical plans for follow-up (e.g., repeat screening, subspecialty care or referral)?
- Who are staff in the office who understand the screening results notification process? (There should be at least two people.)

For additional considerations that impact newborn screening, see [Planning for Continuity of Operations and Access to Services](#).

When planning for infants in the event of an emergency, MCH partners and stakeholders should also be prepared to support infant feeding and provide age-appropriate, nutritious foods. For more information on infant feeding, visit [Response Considerations for Infants 0 – 12 months in Emergencies](#).

Planning Considerations for Young Children (ages 1 – 5 years) in Emergencies

Like infants, there are several concepts that providers and other stakeholders should consider when preparing for the needs of young children during an emergency, including, but not limited to, individual emergency planning, child care facility preparedness, child separation prevention, and promoting emotional well-being and resilience.

Providers should talk with caregivers about at-home emergency kits and emergency packs that children can take to school or child care. Emergency packs should include the child's name, names and phone numbers of familiar caregivers or guardians, allergies, specific access and functional needs, and medical conditions. For a complete at-home emergency kit supply list, see [Preparedness – Support the Development of Individual Emergency Plans](#).

Child care facilities should have emergency plans in place according to state and federal regulations that account for different types of emergencies such as evacuation, shelter-in-place, and natural disasters that occur in the area. Emergency managers and public health officials should be aware of unlicensed child care facilities and more informal child care arrangements that also need to be considered in emergency planning.

Emergency plans should also include information on preventing child separation and protocols for family reunification in various emergency scenarios. Adhering to the following core principles will help prevent child separation and support the reunification process:



Child Reunification Guidance (FEMA)

- In an emergency, transport infants and young children together with familiar caregivers (e.g., teacher, child care provider) whenever possible

- Designate a single agency as the lead for addressing child separation at the state or territorial level. If an agency has not been designated, or the agency is unknown by health care or social services providers or emergency responders, these stakeholders should contact law enforcement in the event of child separation
- Identify how patient transfers between health care facilities may play a role in child separation from their familiar caregivers and develop mitigation strategies

To develop emergency plans that support emotional well-being of children and promote resilience, providers and other partners should consider collaborating with and building relationships among children’s mental health stakeholders. This includes ensuring coordination among health departments, mental health providers, and emergency managers, training emergency responders and other providers who work with children to recognize signs and symptoms of mental distress in children, as well as advocating for mental health providers trained to work with children in a variety of contexts including schools, child care, and community settings.

Preparedness Considerations for Infants and Young Children in Various Emergency Scenarios

Emergency plans should include protocols to address the needs of infants and young children during a variety of emergencies including infectious disease outbreaks, localized emergencies, natural and human-caused disasters requiring evacuation, and natural and human-caused disasters not requiring evacuation.

Table 5: Preparedness Considerations for Infants and Young Children in Various Emergency Scenarios

Emergency Scenario	Considerations for Infants and Young Children
Infectious Disease Outbreaks	<ul style="list-style-type: none"> • Establish a communications plan for disseminating trusted public health information specifically on impacts to infants and young children • Establish telehealth capabilities when possible should the need arise to conduct virtual visits • Talk with caregivers about telemental health options should the need arise • Talk with caregivers about signs of mental health needs in young children early on in a quarantine or shelter-in-place situation • Purchase child-size supplies for local stockpiles, child care centers, and doctor’s offices • Encourage young children to practice safe habits to prevent spread of infectious disease, such as washing hands frequently, covering the mouth with the elbow when coughing and sneezing, and telling caregivers when they do not feel well
Localized Emergencies (e.g. disruption in municipal services such as water, natural gas, roads and transportation)	<ul style="list-style-type: none"> • Identify and develop guidance on back-up transportation routes to hospitals and health care facilities, including facilities with pediatric services • Plan for back-up facilities to take pediatric patients if local hospitals cannot take on additional patients due to circumstances, such as a surge or infrastructure failure, and develop a protocol for transfer of patient medical records to the receiving facility • Communicate child care emergency procedures including full-day and midday closures • Coordinate with local service providers to maintain support for infants and young children, including making provisions for supplemental food, breastfeeding support,

Advice from the Field

“Messaging that is not only age-appropriate but engaging helps make the message of preparedness relevant. The [Ready Wrigley](#) activity books for kids features Ready Wrigley the dog, puzzles, word games, and coloring activities are very popular for both young kids and their families.” Ready Wrigley is accessible online in English, Spanish, and other languages.

-Medical Officer



Emergency Scenario	Considerations for Infants and Young Children
	nutrition education, and health care referrals to support infants and young children, such as Home Visiting and Healthy Start
Natural and Human-Caused Disasters Requiring Evacuation (e.g., hurricanes, wildfires)	<ul style="list-style-type: none"> • Create an emergency pack to bring to child care. <i>For more information, see Planning Considerations for Children ages 1 – 5 years</i> • Plan to transport children and familiar caregivers together • Collect caregivers’ emergency contact information and communicate child care facility evacuation procedures • Establish regional network connections, such as through a local HCC, to identify which hospitals can or could provide pediatric services in the event of an emergency • Consider transportation needs of infants and young children, such as cleanliness, the ability to transport an infant carrier or small child, and the need for additional space for emergency supplies • Understand transportation inventory, location, and capacity in an emergency for transportation equipped for infant and young children, especially if inventory is limited
Natural and Human-Caused Disasters Not Requiring Evacuation	<ul style="list-style-type: none"> • Coordinate with child service providers such as Healthy Start and local MCH organizations to maintain support for infants and young children, including supplemental food and nutrition and health care referrals • Establish telehealth and telemental health capabilities to support continuity of care for infants and young children • Develop plans for infant feeding if a power outage occurs. Storage, viability of pumped breast milk, and the ability to heat breast milk to feed an infant may be impacted • Create a contact list of benefits providers and a list of back-up resources and partners that can provide immediate supplies in an emergency, such as food banks. Power outages may impact the ability to use electronic benefit cards or vouchers from programs such as Temporary Assistance for Needy Families (TANF), Supplemental Nutrition Assistance Program (SNAP), and Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) • Disseminate information about the danger of leaving infants and young children in cars during extreme heat

List of Resources – Preparedness

EMERGENCY PREPAREDNESS RESOURCES

The following include resources mentioned in the preparedness section and other relevant tools.

- [Access and Functional Needs Toolkit: Integrating a Community Partner Network to Inform Risk Communication Strategies](#) (CDC)
- [Addressing Health Equity during the COVID-19 Pandemic](#) (ACOG)
- [At-Risk Individuals with Access and Functional Needs & the CMIST Framework](#) (ASPR)
- [Breastfeeding: Emergency Preparedness Checklists for Breastfeeding Mothers, Relief Workers, and Health Workers](#) (ILCA)
- [Building Public-Private Partnerships to Enhance Disaster Resilience](#) (HHS)
- [Children and Disasters: Prioritizing Within and Among High-Risk Groups](#) (AAP)
- [CLAS Considerations](#) (OMH)
- [Cultural and Linguistic Competency in Disaster Preparedness and Response Fact Sheet](#) (ASPR)
- [Cultural Competency Program for Disaster Preparedness and Crisis Response](#) (OMH)
- [Culturally and Linguistically Appropriate Services \(CLAS\) in Maternal Health Care Training](#) (OMH)
- [Disaster Planning for Obstetrical Services | Obstetrics & Gynecology](#) (Stanford Medicine)
- [Disaster Preparedness and Response Information for Families](#) (AAP)
- [Disaster Safety Planning Resources for New and Expecting Parents](#) (CDC)
- [Eastern Great Lakes Pediatric Consortium for Disaster Response](#) (EGLPCDR)
- [Emergency Kit Checklist for Kids and Families](#) (CDC)
- [EmergencyPhysicians.org](#) (American College of Emergency Physicians)
- [Emergency Planning with Children](#) (FEMA)
- [Emergency Preparedness for Pregnant Women and Families with Infants – General Information](#) (American Public Health Association)
- [Emergency Preparedness Manual for Early Childhood Programs](#) (National Center on Early Childhood Health and Wellness)
- [Emergency System for Advance Registration of Volunteer Health Professionals \(ESAR-VHP\)](#) (HHS)
- [Environmental Health Disparities and Environmental Justice](#) (NIH)
- [Family Readiness Kit](#) (AAP)
- [Family Reunification After Disasters Tool for Health Care Facilities](#) (AAP)
- Get Ready Fact Sheets with Supply Lists for Pregnant Women and Families with Infants: [infant supplies](#), [hurricanes](#), [tornadoes](#), [wildfires](#), [earthquakes](#) (APHA)
- [Hospital Disaster Preparedness for Obstetricians and Facilities Providing Maternity Care](#) (ACOG)
- [Identifying Maternal Depression](#) (CDC)
- [Information and Resources – National Resource Center for Parents with Disabilities](#) (Brandeis)
- [Local FEMA Emergency Office Locator](#) (FEMA)
- [Newborn Screening Program for the State of Kentucky](#) (Kentucky Cabinet for Health and Family Services)
- [NICU/Nursery Evacuation Tabletop Exercise Toolkit](#) (Illinois Emergency Medical Services for Children)
- [Pediatric Disaster Preparedness Toolkit](#) (EIIC)
- [Pediatric Readiness in Emergency Medical Services Systems](#) (AAP)
- [Pediatric Readiness in the Emergency Department](#) (AAP)
- [Plan and Prepare for Emergencies](#) (American Red Cross)
- [Postpartum Depression FAQs](#) (OASH)
- [Pregnancy Risk Assessment Monitoring System](#) (PRAMS)
- [Reproductive Health Care for Women with Disabilities](#) (ACOG)
- [Rural Communities and Emergency Preparedness: Recognizing and planning for resource limitations when responding to disasters for rural communities](#) (HRSA)
- [Social Determinants of Health – Health Care Providers' Guide to Social Needs Screening](#) (AAFP)
- [Strategies for Successfully Including People with Disabilities in Health Department Programs, Plans, and Services](#) (NACCHO)
- [Western Regional Alliance for Pediatric Emergency Management](#) (WRAP-EM)

HHS is not responsible for the availability or content of the resources provided, nor does HHS endorse, warrant, or guarantee the resources listed above. It is the responsibility of the user to determine the usefulness and applicability of the resources provided.

Module 2: Response

Overall Response Considerations for MCH Populations

The response phase occurs during and in the immediate aftermath of an emergency and consists of actions taken to save lives and prevent further damage, such as the coordination and management of resources including personnel, equipment, and supplies. The response phase includes the execution of preparedness plans to support MCH populations, for example, enacting a trauma-informed approach and adhering to health equity standards.

As discussed in the preparedness section, health care, public health, and social services providers and other stakeholders should take actions during response that specifically address the needs of women who are pregnant, postpartum, and/or lactating and infants and young children. While these populations may be subject to many of the same risks, exposures, or injuries as the general population, their care may be more urgent or complex or may require more specialized supplies and equipment. For example, when a pregnant woman goes into labor or a new mother in a shelter is bleeding excessively within several days after delivery and needs medical attention.



Systemic and cultural barriers must be removed throughout emergency response so that individuals are prioritized fairly and everyone has an opportunity to be as healthy as possible. Public health officials, emergency responders, service providers, federal grant program grantees, and community partners serving MCH populations have the power to shape programs, processes, and response activities to ensure equitable health care in an emergency.

Shelter Considerations to Support MCH Populations in Emergency Response

- Require background checks for shelter personnel
- Train personnel to identify signs of human trafficking and abuse
 - See [CDC website for resources for Shelter Personnel on Human Trafficking in the Wake of a Disaster](#)
 - National Human Trafficking Hotline (888-373-7888 or text “HELP” to 233733)
 - Report suspected child exploitation to the CyberTipline, The National Center for Missing & Exploited Children, at 1-800-THE-LOST
- Provide safe, private spaces for infant feeding equipped with comfortable chairs, outlets, a sink with clean water and dish soap, and a refrigerated space to store breast milk/food
- Supply diapers, wipes, bottles and disposable cups, ready-to-feed infant formula, clean water, infant feeding cleaning supplies, feminine hygiene products (e.g., sanitary napkins), and child-size equipment (e.g., beds, masks as advised by public health officials), to women who are pregnant, postpartum, and/or lactating and infants and young children
- Adhere to safe sleep guidelines for infants. *For more information, see [Planning Considerations for Infants \(ages 0 - 12 months\) in Emergencies](#)*
- Provide essential social services, either independently or through partnerships with local social service organizations, including nutrition, breastfeeding support, and health care referrals
- Initiate a referral system for women who are pregnant who go into labor and who show signs of labor or pregnancy loss through health care providers and emergency medical services
- Provide access to services for testing and treatment such as sexually transmitted infections (STIs) and emergency contraception
- Staff individuals who are representative of the community in terms of demographics and culture
- Provide access to medical interpretation and translation services

Continuity of Operations and Access to Services

Adequate planning ensures that critical functions and services continue during and immediately following an emergency. During the response phase, language access, effective communication, and coordination with stakeholders is paramount to continuity of services for MCH populations and supporting a well-coordinated response. Health care, public health, and social services providers should work together with

emergency managers and response workers, such as shelter staff, to ensure access to medical and behavioral health services.

Maintaining communication with women who are pregnant, postpartum, and/or lactating and other caregivers of infants and young children, and with providers who serve MCH populations, ensures that individuals can continue receiving services and that new needs that arise in an emergency are identified and addressed. It is also important during response to maintain access to medical and behavioral health records, if possible. Situations impacting MCH populations include labor and delivery services, health care for postpartum complications, infant care, pediatric services, and behavioral health needs, such as mental health and substance use services.



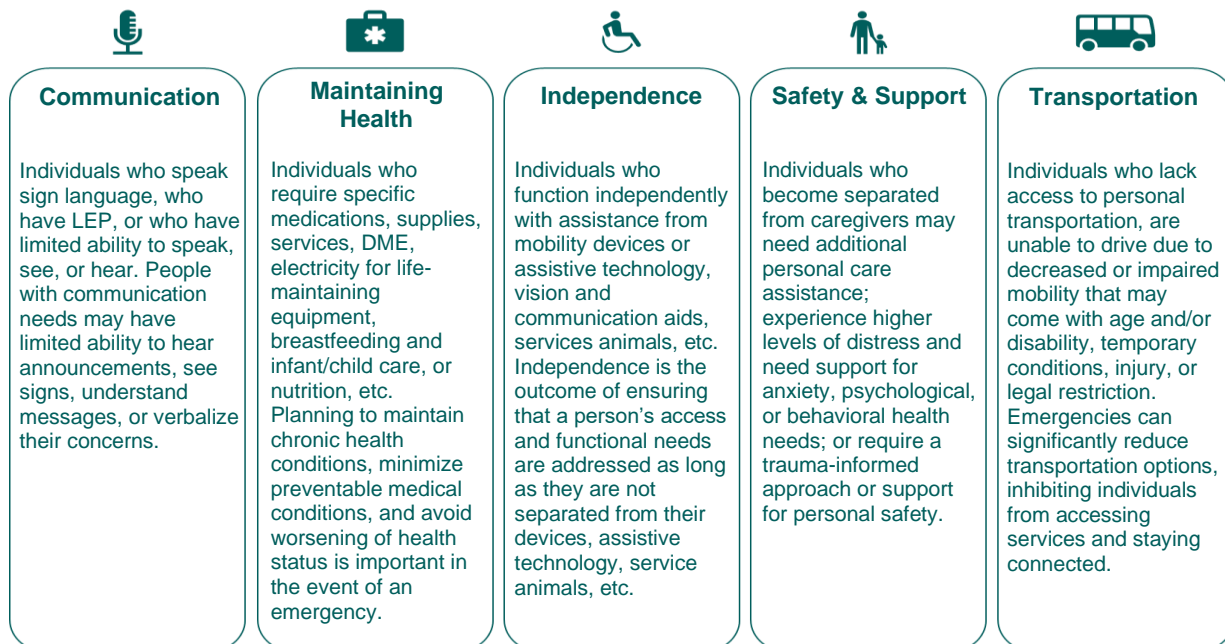
Recommendation for Implementation: Identify contacts and develop contact lists and plans for health care workers that some consider to be nontraditional to support MCH populations in your community to help fill gaps during response. These may include midwives, lactation support providers, doulas, and other people embedded within the community who are trained to work with MCH populations. Licensed providers can register for the [Emergency System for Advance Registration of Volunteer Health Professionals \(ESAR-VHP\)](#).

In addition to communicating with clients and patients, MCH organizations should be in contact with each other to share information about immediate needs and resources to ensure those needs are met. This is often possible through networks established in the preparedness and mitigation phases. MCH organizations can support each other during response to meet the needs of women who are pregnant, postpartum, and/or lactating and infants and young children in a variety of situations, such as access or supply chain disruption. For example, a regional storm that disrupts highway and railway operations could make infant food hard to find in stores. MCH organizations can work together to connect caregivers with organizations that have infant food in stock.

The CMIST Framework (**Figure 10**) presents additional considerations when planning for and responding to the access and functional needs (that may be temporary or permanent) of women who are pregnant, postpartum, and/or lactating and infants and young children.

At-Risk Individuals with Access and Functional Needs & the CMIST Framework (ASPR)

Figure 10: The CMIST Framework



HEALTH INSURANCE DURING EMERGENCY RESPONSE

Emergencies may cause disruptions in health care access due to physical constraints such as damage to infrastructure or infectious disease guidelines. Loss of insurance due to job loss or other factors may also limit access to health care. For women who are pregnant, postpartum, and/or lactating and infants and young children, any delayed or deferred care may have significant impacts on long-term health outcomes.

Medicaid and the Children's Health Insurance Program (CHIP) covered 42 percent of all births and 35 percent of all children in the U.S. in 2018, giving Medicaid programs a tremendously important role in providing health coverage for pregnant individuals and their children. Open enrollment to sign up for these programs is available every year, with some exceptions for public health emergencies. For example, in 2021, the Centers for Medicare and Medicaid Services (CMS) determined that the COVID-19 pandemic presented exceptional circumstances in accessing health insurance and provided a Special Enrollment Period (SEP). Medicaid income eligibility requirements vary by state, but individuals did not need to provide documentation of a qualifying event (e.g., loss of a job or birth of a child), which is typically required for SEP eligibility.

The American Rescue Plan Act of 2021, also called the COVID-19 Stimulus Package, allowed states to extend eligibility in Medicaid and CHIP to 12 months postpartum. CHIP also provides care to children even if parents are not covered through Medicaid. In case of relocation, one can immediately apply for Medicaid in the new state and can be covered by retroactive Medicaid coverage until their insurance is set up in the new state.

- [Sign up \(adults and children\) for Medicaid or CHIP](#) (USA.GOV)
- [Health insurance coverage for children](#) (USA.GOV)
- [Sign up for marketplace health plans](#) (Healthcare.gov)
- [Quick Guide to the Health Insurance Marketplace](#) (Healthcare.gov)
- [State Medicaid and CHIP Telehealth Toolkit](#) (Medicaid)
- [Medicaid telehealth information](#) (Medicaid)
- [HHS emPOWERing Medicaid/CHIP Data Pilot](#) (HHS emPOWER Program)

Health Equity Considerations During Emergency Response



Health care, public health, and social services providers and emergency responders providing support for women who are pregnant, postpartum, and/or lactating and infants and young children should be prepared to effectively support all MCH populations during response efforts. Underserved communities, including groups that have limited access to resources, are at greater risk of adverse effects during and after an emergency, impacting SDOH, such as economic instability, food insecurity, and lack of adequate housing.

All women who are pregnant, postpartum, and/or lactating and infants and young children are not equally impacted during emergencies. For example, low-income families may struggle to meet their basic needs during an emergency because of an increased cost of goods that must be purchased with the same level of benefits. Low-income families are also less likely to have extras supplies and an adequately stocked emergency kit. It is important to consider barriers to access of health care, supplies, and economic activities during emergency response.

Rural residents face heightened risks of severe maternal morbidity and mortality during emergencies, as rural public health departments tend to have less capacity and fewer



The Ramirez Family

Responding to a Nor'easter Storm

A powerful Nor'easter hits the Ramirez's town and the family follows evacuation orders. They were concerned because they only have one day's worth of food, but the shelter has nutritious age-appropriate food and Mrs. Ramirez continues to breastfeed her infant. The Ramirez's see their neighbors at the shelter who talk about staying with family in the event of flooding, applying for government emergency assistance for home flood damage, and using savings to help them get through the emergency. The Ramirez family has very little savings and an informal lease agreement with their landlord. They are unsure what they will do if their home is flooded.

See how the Ramirez family recovers from the Nor'easter in the next section.

resources than their urban counterparts. Rural hospitals also lack surge capacity for personnel and beds and may lack access to specialty health care services. Those serving rural MCH populations should anticipate these challenges and partner with regional stakeholders to share and coordinate resources during an emergency. Providers and emergency responders should ensure the safety of women and children in case of evacuations and relocation. Studies indicate that IPV, child abuse, and sexual violence are highly prevalent after disasters. Also, be aware that IPV disproportionately affects women who are Indigenous and live in rural areas. In the aftermath of a disaster or emergency, individuals with undocumented citizenship status may be unwilling or financially unable to seek assistance at emergency facilities, even if their child is eligible for certain services. Migrant populations are also at an increased risk for human trafficking during emergencies. It is important for providers to be aware of their role in combatting human trafficking. *For more information, see [The Role of Health Care Providers in Combatting Human Trafficking during Disasters in List of Resources section.](#)*



StrongHearts Native Helpline (1-844-7NATIVE) offers free, culturally appropriate support and resources to Native American survivors and families affected by domestic and dating violence.

Health care, public health, and social services professionals and emergency responders providing support during emergency response should plan for and be prepared to address the needs of people with disabilities. Individuals may have sensory, physical, cognitive, and other disabilities that require additional considerations. Research conducted using Medicaid data in Wisconsin²¹ demonstrated that women with intellectual and developmental disabilities have an increased risk of pregnancy complications and adverse outcomes. Consider the following when communicating about emergencies and disseminating resources to ensure they are accessible to MCH populations with disabilities:

- Ensure that health and emergency communication materials, including those specific to MCH populations, are accessible (e.g. braille, large print, visual images, American Sign Language interpreters, closed captioning, Section 508 compliant)
- Comply with the ADA to ensure accessibility of emergency facilities, such as shelters and evacuation centers, and accessible vehicles
- Work directly with local organizations who serve women who are pregnant, postpartum, and/or lactating and infants and children with disabilities to identify their needs in the community
- Coordinate with and through health care, public health, and disability networks that have existing, trusted relationships with clients to prioritize and reach women who are pregnant, postpartum, and/or lactating and infants and children with disabilities, such as individuals with electricity-dependent DME and individuals who are chronically ill

Emergency support providers should prioritize inclusivity by removing eligibility barriers, raising awareness through outreach and effective multilingual resources, and tailoring support to the specific needs of immigrant communities. HRSA-funded Health Centers are one of the largest systems of primary and preventive care in the country that provides care to millions of patients regardless of ability to pay. Health Centers can include Federally Qualified Health Centers (FQHCs), Community Health Centers, Migrant Health Centers, Health Care for the Homeless, and Health Centers for Residents of Public Housing, and they may support relief efforts for at-risk individuals.



Health Centers provide care to patients regardless of ability to pay

Key Concepts to Guide Equitable Response Efforts



There are two key concepts that support equitable response efforts: cultural competency and cultural humility. Cultural competency is the ability of individuals and systems to respond respectfully and effectively to people of all cultures, classes, races, ethnic backgrounds, sexual orientations, and faiths or religions in a manner that recognizes, affirms, and values the worth of

²¹ Rubenstein, E., Ehrenthal, D., Mallinson, D., Bishop, L., Kuo, Hsiang-Huo, & Durkin, M. (2020). [Pregnancy complications and maternal birth outcomes in women with intellectual and developmental disabilities in Wisconsin Medicaid.](https://doi.org/10.1371/journal.pone.0241298) <https://doi.org/10.1371/journal.pone.0241298>

individuals, families, tribes, and communities, and protects and preserves the dignity of each. Cultural humility is a lifelong process of self-reflection and self-critique whereby the individual not only learns about another’s culture, but one starts with an examination of her/his own beliefs and cultural identities. This critical consciousness is more than just self-awareness, but requires one to understand one’s own assumptions, biases, and values.



Recommendation for Implementation: Practice cultural humility when supporting a patient who is pregnant by understanding her priorities. Try saying: “I want to make sure that I understand your perspective. What are your main goals for labor and delivery? What are your biggest fears? How can I best support you?”

Strategies to put this into practice to support women who are pregnant, postpartum, and/or lactating and infants and children include²²:

- Practice self-reflection, including awareness of your beliefs, values, and implicit biases
- Recognize what you don’t know and be open to learning as much as you can
- Be open to other peoples’ identities and empathize with their life experiences
- Acknowledge that the woman is usually her own best authority, not you
- Learn and grow from people whose beliefs, values, and worldviews differ from yours
- Acknowledge power imbalances, stereotypes, discrimination, and, microaggressions
- Address and apologize for a misstep (for example, committing a microaggression)
- Offer a safe and honest space for the woman to discuss her experiences, including experiences with you as a provider

Incorporating Culturally and Linguistically Appropriate Standards into Response



In 2017, more than 35,400 cases of Zika virus infection were confirmed in Puerto Rico in a span of 16 months. This number represented 85 percent

of all cases reported in the U.S. and its territories. As the Zika virus was linked to adverse fetal and birth outcomes, health organizations including the CDC ran educational campaigns on how women could protect themselves and any possible pregnancy from the virus. The CDC developed resource materials in Spanish to ensure women who were pregnant, postpartum, and/or lactating had access to information, including MotherToBaby phone lines which were also available in Spanish.

Source: [CDC Zika and Pregnancy Site](#); [Rodriguez-Diaz et al. – NIH. Zika Virus in Puerto Rico \(2017\): Health justice too long delayed](#)

The LEARN model provides a framework for listening, explaining, acknowledging, recommending, and negotiating health information and instructions.

- **Listen** with empathy for the patient’s perception of the problem
- **Explain** your perception of the issue
- **Acknowledge** and discuss differences and similarities
- **Recommend** treatment. Suggest a treatment plan that is developed with the client’s involvement, including culturally appropriate aspects
- **Negotiate** agreement. The final treatment plan should be determined as mutually agreeable by both the care provider and client

Additional Response Considerations to Foster Equity

Communication

- Collect MCH population data to better understand local communities and needs in emergencies
- Provide varied and diverse communication channels to reach MCH populations based on age and language (e.g., radio, TV, social media, text alerts)

²² U.S. Department of Health and Human Services Office of Minority Health (HHS OMH). (2020). [Culturally and Linguistically Appropriate Services \(CLAS\) in Maternal Health Care](#). <https://thinkculturalhealth.hhs.gov/maternal-health-care/>

- Ensure language and information is accessible through interpretation and translation services. *Read more about OMH Cultural and Linguistic Appropriate Services (CLAS) Standards in the [Introduction – Key Concepts](#)*
- Disseminate messaging during emergencies through trusted entities, such as community health workers (e.g., Promotores de Salud)
- Promote open and welcoming environments, and use and foster health language that is inclusive for all types of families
- Leverage networks of trusted community leaders to support emergency planning and information-sharing, such as a Community Outreach Information Network (COIN)²³



Public Health Workbook to Define, Locate, and Reach Special, Vulnerable, and At-risk Populations in an Emergency

Recommendation for Implementation: Incorporate MCH populations into a COIN by engaging trusted partners and individuals serving women who are pregnant, postpartum, and/or lactating and infants and young children. Convene a small group responsible for coordinating each phase of COIN development for MCH populations:



- Phase 1:** Define MCH populations in the community including underserved populations, such as rural residents, people with disabilities, people experiencing homelessness, people who speak English as a second language, and people from racial/ethnic minority groups
- Phase 2:** Locate MCH populations through information gathered from community partners
- Phase 3:** Reach MCH populations through effective communications channels

Representation

- Ensure that health care, public health, and social services providers interacting with MCH populations are representative of the local community to include community members and collaboration with local organizations, which helps foster trust and communication during response efforts
- Provide gender-informed services to women by making female case managers available; this includes providing appropriate maternal health providers
- Gender identity, gender expression, and sexual orientation should be included in a shelter's non-discrimination policy so that transgender residents, gender non-conforming residents, and LGBTQ+ individuals and families are explicitly covered by the policy

Safety and Behavioral Health

- Provide information about where it is safe, as well as where it may be unsafe, to seek shelter during an emergency
- Ensure that women who are pregnant, postpartum, and/or lactating and infants and young children are physically safe from environmental hazards as well as potential safety hazards in mass gathering/sheltered situations. Pay attention to safety and security in areas such as sleep quarters and bathrooms

Providing Culturally Appropriate Food After Hurricanes Irma and Maria



In 2017, dialysis patients were evacuated from Puerto Rico and the US Virgin Islands to Atlanta, Georgia out of medical necessity after dialysis capabilities on the islands were completely destroyed in Hurricanes Irma and Maria. The dialysis patients needed a renal diet but were not accustomed to many foods common to the continental US. Federal and non-governmental partners worked together to provide patients with a culturally appropriate renal diet to ensure the patients' health and quality care. MCH populations similarly have special nutritional needs. Practicing cultural competency related to special foods and diets for MCH populations supports health and overall wellbeing of women who are pregnant, postpartum, and/or lactating and infants and children.

²³ Centers for Disease Control and Prevention. (2018). [Reaching At-Risk Populations in an Emergency](https://emergency.cdc.gov/workbook/index.asp). <https://emergency.cdc.gov/workbook/index.asp>

- Make the National Domestic Violence Hotline (1-800-799-SAFE) and the Disaster Distress Helpline (1-800-985-5990) available to individuals with concerns (e.g., signs, access to a phone, etc.). Individuals experiencing homelessness may be at higher risk of adverse physical and psychological reactions to emergencies due to limited resources and/or past exposure to traumatic events
- Keep the family unit together to help children and their parents maintain unity and comfort
- Provide basic emotional and tangible psychological support using interventions such as Psychological First Aid

Response Considerations for Women who are Pregnant, Postpartum, and/or Lactating

Various situations impacting women who are pregnant, postpartum, and/or lactating need to be considered during emergency response. For example, stress, which can increase during an emergency, has potentially negative impacts on women who are pregnant and can contribute to adverse outcomes such as pre-term and low-birth-weight infants.



Trauma during pregnancy presents anatomic and physiologic considerations that may require increased use of specialized resources, such as caesarean delivery. A trauma-informed approach is necessary for women who are pregnant, postpartum, and/or lactating who may be critically impacted by high levels of stress associated with an emergency response, especially women who have experienced past trauma or abuse, or have a substance use disorder. Listening to and responding to the needs and concerns of women who are pregnant, postpartum, and/or lactating helps improve outcomes by creating an environment where women are comfortable, empowered to talk about their needs, and able to access services quickly. It is also important to monitor women who are in the immediate postpartum period for signs and symptoms of complications, such as excessive and prolonged bleeding, hypertension, and complications with breastfeeding, and take necessary steps to prevent maternal mortality and morbidity. For example, shelters should have equipment to take blood pressure readings, and staff should check in with women who are postpartum in their facility and arrange for transfer to a local health provider or health care facility should additional assessment become necessary. Additionally, health care providers, federal MCH grantees, community organizations, and other partners serving MCH populations should be well-informed of the urgent warning signs of pregnancy-related health issues.

Advice from the Field

“Creating strong partnerships with those serving MCH populations before an emergency really pays off during response. An example of this is when State Title V Directors worked together during Hurricane Katrina in 2005 and the Zika Outbreak in 2015-16 to track families' change of location and ensure continuity of care during and after the emergencies, which included post-evacuations for Hurricane Katrina.”

-*Children and Families Specialist*



Recommendation for Implementation: Emergency situations can be chaotic. However, taking time to ask a woman who is pregnant or woman caring for an infant how she is feeling could be lifesaving. Incorporate lessons from the [CDC's Hear Her Campaign](#) into emergency management trainings and take action when a pregnant, postpartum, or lactating woman tells you that something is not right. Hear Her provides resources and information that raises awareness of potentially life-threatening warning signs during and after pregnancy and improve communication between patients and their health care providers.



Access to culturally competent medical and behavioral health services is important to ensuring maternal health equity. During emergency response, access to interpretation and translation services for women who are pregnant, postpartum, and/or lactating is critical to expressing needs related to pregnancy, infant care, or postpartum care to emergency response staff.

Behavioral Health Considerations for Women who are Pregnant, Postpartum, and/or Lactating in Emergencies

Women who are pregnant, postpartum, and/or lactating with mental illness or mental health challenges may experience exacerbation and/or triggering of symptoms during an emergency. Access to medications, mental health providers, and other treatments may be impacted during an emergency. Those experiencing SUD may struggle with disruption of in-person support groups, medication for medication-assisted treatment (MAT), and other forms of treatment. Individuals experiencing SUD may also be unable or face challenges to ensure their safety during an emergency due to impaired judgment and functional abilities. It is important to monitor and provide support to women who are pregnant, postpartum, and/or lactating who are trying to quit drug use. Providers and stakeholders working with MCH populations during an emergency should refer those in need of support and treatment to behavioral and mental health providers, resources, and telehealth providers.

Supporting Women who are Pregnant, Postpartum, and/or Lactating who have Experienced Abuse

Supporting Victims of Domestic Violence During Hurricane Sandy



New Jersey maintains a Domestic Violence Central Registry with up-to-date information on all restraining orders entered in the Family Automated Case Tracking System that is available to law enforcement agencies and the

Family Court. Under normal circumstances, this registry and an accompanying hotline facilitate enforcement of restraining orders and protection of victims as they move between municipalities and counties in the state. During Hurricane Sandy in 2012, when victims of domestic violence needed to relocate due to storm hazards, providers were able to call the hotline where screeners could coordinate relocation to ensure safe and appropriate placement.

Hotlines for Survivors of Abuse

- National Domestic Violence Hotline 1-800-799-7233/SAFE
- National Sexual Assault Hotline 1-800-656-4673/HOPE

Source: National Association of County and City Health Officials (NACCHO) (2016). [HURRICANE SANDY RECOVERY WORKSHOP SUMMARY REPORT: Lessons Learned and Promising Practices for Home and Community-Based Service Providers](#)



Experiencing an emergency is traumatic and creates known and unforeseen challenges in accessing safety, support, and resources. Abuse survivors and individuals experiencing IPV may have additional challenges overcoming stigma and trauma and meeting their basic needs. Abuse can begin or escalate during pregnancy and can cause serious harm to women who are pregnant and the fetus. Studies show that up to 8 percent of women report domestic violence or sexual assault before and during pregnancy and victimization by partners increases to 12 percent after birth.²⁴

Disruptions during an emergency situation, such as a stay-at-home order, lack of public transportation service, and workplace and school closures, impact survivors' safety plans and increase vulnerability to sexual violence and domestic abuse. The prevalence and severity of IPV, which includes assaultive and coercive behaviors by a perpetrator, can have a compounding effect on a woman's mental health and recovery after an emergency.



Recommendation for Implementation: First responders, health care providers, and social services providers can support women who have experienced abuse or have a substance use disorder by taking a trauma-informed approach that ensures continuity of services, provides private and safe spaces when possible to facilitate conversation, provides mental health support staff, and promotes continued access to clinical care, nutrition, and other necessities.

²⁴ U.S. Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response (HHS ASPR). [First Responders: Support for Pregnant Survivors of Abuse or Rape During Disasters](#). <https://www.phe.gov/Preparedness/planning/abc/Documents/first-responder-factsheet.pdf>

Response Considerations for Women who are Pregnant, Postpartum, and/or Lactating in Various Emergency Scenarios

Emergency response activities should address the specific needs of women who are pregnant, postpartum, and/or lactating during a variety of emergencies including infectious disease outbreaks, localized emergencies, and natural disasters.

Table 6: Response Considerations for Women who are Pregnant, Postpartum, and/or Lactating in Various Emergency Scenarios

Emergency Scenario	Considerations for Women who are Pregnant, Postpartum, and/or Lactating
Infectious Disease Outbreaks	<ul style="list-style-type: none"> • Communicate risks of current infectious disease outbreak(s) to women who are pregnant, postpartum, and/or lactating • Talk to women who are pregnant, postpartum, and/or lactating about appropriate precautionary measures they should take during the specific outbreak, such as receiving annual flu shots, wearing masks, and advising on treatment if infected • Conduct telehealth visits when possible. Distribute equipment to support telehealth care, such as remote monitoring blood pressure cuffs for prenatal patients • Distribute PPE to what some may consider nontraditional providers, such as midwives, and others who support women who are pregnant, postpartum, and/or lactating in medical facilities and at home, including doulas, lactation specialists, and community health workers (e.g., Promotores de Salud) • Advise on seeking in-person care at medical facilities, such as regular check-ups or for other symptoms, as delaying care could cause delayed diagnoses or other complications. • Communicate appropriate safety measures for in-person care • Adjust birth plans based on any changes to the labor and delivery process, such as visitor restrictions • Check with public health authorities before making breastfeeding recommendations. If there is a need to recommend temporarily suspending breastfeeding, provide information, resources, and support to help maintain milk supply so breastfeeding may be resumed in the future and how to prevent infections (e.g., mastitis)
Localized Emergencies	<ul style="list-style-type: none"> • Activate partner networks at the regional, state, and/or local levels to provide outreach to ensure the safety of h women who are pregnant, postpartum, and/or lactating • Share information with MCH partner organizations about needs that have arisen during an emergency • Activate power dependency plans in the event of a power outage, including switching to battery-operated supplies and generators. Ensure carbon monoxide detectors are in place and include messaging to MCH populations about risks of carbon monoxide poisoning
Natural and Human-Caused Disasters Requiring Evacuation	<ul style="list-style-type: none"> • Implement agreements defined in the preparedness phase to fill roles and responsibilities among organizations caring for women who are pregnant, postpartum, and/or lactating • Shelter in place at domestic violence shelters if it is safe to do so. Coordinate with shelter providers and staff and provide support to existing plans to ensure safe accommodations for survivors of partner violence and abuse if a domestic violence shelter must be evacuated • Provide mental health services at relocation centers and shelters to provide trauma-informed mental health care for women who are pregnant, postpartum, and/or lactating. Previous exposure to disaster or trauma may cause some individuals to be at greater risk for adverse stress reactions
Natural and Human-Caused Disasters Not Requiring Evacuation	<ul style="list-style-type: none"> • Maintain contact with local, state, and federal organizations supporting MCH populations to ensure that women who are pregnant, postpartum, and/or lactating who are located in impacted areas receive necessary supplies • Provide referrals to at-risk women who are pregnant, postpartum and/or lactating as appropriate (e.g., Home Visiting, Domestic Violence Hotline, etc.)

Response Considerations for Infants and Young Children

According to the CDC, younger children are often more affected by emergencies than adults due to a variety of reasons. For example, infants and young children:

- Have thinner skin and breathe faster than adults do, making them more likely to take in harmful substances through the skin or airways
- Have a higher chance of being harmed by very hot or cold temperatures
- May be unable to follow directions or make decisions to keep them away from danger during an emergency
- Use energy more quickly than adult bodies, and they need food and water more often
- Are more likely to put their hands in their mouths, and spend more time outdoors and on the ground, making them more likely to encounter dangers in the environment
- May not be able to explain how they are feeling, which can make it harder to identify a medical problem and treat them quickly
- Have more contact with others, and they have less developed immune systems to fight off infections. This means they are more likely to catch an illness that can spread from person to person
- Some children have special health care needs (e.g., physical, intellectual and developmental disabilities, chronic medical conditions). These can increase a child's chance of getting sick or highly distressed during an emergency, especially if the child is separated from a parent or caregiver

Health care, public health, and social services providers who care for and support infants and young children should activate emergency plans to protect the health and safety of infants and young children during emergencies. For example, providers may need to procure and use or provide appropriate equipment and supplies for treating infants and young children, such as child-size masks and needles, transportation equipment (e.g., infant carriers, car seats), and other necessary supplies (e.g., diapers, wipes, bottles, disposable cups).

Mental Health Considerations for Infants and Young Children in Emergencies

It is important for all individuals who will be caring for and supporting infants and young children during an emergency to understand that children may react differently during emergency situations than adults and mental health needs may present differently depending on the child's age and development. Changes in behavior, fussiness, and anger can be signs of stress, anxiety, or depression in infants and young children. Children react, in part, on what they see from the adults around them. When parents and caregivers deal with an emergency calmly and confidently, they can provide the best support for children. Take the time to calm a child during an emergency, when possible, which will help them follow instructions from teachers, caregivers, or first responders. For example, consider employing psychological first aid, an early intervention that promotes an environment of safety, calm, connectedness, self-efficacy, empowerment, and hope.



[National Child Traumatic Stress Network \(NCTSN\)](#)

Common reactions to distress for children include:

- **Infants to 2-year-olds:** Infants may cry more and/or want to be held and cuddled more than usual
- **3 to 5-year-olds:** Preschool and kindergarten children may return to behaviors they have outgrown, such as toileting accidents, bed-wetting, or being frightened about being separated from their parents/caregivers. They may also have tantrums or a hard time sleeping

Response Considerations for Infants (ages 0 – 12 months) in Emergencies



Infants require multiple checkups during the first several weeks and months after birth. During an emergency response, health care providers should prioritize access to the appropriate type and level of infant care, such as newborn screenings, which is an important mechanism for early detection of conditions that are life-threatening or that impact long-term health. During emergency response, health care providers should enact emergency contingency plans to ensure continuity of screenings, including having readily accessible results from previous screenings and completing screening follow-ups.

Supporting Infant Feeding in an Emergency



- Keep infants and caregivers together
- Ensure women who are breastfeeding have access to healthy food and clean water
- Create safe locations for women who are pregnant, postpartum, and/or lactating to feed their child(ren)
- Have ready-to-use infant formula in a clean bottle or disposable cup as an alternative or if infant becomes separated from caregiver; if ready-to-use formula is not available, access to clean water is required for powdered formula
- Provide access to health care providers with lactation experience and train emergency personnel in infant feeding

Whether care is provided at a hospital, shelter, community organization, or in the home, MCH partners should follow their emergency plans and coordinate within the community to make the appropriate resources available to support newborns and infants, including ready-to-feed formula, bottles and nipples (when they can be cleaned properly), disposable cups, cleaning supplies for infant feeding items, diapers, wipes, safety approved cribs, fitted sheets, and guidance to support safe sleeping. Transportation safety is also important for infants during an emergency and vehicles should be able to transport infant carriers.

Guidelines for infant feeding are important to understand during response. Breast milk provides the safest, cleanest food for newborns and infants, when available, during emergencies. However, guidance for breastfeeding can change depending on the emergency. For example, public health guidance might recommend temporarily suspending breastfeeding during an infectious disease outbreak, whereas continuing to breastfeed might be encouraged during a natural disaster. Additionally, emergency situations may pose significant barriers to breastfeeding for the woman and infant. Stress, lack of privacy, lack of

security and comfort, lack of lactation support, and concerns about possible infection or maternal medications all impact breastfeeding. Remain aware of the public health guidance to ensure the safety and health of the woman and child.

Infant feeding, including breastfeeding, formula, or a combination, should continue as normal for each caregiver/infant during an emergency when possible. Lactating women who are partially breastfeeding may be able to increase their milk supply by breastfeeding more frequently, which is helpful if formula is not available or in short supply. Emergency workers, such as shelter staff, should be aware of the various nutritional needs of infants and young children and should be able to identify appropriate and necessary resources, such as soft or pureed food for infants 6 months and older. Lactation and infant feeding support from a trained provider should be available. If an infant is separated from a caregiver, contact a local milk bank to see if donor milk is available. *For more information, refer to [Planning Considerations for Infants \(ages 0-12 months\) in Emergencies](#).*



Infant Feeding in Disasters and Emergencies (AAP)

Response Considerations for Young Children (ages 1 – 5 years) in Emergencies:

During an emergency response, first responders, health care providers, and caregivers need to act quickly to address conditions where children are at greater risk for injury or harm, such as hypothermia and head injuries. Signs of head injury include, but are not exclusive to, visible injuries, vomiting, and

confusion. For children exposed to extreme weather conditions or harmful elements, quickly cover them with blankets. Continuity of operations and coordination among partners during an emergency including first responders, health care facilities, and labs is important for timely diagnoses and information sharing. For example, even in the event of a power outage pediatric medical records need to be accessible and updated with new information during the emergency.

IPV and Child Abuse and Neglect During the COVID-19 Pandemic

IPV and child abuse and neglect increased during the COVID-19 pandemic in 2020. Widespread stay-at-home orders caused individuals to be located in the same space as their perpetrators for extended periods of time. While domestic violence providers anticipated increased demand for services, some domestic violence hotlines reported a decline in calls by over 50 percent.²⁵ Children were also at-risk of abuse and violence during COVID-19 stay-at-home orders. Research has shown that increased stress of caregivers/parents is a leading factor in child abuse and neglect. During the COVID-19 pandemic many caregivers faced stressors including job loss, food and housing insecurity, and lack of in-person social support including child care and family members. Due to stay-at-home orders, trusted adults such as teachers, counselors, and child services providers were unable to see signs of distress that would typically be detected during a home visit or at school.

Children process situations differently than adults and emergencies can be scary and confusing for young children. When addressing the needs of young children in an emergency, talk to caregivers to understand the situation. Talk to children who can verbally communicate in a way that they understand in a calm manner, making sure to consider [OMH's CLAS Standards](#). This can help children process the situation and their emotions and help them feel calm and comfortable.

When possible, provide young children with a creative outlet to express themselves, such as through art and music, and ensure nutritious, age-appropriate foods are available, such as fruit cut into small pieces and soft and pureed food. It is also beneficial for young children to maintain as much of a routine as possible and spend time with familiar caregivers and family.

Support young children who have experienced abuse during and immediately after an emergency. First responders, health care providers, and social service providers should understand signs of child abuse, such



Recommendation for Implementation: Provide young children with opportunities to talk about what they are going through, share their feelings, and ask questions. Communicate information about the emergency in a reassuring way.

as injuries, fear, anxiety, shame, hopelessness, depression, and withdrawal. These stakeholders may also need to report suspected child abuse in emergency situations, following pre-established guidelines and protocols, and provide referrals to mental health screenings when warranted.

Response Considerations for Infants and Young Children in Various Emergency Scenarios

Emergency response activities should address the specific needs of infants and young children during a variety of emergencies including infectious disease outbreaks, localized emergencies, and natural disasters.

²⁵ Megan L. Evans, M.D., M.P.H., Margo Lindauer, J.D., and Maureen E. Farrell, M.D. (2020). [A Pandemic within a Pandemic — Intimate Partner Violence during COVID-19](https://www.nejm.org/doi/full/10.1056/NEJMp2024046). <https://www.nejm.org/doi/full/10.1056/NEJMp2024046>

Table 7: Response Considerations for Infants and Young Children in Various Emergency Scenarios

Emergency Scenario	Considerations for Infants and Young Children
Infectious Disease Outbreaks	<ul style="list-style-type: none"> • Conduct telehealth and telemental health visits when possible and distribute equipment to support virtual care • Communicate child-specific risks of the outbreak to caregivers and children and advise on treatment if infected • Advise on seeking in-person care at medical facilities, such as regular check-ups or for other symptoms, as delaying care could cause delayed diagnoses or other complications (e.g., higher likelihood of disease if not adhering to vaccination schedule) • Communicate appropriate safety measures for in-person care • Encourage caregivers and young children to continue practicing safety measures (e.g., frequent hand washing, covering their mouth with their elbow when coughing or sneezing, telling their caregiver or teacher when they are not feeling well) • Adhere to public health protocols based on age as needed. For example, wearing a mask might be advised for children 2 years and older but not for children younger than 2 years
Localized Emergencies	<ul style="list-style-type: none"> • Follow emergency protocols for child care and school closures • Follow decontamination protocols for children in case of exposure to chemicals (<i>for more information, see AAP Decontamination Guide in List of Resources section</i>) • Maintain contact with local MCH organizations to ensure infants and young children in impacted areas receive supplies in the event of service disruption such as power or water • Ensure indoor temperature is infant-appropriate as loss of heat can impact newborns
Natural and Human-Caused Disasters Requiring Evacuation	<ul style="list-style-type: none"> • Provide access to pediatricians/pediatric health care providers in shelters or through telehealth and telemental health capabilities • Accommodate car seats and other supplies required for infants and young children in transportation • Establish child care, child-friendly areas and child-centric resources like diapers, wipes, clean water, infant feeding supplies including bottles/nipples and disposable cups and cleaning supplies, tissues, family use facilities such as showers and bathrooms with liquid hand soap, access to specialists, private-spaces for infant feeding, safety approved cribs and fitted sheets to support safe sleeping, and adhere to safe sleeping guidelines in shelters • Ask caregivers how they feed their infant and do not assume how the infant is being fed. Infant feeding should continue as is normal for each caregiver/infant and should only change when necessary. This may include breastfeeding, formula, or a combination of the two. Those who are breastfeeding partially have the option to breastfeed more, if possible, to increase their supply and feed less formula
Natural and Human-Caused Disasters Not Requiring Evacuation	<ul style="list-style-type: none"> • Address new needs that arise for infants and young children located in impacted areas • Communicate information to children about the emergency in a reassuring way and give children the opportunity to share their feelings and ask questions, including recognizing scary and uncomfortable parts of the situation • Provide a creative outlet for children such as coloring or music to relieve stress • Provide referrals to MCH services as appropriate to women who are pregnant, postpartum and/or lactating such as Healthy Start or WIC

List of Resources – Response

EMERGENCY RESPONSE RESOURCES

The following include resources mentioned in the response section and other relevant tools.

- [Carbon Monoxide Poisoning After a Disaster](#) (CDC)
- [Caring for Children in a Disaster](#) (CDC)
- [Child Safety Guidance for Emergency Evacuation Shelters](#) (Save the Children)
- [Commonly Used Sheltering Items & Services Listing \(CUSI-SL\)](#) (FEMA)
- [Communicating with people with Limited English Proficiency \(LEP\)](#) (HHS)
- [Cultural awareness: Children and disasters](#) (SAMHSA)
- [Data Template: Collecting Supplemental Information on Pregnant Women When Conducting Post-Disaster Morbidity Surveillance](#) (CDC)
- [Decontamination Guide for Children in Mass Chemical Exposure Incident](#) (AAP)
- [Disaster Response Guidance for Health Care Providers: Identifying and Understanding the Health Care Needs of Individuals Experiencing Homelessness](#) (ASPR)
- [Equal Access for Transgender People – Supporting Inclusive Housing and Shelters](#) (HUD)
- [Federally Qualified Health Centers](#) (HRSA)
- [First Responders: Supporting Pregnant Survivors of Abuse or Rape During Disasters](#) (ASPR)
- [Guide to Coordinating WIC Services during Disaster](#) (USDA)
- [Health Center Program](#) (HRSA)
- [Helping Children Cope with Emergencies](#) (CDC)
- [How to Clean, Sanitize, and Store Infant Feeding Items](#) (CDC)
- [How to Keep Your Breast Pump Clean](#) (CDC)
- [Human Trafficking in the Wake of a Disaster: Information and Resources for Shelter Personnel](#) (CDC)
- [Infant Feeding in Disasters and Emergencies](#) (AAP)
- [Medicaid & CHIP Disaster Response Resources](#) (CMS)
- [National Child Traumatic Stress Network](#) (NCTSN)
- [National Indigenous Women's Resource Center's "Understanding Trauma and Mental Health in the Context of Domestic Violence Advocacy" webinar](#) (NIWRC)
- [Neonatal Resuscitation Program](#) (AAP)
- [Promoting Stress Management for Pregnant Women](#) (HHS)
- [Promotores de Salud Program](#) (HHS)
- [Proper Storage and Preparation of Breast Milk](#) (CDC)
- [Psychological First Aid field operations guide \(second ed.\)](#) (NCTSN)
- [Public Health Workbook to Define, Locate, and Reach At-risk Populations in an Emergency](#) (CDC)
- [Resources for Emergency planners and responders for children in disasters](#) (CDC)
- [Resources for Infant Formula and Nutrition](#) (CDC)
- [RESPOND Guide from the Office of Minority Health](#) (OMH)
- [Rural Emergency Preparedness and Response](#)
- [Sheltering Handbook](#) (American Red Cross)
- [Step-by-Step Pediatric CPR technique](#) (American Red Cross)
- [StrongHearts Native Helpline \(1-844-7NATIVE \(762-8483\)\)](#)
- [Taking a Trauma-Informed Approach to care in Emergency Response](#) (CDC)
- [The Role of Health Care Providers in Combatting Human Trafficking during Disasters](#) (ASPR)
- [Tribal Community Response When a Woman Is Missing: A Toolkit for Action](#) (NIWRC)
- [Why Use Culturally and Linguistically Appropriate Services \(CLAS\) Throughout a Disaster?](#) (OMH)

HHS is not responsible for the availability or content of the resources provided, nor does HHS endorse, warrant, or guarantee the resources listed above. It is the responsibility of the user to determine the usefulness and applicability of the resources provided.

Module 3: Recovery

Overall Recovery Considerations for MCH Populations

The recovery phase of the emergency management cycle occurs after an emergency and requires balancing immediate needs to return to normalcy, such as repairing infrastructure and restoring services, with long-term mitigation goals to reduce future vulnerability to adverse outcomes of an emergency. Both aspects of recovery are crucial when supporting MCH populations.

In the short-term, women who are pregnant, postpartum, and/or lactating and infants and young children need immediate access to health care services, such as immunizations, pre- and postnatal check-ups, and newborn screenings. Emergency managers and public officials should replenish stockpiles as soon as possible to maintain preparedness and prioritize needs of MCH populations for food, water, power, and shelter. In the long-term, MCH providers such as social service providers, Title V MCH Block Grantees, health care providers, and community partners should incorporate lessons learned from recent emergencies into their preparedness plans to mitigate the impact of emergencies on MCH populations.



Recommendation for Implementation: Assign an individual or group to perform a gap analysis of supplies, staff, and services after an emergency. Present recommendations to organizational leadership to improve emergency preparedness and coordination among MCH partners.



Rebuilding and ensuring access to social safety net programs (e.g., TANF, SNAP, WIC) as soon as possible after an emergency is important to ensure an equitable recovery, as populations who depended on social safety net programs prior to the emergency face the greatest challenges to recovery. For example, a family that is low-income and has limited resources to purchase food is going to face even greater challenges after an emergency if it caused irreparable damage to their refrigerator. Using MCH community networks and local resources during recovery helps mitigate cumulative effects of SDOH on communities disproportionately impacted by emergencies.

Continuity of health insurance coverage is another indicator of an individuals' ability to recover. Understanding private health insurance policies, Medicaid, and CHIP coverage is important to serving MCH populations in the aftermath of emergencies. For example, losing coverage a certain number of days after giving birth is typical for Medicaid beneficiaries. Health care providers should talk with women who are pregnant, postpartum, and/or lactating and caregivers of infants and young children about their insurance policy and provide contact information and resources about publicly available insurance. Additionally, lack of out-of-network coverage is typical for private health insurance policies, but individuals may need to be seen at an out-of-network facility or provider due to damage, relocation, or unavailable medical records or insurance documentation. This may result in additional paperwork or unexpected large medical expenses for the individual as they are recovering from the emergency.

Women who are pregnant, postpartum, and/or lactating with disabilities, and infants and children with disabilities may also need to replace DME that was lost, left behind, damaged, or destroyed in an emergency. Providers should advise individuals to contact their health insurance provider to seek replacement of DME. Medicare also has a program to replace DME after an emergency. *For more information on insurance and Medicaid, see [Continuity of Operations and Access to Services – Health Insurance in Emergency Response](#) in the Response section.*



Medicare DME Replacement in an Emergency



Providers and organizations leading recovery activities should consider needs of low-income groups who may not have savings or insurance to cover the cost of health care, repairs, or replenishment of basic needs (e.g., food, clothing) after an emergency. Providers serving MCH populations should provide referrals to MCH organizations, such as Home Visiting and Healthy Start programs, to address needs during recovery.

Providers should address missed appointments for prenatal check-ups, immunizations, well-child visits, and newborn screenings. The method of service delivery may need to be adjusted depending on the emergency. For example, in response to the COVID-19 pandemic in 2020, Alabama began conducting well-child visits by phone, and WIC developed an electronic app to provide digital access to services.

Community-Centered Recovery

A collaborative, community-centered approach that engages an array of local stakeholders is important during recovery. In the aftermath of Hurricanes Matthew (2016) and Michael (2018) in Florida, early learning coalitions, which represent child care providers throughout the state, were involved in discussions and planning to serve families by keeping child care services open. After the hurricane made landfall, coalition members made phone calls and home visits to households with young children. Early learning coalitions played an important role during hurricane recovery by engaging in outreach to individuals and families with young children and relaying important information to emergency managers.

Coordination among partners serving MCH populations should continue after an emergency to ensure individuals' access and functional needs are being met. For example, suppose a young child in the community needs hypo-allergenic food but the local food bank does not have it after a regional storm disrupted the supply chain. The food bank may contact local MCH partners to locate a source for hypo-allergenic food. Community providers and MCH partners can also enhance support after an emergency by understanding available services in the community including shelters, faith-based organizations offering services, and government assistance related to the emergency. *For a list of MCH partners, see **Figure 6: Example MCH Partners and Stakeholders**.*

Behavioral Health in Recovery

Another major component to address during recovery for MCH populations is behavioral health, as an emergency can present complex stressors for MCH populations that can emotionally distress people and/or exacerbate existing conditions. Emergencies impact individuals differently and can cause trauma, anxiety, depression, and other mental health symptoms as well as disruption of SUD treatment. Providers should continue to discuss behavioral health options with women who are pregnant, postpartum, and/or lactating and caregivers of infants and young children in the aftermath of an emergency, even if symptoms are not immediately present.



By implementing a trauma-informed approach to health care and behavioral health, MCH organizations can support MCH populations after emergencies by making individuals feel comfortable seeking support and ensuring individuals are not further traumatized. It is important for all individuals working with women who are pregnant, postpartum, and/or lactating and infants and young children to be aware that significant life events may have occurred during the emergency that can

Advice from the Field

“Striking the balance of support and recognizing the limited capacity of local organizations after an emergency is important. For example, some child care facilities are built to withstand power outages and earthquakes. These facilities can easily be overwhelmed by an influx of supplies that are not needed but arrive anyway. Well-intentioned partners assume the facility has been damaged by an earthquake but don't understand the situation on the ground before acting. Dealing with unnecessary supplies can add to recovery activities.”

-Emergency Management Coordinator



FACTORS IMPACTING MENTAL HEALTH AFTER AN EMERGENCY

- Direct exposure to an emergency, such as being evacuated or witnessing others, including family members, in life-threatening situations
- Family variables, such as how parents and other trusted adults react to an emergency
- Pre-existing conditions, including mental health conditions
- Socioeconomic factors, such as financial resources
- Past trauma

[Source: CDC Public Health Matters Blog – Using Trauma-Informed Care to Guide Emergency Preparedness and Response](#)

cause trauma or re-traumatization, such as the death or injury of a family member, child separation, experiencing a life-threatening situation, or being unable to leave one's home.

Continuity of Operations After an Emergency

It may take longer to recover and return to normal operations after emergencies that caused infrastructure damage and disruption to public services, such as water and power. Damage to office buildings, records storage facilities, medical facilities, and warehouses can also delay the return to normal operations. Additionally, staff may have difficulty conducting home visits and other appointments with patients or clients after an emergency. In-person appointments may be interrupted due to road closures, unsafe conditions, or office closures and telehealth may be unavailable due to power outages. MCH organizations and providers should quickly identify new needs in the aftermath of an emergency and provide referrals to meet individual needs. Maintaining communications and sharing information and resources among MCH partners strengthens recovery efforts and supports MCH populations in getting the supplies and support they need.

Figure 11: Continuity of Operations during Recovery

Continuity of Operations during Recovery	
<p>Communications</p> <ul style="list-style-type: none"> • Continue communication with MCH populations through multiple channels • Communicate contact information for public health, social services, mental health, and other relevant organizations that individuals can contact to ask questions and receive support • Continue collaboration with partners serving MCH populations to amplify communications and important messages • Tailor messaging as needed based on the needs of women who are pregnant, postpartum, and/or lactating and infants and young children in the aftermath of an emergency 	<p>Power Dependency</p> <ul style="list-style-type: none"> • Know who to refer MCH populations to for support with power-dependent supplies such as expressed breast milk, breast pumps, and DME • Maintain access to charging stations or individual chargers for mobile devices at community centers, during home visits, or at other locations serving MCH populations after an emergency • Facilitate transfer of, or restore access to, medical, behavioral health, substance use, and other treatment records as needed • Coordinate alternative sites for appointments, lab work, and processing if power is out for extended time
<p>Access</p> <ul style="list-style-type: none"> • Adapt based on circumstances to continue essential operations to serve MCH populations • Identify staff and MCH populations who have been disproportionately impacted and might need additional support (e.g., damaged housing or birthing facility) 	<p>Personnel</p> <ul style="list-style-type: none"> • Communicate with staff serving MCH populations in need of services and deploy based on accessibility and need • Work with MCH partners to address unanticipated needs, such as limited supplies (e.g. infant food, batteries, feminine hygiene products)

Health Equity Considerations During Recovery



Some MCH populations may require more time to recover from an emergency than others due to the cumulative impact of SDOH. Underserved communities typically take longer to recover physically and financially from emergencies due to existing disparities and may require additional support.

For example, women who are pregnant, postpartum, and/or lactating and infants and young children experiencing homelessness face a combination of disparities before an emergency, in addition to lack of adequate and safe shelter, such as limited social connectedness and lack of access to subsistence and health resources. For some MCH populations, existing disparities may present additional barriers to recovery after an emergency as compared to other more resilient individuals.

Approximately 44 percent of young women and 18 percent of young men ages 18-25 who experience homelessness report being a parent or pregnant; each year, hundreds of thousands of children—up to 1.1 million in the U.S. in 2017—live with a young mom or, less frequently, a young dad who is experiencing homelessness.²⁶ Individuals experiencing homelessness are more likely to suffer chronic health problems, poor nutrition, poor sanitation, and violence. This group is often harder to reach in the aftermath of emergencies and has fewer resources to access recovery supports, such as access to the internet and transportation. Individuals experiencing homelessness are more likely to have experienced trauma prior to an emergency and therefore, are at greater risk for re-traumatization.

MCH populations from diverse cultural and linguistic backgrounds may face additional barriers in accessing benefits and quality health care in the aftermath of an emergency. It can be challenging for this group to receive information on benefits and services available to support women during and after pregnancy and young children during recovery. Carrying out plans to adhere to CLAS Standards after an emergency is important to ensure that MCH populations receive culturally and linguistically competent information and support. *Read more about CLAS Standards in **Table 2**.*



Recommendation for Implementation: Include service providers for MCH populations experiencing homelessness in emergency planning. Understanding that individuals and families experiencing homelessness have often experienced trauma prior to an emergency and training providers on using a trauma-informed approach to emergency response will help ensure this population is sufficiently supported. Common triggers for traumatic symptoms include loud noises, small spaces, lack of privacy, and chaotic or disorganized surroundings.



The Ramirez Family

Responding to a Nor'easter Storm
After the Nor'easter storm, the Ramirez family learns their home has flood damage. The family temporarily stays with Mr. Ramirez's brother who lives in a two-bedroom apartment. The Ramirez family returns to their home before the flood damage has been completely repaired and, unfortunately, their landlord is slow to complete the necessary work. Their infant develops a respiratory infection caused by mold and the medical bills are more than the Ramirez's can afford. A week later the Ramirez's see their neighbors who are staying with family while their home is repaired. The neighbors mention receiving government emergency assistance to fix water damage to their home. The Ramirez family survived the Nor'easter, but it is taking them longer to recover than others in their community and circumstances related to the storm have put the family in debt.

What does the Ramirez family's story tell us about compounding inequity in emergencies?



Maternity Group Homes for Pregnant and Parenting Youth

²⁶ Covenant House. [Homeless Youth Programs](https://www.covenanthouse.org/homeless-youth-programs/mother-child-teenage-pregnancy-help). <https://www.covenanthouse.org/homeless-youth-programs/mother-child-teenage-pregnancy-help>

Recovery for Women who are Pregnant, Postpartum, and/or Lactating

For MCH populations, the stress of pregnancy, the postpartum period, and caring for an infant or young child adds may add to the challenges of navigating emergency recovery. Health care and social services providers should resume regular visits with women who are pregnant, postpartum, and/or lactating, including prenatal and postpartum visits, after an emergency. Providers should also work with their patients to reschedule and prioritize any appointments that were missed due to the emergency, either in-person or as telehealth visits. In advance of and during these appointments, health care providers can address any disruptions in receiving prescription medications, supplements (e.g., prenatal vitamins), contraceptives, and feminine hygiene products, and re-visit birth plans. For example, a woman may need to select a different hospital or birthing facility if the planned facility was damaged during the emergency and the woman is late-term pregnant. In the event of physical injury or other immediate needs, such as recovery from a caesarian section, health care, public health, and social services providers should ensure women who are pregnant, postpartum, and/or lactating have necessary support at home (e.g., home visitor, caregiver, family member) as well as health and safety supplies.

Behavioral Health Considerations for Women who are Pregnant, Postpartum, and/or Lactating

During the recovery period, emergencies may make it more difficult for individuals to access treatment and services for mental health conditions and SUD. For example, it may be challenging for individuals with SUD to get the medication required for treatment or attend support meetings. Additionally, while new SUD do not typically develop after emergencies, substance use and misuse may increase following emergencies and women with SUD are at a higher risk for relapse and overdose in the postpartum period. Due to these compounding factors, behavioral health providers and other health care providers should screen for substance use and provide clients with support they need to address SUD, including access to MAT to sustain recovery and prevent overdose.



Recommendation for Implementation: Develop substance use screening procedures and integrate trauma-informed practices into substance use policies. Identify substance use treatment providers in the community and implement a referral process.

Emergencies and related stress experienced by women who are pregnant may also have an impact on maternal depression and may affect pregnancy outcomes and complications. Even if women who are pregnant, postpartum, and/or lactating were not receiving mental health support before an emergency, health care providers should discuss mental health with their patients and provide mental health referrals if needed. Women who are postpartum should also receive postpartum mental health screenings. Women who are pregnant, postpartum, and/or lactating, their providers and family should know who to contact in the event of a mental health emergency.



It is also important for providers serving women who are pregnant, postpartum, and/or lactating to understand that when caregivers are experiencing anxiety, depression, and other responses to trauma, the young children in their care may be at increased risk for developmental and behavioral issues and, in addition to following recommended developmental guidance, should be screened and assessed if concerns arise. *For more information about postpartum depression, see [Preparedness Considerations for Women who are Postpartum Caring for Infants](#).*

Support for Women who are Pregnant, Postpartum, and/or Lactating who Experience Abuse

Disruptions to daily routines caused by an emergency, such as stay-at-home orders or a change in employment status, may impact survivors' safety plans and increase vulnerability to adverse outcomes. The stressors caused by an emergency, such as isolation in an infectious disease outbreak, could worsen or start a cycle of violence in homes. The COVID-19 pandemic in 2020, for example, caused a global lockdown which



SAMHSA's National Helpline, 1-800-662-HELP (4357) is a 24-hour service for individuals and family members facing mental and/or substance use disorders

[Resources to Support Women Who Are Pregnant and Postpartum with Substance Use Disorders](#)

resulted in major economic devastation and disconnected many individuals from community resources and support systems. Domestic violence and IPV reporting during the COVID-19 pandemic decreased due to social isolation. On the other hand, after Hurricane Katrina in 2005 there was a reported 45 percent increase in domestic violence.²⁷ One of the reasons for this increase has been attributed to survivors being more likely to remain with or return to an abusive partner while staying in the temporary emergency shelter system.²⁸ Accessing social services after an emergency creates visibility and third parties, such as shelter workers, become aware of and report domestic violence.



Due to the potential for an increase in domestic violence after an emergency, organizations serving survivors should understand needs of their pregnant, postpartum, and lactating clients and plan to provide increased support after an emergency. Providers should refer women experiencing abuse with community-based services and support systems. Implementing a trauma-informed approach builds resilience in emergencies by helping women who are pregnant, postpartum, and/or lactating feel comfortable and supported, and avoid re-traumatization.



Recommendation for Implementation: Plan for an increased demand for social services for survivors of abuse after an emergency. Develop multiple methods of support for survivors, such as in-person, telehealth, and text message services. Supporting multiple methods of service builds resilience against the effects of an emergency.

Discuss and collect lessons learned with stakeholders to update domestic violence shelter evacuation plans, including supporting survivors and those experiencing abuse to remain separate from their abusers during shelter and evacuation. Health care and social services providers can help survivors of abuse after an emergency by ensuring continuity of services, providing private and safe spaces to facilitate conversation, and promote continued access to clinical care, behavioral health services, safe housing, nutrition, and other necessities and financial support. It is important to recognize that survivors who have experienced disruptions in daily routines, such as shelter-in-place, stay-at-home orders, or evacuation, might feel unsafe seeking support in person or over the phone.



The National Domestic Violence Hotline (1-800-799-SAFE (7233)) is a resource for survivors and those supporting survivors, including health care providers and social service providers. For those who may not feel safe calling, chat or text options are also available.

Recovery Considerations for Women who are Pregnant, Postpartum, and/or Lactating in Various Emergency Scenarios

Recovery plans and activities should address the needs of women who are pregnant, postpartum, and/or lactating during a variety of emergencies including infectious disease outbreaks, localized emergencies, natural and human-caused disasters requiring evacuation, and natural and human-caused disasters not requiring evacuation.

Table 8: Recovery Considerations for Women who are Pregnant, Postpartum, and/or Lactating in Various Emergency Scenarios

Emergency Scenario	Considerations for Women who are Pregnant, Postpartum, and/or Lactating
Infectious Disease Outbreaks	<ul style="list-style-type: none"> Communicate guidance with women who are pregnant, postpartum, and/or lactating about lasting effects of the outbreak, such as different strains of the disease, and prevention measures, such as getting annual flu shots

²⁷ U.S. Department of Health and Human Services Office of the Assistant Secretary for Preparedness and Response (HHS ASPR). *First Responders: Support for Pregnant Survivors of Abuse or Rape During Disasters*. <https://www.phe.gov/Preparedness/planning/abc/Documents/first-responder-factsheet.pdf>

²⁸ Gearhart, S., Perez-Patron, M., Hammond, Tracy A., Goldberg, Daniel W., Klein, A., and Horney, Jennifer A. (2018). *The Impact of Natural Disasters on Domestic Violence: An Analysis of Reports of Simple Assault in Florida (1999–2007)*. *Violence and Gender* Vol. 5, No. 2. <https://www.liebertpub.com/doi/10.1089/vio.2017.0077>

Emergency Scenario	Considerations for Women who are Pregnant, Postpartum, and/or Lactating
	<ul style="list-style-type: none"> • Communicate risks of known long-term effects of the infectious disease specific to women who are pregnant, postpartum, and/or lactating. Communication about individual circumstances and risks should occur one-on-one with providers • Emphasize coping strategies to support public health emergency recovery such as talking to friends and family, creative self-expression, talking with a mental health provider, and seeking substance use treatment • Provide relactation support if breastfeeding was interrupted during an outbreak and if it safe to do so • Re-establish behavioral health support if it was interrupted during the outbreak or if new needs arise
Localized Emergencies	<ul style="list-style-type: none"> • Reach out to women who are pregnant, postpartum, and/or lactating if an appointment was missed during the emergency, such as a prenatal or postpartum visit or screening, and respond appropriately to any new needs that have arisen • Contact MCH state, national, and federal agencies if further support is needed in recovery. Local MCH organizations should remain in contact with their network to refer women who are pregnant, postpartum, and/or lactating based on individual needs
Natural and Human-Caused Disasters Requiring Evacuation	<ul style="list-style-type: none"> • Return home only when it is safe to do so. For example, certain scenarios at home such as debris, standing water, or unhealthy air quality may be hazardous to MCH populations • Communicate guidance specific to women who are pregnant, postpartum, and/or lactating on safety hazards associated with environmental cleanup and home rehabilitation, including chemical and biological exposures such as mold • Ensure continuity of services for women who are pregnant, postpartum, and/or lactating temporarily or permanently relocating out of state. Portability of personal medical records is important to ensuring continuity of services • Understand insurance policies and points of contact should health care take place out of network • Provide relactation support if breastfeeding was interrupted during evacuation • Revisit birth plans if a hospital or birthing facility was damaged during the natural disaster
Natural and Human-Caused Disasters Not Requiring Evacuation	<ul style="list-style-type: none"> • Ensure there are necessary supplies if electricity or water services remain out for an extended period of time • Revisit birth plans if a hospital or birthing facility was damaged during the natural disaster • Communicate public health guidance of lasting effects related to a natural disaster such as air quality and contaminated water sources

Recovery for Infants and Young Children

Health care providers should resume regular visits with infants and young children, including check-ups, immunizations, screenings, specialist visits, and newborn screenings as soon as it is safe to do so. Disruptions in receiving medications, supplies, and immunizations should be addressed as quickly as possible.

Children’s mental health and well-being are important to monitor and address after an emergency. Caregivers can support infants and young children and their well-being by establishing a routine as soon as possible after an emergency. Young children’s exposure to news coverage of the emergency should also be limited. Watching or listening to news about the emergency and its aftermath can cause distress for children who experienced the event. Emergency managers and public health officials can support a return to normalcy for children by prioritizing restoration of places that are frequently used by children such as playgrounds, parks, schools, child care centers, and community centers. Restoring access to these spaces provides an outlet for children and caregivers alike when coping with the aftermath of an emergency. Providing child care services in the community after an emergency provides respite for



caregivers while navigating individual recovery activities such as coordinating with insurance companies, government assistance programs, employers, and health care providers.



It is important for young children to be able to express themselves in the aftermath of an emergency to process their experience and emotions. When talking with children about an emergency, listen to them, acknowledge and validate their feelings, share your own feelings, and acknowledge the scary parts of the situation. Having conversations with caregivers and trusted adults about emergencies and difficult situations at a young age builds resilience as children grow older and become adults.



A trauma-informed approach is critical to supporting children in recovery in any setting, whether a health care, child care, or social services facility. Just like adults, children may have experienced loss of a loved one, witnessed death, or experienced evacuation or a life-threatening situation and are at risk for re-traumatization. Trauma-informed practices make children feel safe and supported during the aftermath of an emergency when they are especially at-risk to further traumatization.



[Resources for Child Trauma-Informed Care](#)

Family Separation and Reunification

While preventing the separation of children from their caregivers (e.g., teachers or parents/primary caregivers) should be incorporated into emergency plans, reunification plans should be in place in the event of child separation. Child separation in an emergency can occur due to being transported to different medical facilities, a caregiver or child needing to go to a health care facility that doesn't allow family members or visitors, or because a child is at a child care facility or school and the family can't reach them. After an emergency, ensure procedures are followed to work with appropriate agencies and authorities to reunify families. *For more information about preventing child separation, see [Preparedness – Planning Considerations for Young Children \(1 - 5 Years\)](#).*

Child separation has complex effects on children and families. It does not take long for attachment, reattachment, and reintegration challenges to emerge when child-caregiver separation occurs, whether for a short or extended period of time.

Reunification is not only physical, but also entails critical mental health components. In the event of separation and reunification, it is important to provide holistic support to all involved (child, family, caregivers) to address specific needs. How a child reacts, and the common signs of distress, can vary depending on the child's age, past experiences, and how the child typically copes with stress. How an adult caregiver responds in crises are the most potent mitigator of traumatic stress for the young child. The availability of secure, safe and uninterrupted caregiving relationships will be the greatest protection against adverse outcomes for young children.

Advice from the Field

“The work of reunification is not only physical and legal but psychological and behavioral. Social and pediatric crisis mental health services that are culturally and linguistically appropriate, especially for young children, need to be part of reunification processes.”

-Family Reunification Officer



Holistic support includes recognizing changes in behavior and symptoms of mental distress that may result from trauma and/or stress. It is critical to provide age-appropriate mental health counseling and resources in addition to physical health care resources early in recovery.

Recovery Considerations for Infants (ages 0 – 12 months)

It is important to continue to adhere to safe sleep practices and infant feeding methods in the recovery environment. For example, infants should not sleep in spaces with potential exposure to carbon monoxide or fumes from generators and are more sensitive to air contamination such as smoke. *For more*

information on safe sleep, refer to [Planning Considerations for Infants \(ages 0 -12 months\) in Emergencies](#).

Breastfeeding may be able to continue even if interruption occurred during an emergency. If breastfeeding was interrupted, providers should refer women who are breastfeeding to relactation support providers who can provide individual support.

Maintaining continuity of newborn screenings remains critical during recovery, especially if a screening or follow up appointment to review screening results was missed during the emergency. CMS observed that, during COVID-19 related shutdowns in 2020, there were 22 percent fewer vaccinations received by beneficiaries up to age 2 and 44 percent fewer child screening services that assess physical and cognitive development.²⁹ Health care, mental health, and social services providers should talk with caregivers about telehealth capabilities for infants, and prioritize scheduling in-person appointments as soon as possible. *For more information on newborn screenings, refer to [Planning Considerations for Infants \(ages 0 -12 months\) in Emergencies](#).*

Providers should continue talking with caregivers about emergency preparedness to build and maintain resilience. At-home emergency kits should be continuously updated as infants get older to support changing needs for food, medicines, and clothing.

Recovery Considerations for Young Children (ages 1 – 5 years)

A variety of factors influence a young child’s recovery after an emergency. A child who experiences trauma or a stressful emergency situation may exhibit a range of stress symptoms that can be physical or psychological. Signs of stress in young children can present as requiring additional attention, disruptions to potty training, appetite changes, and other behavior and mood changes, such as increased tantrums and fearfulness. Children can also be impacted by hearing about an emergency situation that happened to a family member or friend.



Trauma-informed practices support children and families after an emergency by avoiding re-traumatization and quickly addressing responses to stress or trauma. Health care providers should ask about a child’s well-being and behavior after an emergency and provide mental health referrals as needed. Caregivers should seek a referral to a child mental health provider if stress symptoms persist or worsen.

Child abuse and neglect can also worsen in the aftermath of an emergency. Emergency managers and public health officials should work with local and state child welfare and advocacy organizations to disseminate information about services supporting young children, information about child abuse and neglect, and guidelines for reporting suspected child abuse. Health care, public health, and social services providers should also follow local and state guidelines for reporting suspected abuse. MCH organizations supporting young children should encourage caregivers and families to return to routine activities such as child care, playing with other children, and other child-centric activities such as going to the park or playground.

Advice from the Field

“A parent or caregiver’s unwillingness to access services that a child is eligible for becomes an obstacle to receiving support. Partnerships with community organizations, such as faith-based communities, that serve immigrant and undocumented families are indispensable for outreach. It’s important to understand that caregivers with undocumented status may be asylum seekers and may have experience with traumatic events and/or people of authority in the United States or their country of origin.”

-Recovery Specialist

²⁹ Centers for Medicare and Medicaid Services. (2021). [CMS Issues Urgent Call to Action Following Drastic Decline in Care for Children in Medicaid and Children’s Health Insurance Program Due to COVID-19 Pandemic](https://www.cms.gov/newsroom/press-releases/cms-issues-urgent-call-action-following-drastic-decline-care-children-medicaid-and-childrens-health). <https://www.cms.gov/newsroom/press-releases/cms-issues-urgent-call-action-following-drastic-decline-care-children-medicaid-and-childrens-health>

Recovery Considerations for Infants and Young Children in Various Emergency Scenarios

Recovery plans and activities should address the needs of infants and young children during a variety of emergencies including infectious disease outbreaks, localized emergencies, natural and human-caused disasters requiring evacuation, and natural and human-caused disasters not requiring evacuation.

Table 9: Recovery Considerations for Infants and Young Children in Various Emergency Scenarios

Emergency Scenario	Considerations for Infants and Young Children
Infectious Disease Outbreaks	<ul style="list-style-type: none"> • Communicate guidance to caregivers on any lasting effects of the outbreak that impact children, such as different strains of the disease, and prevention measures, such as getting vaccines • Communicate risks of known long-term effects of the infectious disease specific to infants and young children. Communication about individual circumstances and risks should occur one-on-one with providers • Talk with caregivers and young children about changes in behavior in response to necessary measures to prevent the spread of disease (e.g., stay-at-home orders) and provide referrals to child mental health services as needed • Return to a normal routine after stay-at-home orders have lifted and continue to provide children with opportunities to express themselves, such as through art or music
Localized Emergencies	<ul style="list-style-type: none"> • Follow up with caregivers if an appointment was missed during the emergency, and respond appropriately to new needs that have arisen • Maintain contact with local MCH organizations should service outages persist, such as water and power, to ensure caregivers receive supplies to support infants and young children
Natural and Human-Caused Disasters Requiring Evacuation	<ul style="list-style-type: none"> • Consider safety for young children returning to their homes. Children are more affected than adults by environmental contaminants, mold, and chemicals and should return after cleaning has occurred. Carbon monoxide from generators also poses a threat to health and safety • Consider safety for young children going to temporary housing or relocating with familiar caregiving adults (e.g., parents or relatives) such as following child-safe guidelines with medications and household cleaning supplies • Understand insurance policies and points of contact should health care take place out of network • Ensure continuity of services for newborns and young children who temporarily relocate or relocate out of state, including newborn screenings. Communication among health care and social services providers across state lines is important for continuity of care and services • Communicate information to children in a reaffirming way and give them space to ask questions, talk about their experiences, and help them identify emotions
Natural and Human-Caused Disasters Not Requiring Evacuation	<ul style="list-style-type: none"> • Maintain contact with local, state, and federal MCH organizations should service outages persist, such as water and power, to ensure caregivers receive supplies to support infants and young children is needed • Recognize that even if a child experienced minimal effects of a natural disaster, such as heavy rain from a hurricane or smokey skies from a wildfire, they can still be impacted from the experience or from the experiences of family or friends

Mitigation and Community Resilience

Emergency management does not end with recovery, as efforts to support MCH populations throughout the emergency management cycle of preparedness, response, recovery, and mitigation is ongoing. Mitigation activities build resilience for individuals and communities. Even after a community has completed physical recovery efforts, such as infrastructure repair, restoration of services, and clearing debris, recovery for individuals and families may last much longer. Individuals may experience long-term

effects of an emergency such as behavioral health challenges, financial burdens, and housing uncertainty.



To mitigate the impact of future emergencies, solicit information from MCH populations, partners, and stakeholders and engage in discussions about what worked well and what did not work well during an emergency. This information will help organizations from the local to federal level identify gaps in emergency plans and opportunities to incorporate lessons learned into preparedness activities. For example, efforts to expand telehealth capabilities and access should be ongoing. Lessons learned should be taken from telehealth in emergencies, such as infectious disease outbreaks, to identify disparities that impact health equity.

Innovation in Mitigation



Following Hurricane Michael in 2018 in Florida, several school districts set up kiosks in schools that had privacy and a secure internet connection for students to attend telemental health appointments. This innovation set a precedent for other virtual response resources during the COVID-19 pandemic in 2020.

In 2017, requests from general population emergency shelters for sensory items and kits, especially for children with autism, brought together different organizations, such as the American Red Cross and government agencies, to meet the demand. Using this lesson learned, sensory kits have since been developed and distributed in a variety of emergency situations.

Additionally, funding social services for families promotes resilience. Convening multisector groups at the community level that support children, such as teachers, principals, and parent-teacher associations (PTA), can be used to enhance recovery and mitigation efforts. This phase of the emergency management cycle offers a vital opportunity to include MCH partners who have not been previously involved in emergency management activities. *For more information on MCH partners that can be involved in emergency management to support women who are pregnant, postpartum, and/or lactating and young children, see **Figure 6: Example MCH Partners and Stakeholders.***

MCH partners and stakeholders can support mitigation activities by bolstering partnerships, community-wide emergency planning, and internal practices. For example, stakeholders can focus on incorporating a trauma-informed approach into organization-wide policies and procedures to build MCH populations' trust and experiences with health care, social services, and other MCH organizations. Developing trauma-informed practices during steady state builds capacity of staff and providers at all levels to make women who are pregnant, postpartum, and/or lactating and infants and young children feel comfortable and supported receiving care and services.

List of Resources – Recovery

EMERGENCY RECOVERY RESOURCES

The following include resources mentioned in the recovery section and other relevant tools.

- [Aunt Bertha Social Services Finder – FindHelp.org](#)
- [Child and Adult Care Food Programs \(CACFP\)](#)
- [Disaster and Trauma Resource Center \(AACAP\)](#)
- [Disaster Housing Recovery Coalition – National and State Member List](#) (National Low-Income Housing Coalition)
- [Disaster Human Services Case Management \(ACF\)](#)
- [Durable Medical Equipment Replacement in a Disaster or Emergency](#) (Medi)
- [Ensuring Language Access and Effective Communication during Response and Recovery: A Checklist for Emergency Responders \(English\)](#) (ASPR)
- [Ensuring Language Access and Effective Communication during Response and Recovery: A Checklist for Emergency Responders \(Spanish\)](#) (ASPR)
- [Family Separation and Reunification \(AAP\)](#)
- [Food Safety for Infants After a Natural Disaster | Breastfeeding](#) (CDC)
- [Kids in Need of Defense \(KIND\)](#)
- [Maternity Group Homes for Pregnant and Parenting Youth](#) (ACF)
- [Post-Disaster Reunification of Children: A Nationwide Approach](#) (FEMA)
- [Recommended Child and Adolescent Immunization Schedule](#) (CDC)
- [Resources for Child Trauma-Informed Care](#) (SAMHSA)
- [Resources to Support Women who are Pregnant & Postpartum with Substance Use Disorders](#) (SAMHSA)
- [Taking Care of Yourself after a Traumatic Event](#) (University of Notre Dame Counseling Center)
- [Unaccompanied Minor Registry \(UMR\)](#)

HHS is not responsible for the availability or content of the resources provided, nor does HHS endorse, warrant, or guarantee the resources listed above. It is the responsibility of the user to determine the usefulness and applicability of the resources provided.

Module 4: Case Studies

Case Study 1

William, 3-year-old typically developing child



William lives on the West Coast and attends a 35-person child care program from 8AM – 5PM daily at a licensed child care facility. He has been potty training for the past few months and now only wears pull-ups when sleeping. He does not take any medications or supplements. He thrives at daycare because of the structure and the ample time for play and exploration, both inside the classroom and on their play structures.

Preparedness: As part of regular emergency planning protocol, in coordination with state government agencies, the staff of the child care program asked parents to bring emergency bags for each child, which included clothes, diapers or pullups (if needed), bottled water, extra shoes, medical notes and supplemental medication (if needed), and a favorite toy. They also regularly update an accordion file with printed forms for each child containing printed emergency forms containing relevant health history, allergies, and emergency contact lists, including the names and phone numbers of approved parents, guardians, and caregivers for pick-ups, and name and number of primary care doctor. The program conducted regular evacuation drills with faculty and staff in accordance with state guidelines and contracted with a local bus company for emergency transport, if needed.

Emergency Scenario: *At 10AM, a fast-moving wildfire shifted and was heading straight toward the region where William's child care facility was located. The county issued emergency evacuation orders.*

Response: William's child care program quickly evacuated all 35 children ages 3-5 years old, including William's class. They transported all children to a safe location about 10 miles away using the contracted buses. The staff remembered to bring each child's emergency bag, their accordion file containing emergency forms and contact lists, first aid kits, and ample lunch and snacks for all age groups. The staff contacted parents and legal guardians and asked them to pick up their children from the designated location no later than 5PM. William's father works further away from the safe meeting location than many of the parents and guardians, so William is one of the last children to be picked up. He wet his pants for the first time in a few weeks and was crying and inconsolable.

Recovery: When William's father arrived, the teachers released William to his care. They also let his father know that William had been experiencing great distress because of the events of the day and their lack of access to spaces for unstructured play. After a couple of weeks, William was still regularly wetting his pants, acting out, and nervous about his father leaving his sight. His father took some time off work to be with him and reached out to their pediatrician to ask for support in addressing the underlying trauma impacting his behavior. The pediatrician provided a referral to a child behavioral health specialist. Fortunately, William's child care program building and play structures were not impacted, but it still took over a week for the air quality to clear well enough for children to play outside. The child care program had all outdoor equipment cleaned and open for use as soon as it was safe to re-establish outdoor play time routines for children.

Case Study 1 – Further Reflection

What elements in this case helped to make the emergency response successful?

Potential Responses:

- The child care program was well-prepared with portable hard copy emergency contact lists and emergency evacuation plans and drills in accordance with state guidelines, including a contract with a local bus company for emergency transportation. *For more information, see [Preparedness – Planning for Continuity of Operations and Access to Services](#)*
- William’s father recognized that William needed support following the emergency. William’s father took appropriate steps to provide support by taking some time off work to support William and reaching out for professional help through the pediatrician’s referral to address William’s underlying trauma. *For more information, see [Response – Response for Infants and Young Children](#)*

What could be improved in this scenario?

Potential Responses:

- Child care staff should have double checked that William’s father was on the approved emergency contact list before releasing William into his care. *For more information, see [Preparedness – Planning Considerations for Young Children \(1 - 5 Years\)](#) and [Recovery – Family Separation and Reunification](#)*
- Child care staff could have sought out an emergency relocation site that was equipped with supplies and physical spaces to accommodate children’s unstructured play. Additionally, early childhood programs should have contingency plans for keeping children occupied (i.e. including the necessary books, videos, music, nap supplies, etc., in their emergency toolkit). *For more information, see [Preparedness – Preparedness Considerations for Infants and Young Children in Various Emergency Scenarios](#)*
- Access to a medical provider at the location would have been helpful to support William when it was first observed that he was in great distress. *For more information, see [Preparedness – Preparedness Considerations for Infants and Young Children in Various Emergency Scenarios](#)*
- The child care staff could have received training to talk about what is happening in an age appropriate way and to include and refer to age appropriate and familiar educational emergency training messages for the children (e.g., [Clifford’s Fire Safety Rule: stop drop and roll](#)). *For more information, see [Preparedness – Preparedness Considerations for Infants and Young Children in Various Emergency Scenarios](#)*

Case Study 2

Sophia, 30-year-old pregnant mother of two children ages 2 and 5



Sophia lives on the Gulf Coast, which is regularly impacted by hurricanes and tropical storms. She is expecting her third child within the next month. She has had an uneventful pregnancy and plans to give birth with her midwife and doula in a local birthing center. She has insulin-dependent diabetes and requires regular blood sugar monitoring and insulin injections.

Preparedness: Sophia's midwife has spoken with her about various scenarios that may require her to go to a hospital for her child's birth, including a natural disaster or medical emergency, especially considering her diabetes. Together, they create back-up birth plans to accommodate Sophia's birth preferences while keeping her safe. Sophia's region has established a strong relationship among emergency responders and local transportation providers, so she is not concerned about being able to get to the birthing center or hospital if she goes into labor during an emergency. Sophia does not speak English but receives local news and public health communications in her first language from trusted sources.

Emergency Scenario: *A category 3 storm is moving quickly toward Sophia's region and her neighborhood, which includes the birthing center, has been given evacuation orders. The jurisdiction has set up shelters a few miles away from where the storm is expected to cause the most damage. Sophia and her partner decide to go with their two sons (ages 2 and 5) to one of the shelters that they have heard is well-equipped for families, including having child-size beds and a play area. They grab her prepared labor and delivery hospital bag, her insulin and other medication, as well as crafts and snacks for the children.*

Response: On the way to the shelter, Sophia calls her doula who agrees to help Sophia communicate with shelter staff members by translating and interpreting over the phone. Upon arriving at the shelter, Sophia informs the staff that she is expecting any day. She also requests for her family to stay in the same area when they suggest her children could go to a separate section. A few hours after arriving at the shelter, Sophia began to experience labor pains. Sophia immediately informs the staff, but they are hesitant to act quickly because Sophia doesn't seem to be in a lot of pain. She calls her doula who informs shelter staff to quickly secure her transportation and calls the midwife. The three of them discuss the options for Sophia's delivery. They all agree to meet at the nearest hospital where the midwife has delivery privileges. The doula speaks to shelter staff to advocate for Sophia's immediate transport. Sophia and her family have no friends or neighbors at this shelter, so her partner must stay back with their children while she goes to the hospital.

Recovery: Sophia made it to the hospital and vaginally delivered a healthy baby girl. Her doula and midwife worked with hospital staff to make sure that Sophia's medical history of diabetes was known and monitored. The hurricane caused extensive flooding, so her family was still at the shelter when she was discharged from the hospital. Sophia was transported back to the shelter to be reunited with her family, and the shelter provided them a clean, safe space to sleep, a pack 'n play for the newborn infant, and a quiet area to express and feed their new baby breast milk for the 24 hours that they had to remain at the shelter. Sophia and her family monitored news about their neighborhood through local news reports and text message communications from their local emergency management office. After news was released that it was safe to return to homes in Sophia's neighborhood, Sophia's partner visited their home to confirm it was safe for Sophia and their three children.

Case Study 2 – Further Reflection

What elements in this case helped to make the emergency response successful?

Potential Responses:

- Sophia previously discussed emergency scenarios with her midwife and readily evacuated when she needed to. She had prepared a hospital bag for herself which was ready to go and remembered to pack some crafts and snacks for the children. *For more information, see [Preparedness – Preparedness for Women who are Pregnant, Postpartum, and/or Lactating](#)*
- The local shelter was well-equipped for families and children and was able to house Sophia's family and provide calm, safe conditions for them and the newborn. The strong relationship between social service organizations, including the shelter and transport company, and emergency responders, allowed for adequate response for Sophia's needs. *For more information, see [Preparedness – Overall Planning Considerations for MCH Populations; Integrate MCH Partners and Stakeholders into Emergency Planning](#)*

What could be improved in this scenario?

Potential Responses:

- The shelter should have immediately placed Sophia on a watchlist and asked for her birth plans once she informed them that she was expecting any day. They should have prioritized getting her care as soon as she requested it; it is important to thoughtfully listen to the experiences of women, who are in a position to offer deep information on their condition. *For more information, see [Response – Key Concepts to Guide Equitable Response Efforts](#)*
- It is unclear whether the shelter had interpretation and translation services on site. In the case where Sophia could not rely on her doula to communicate with shelter staff, the absence of interpreter and translation services would have posed a significant issue for Sophia's family and health. Provide culturally and linguistically appropriate services to provide quality care and reduce health disparities. *For more information, see [Key Concepts – HHS Office of Minority Health \(OMH\) Cultural and Linguistic Appropriate Services \(CLAS\) Standards](#)*
- Shelters and other emergency responders should not separate children from their parents in emergency situations. Rather, prioritize keeping families together when possible. *For more information, see [Preparedness – Planning Considerations for Young Children \(1 - 5 Years\)](#) and [Recovery – Family Separation and Reunification](#)*

Case Study 3

Camila, 22-year-old mother of two children ages 3-years and 6-months-old



Camila is temporarily living in a domestic violence shelter with her 3-year-old daughter and 6-month-old son in a large metropolitan area. English is Camila's second language and she communicates primarily in Spanish with shelter staff and her health care providers. Camila's children attend a child care program that supports low-income families during the day while Camila is at work. Camila receives communications in Spanish from the child care center, but there is only one Spanish-speaking staff member who has become Camila's primary point of contact.

Preparedness: The shelter has a designated children's play area, and Camila keeps activities such as coloring books, crayons, puzzles, and children's books in their room. Camila prefers to communicate with health care and social services providers online. She receives regular communications from her primary care provider and her children's pediatrician through secure online portals and emails with public health-related information. Camila's providers have established telehealth capabilities and attends a mix of telehealth and in-person visits.

Emergency Scenario: *A highly contagious influenza virus is spreading rapidly across Camila's region. This virus is dangerous for infants and young children. Camila is concerned because the shelter where she lives is crowded and she is unsure how to keep herself and her children safe. Camila's daughter just brought a notice home from child care that there has been a confirmed influenza case at the child care center. Camila calls the center for more information, but the Spanish-speaking staff member is out for the week. Child care staff tell Camila the staff members will call her when the staff member returns.*

Response: Camila sends an online message to her children's pediatrician's office explaining the situation and requests information. The pediatrician's office sends information specific to infants and young children, refers Camila to a no-cost interpretation and translation service in her area so that Camila can communicate with the child care center, and recommends national and local sources to follow for information about the virus outbreak. Two days later public health officials recommend that individuals wear masks to prevent the spread of the virus and Camila's children's child care center shuts down for two weeks. Camila takes unpaid time off from work to care for her two children. She remains concerned because though the shelter has implemented a mask mandate, social distancing guidelines, additional hand hygiene and sanitation procedures, and requires all to eat meals in their respective rooms, the shelter is experiencing a mask shortage and some new residents do not yet have masks. Camila continues to use shared facilities as necessary but restricts her children's play time and activities to their room rather than using the children's common play area during this time. Camila had a small amount of savings that is nearly depleted by the time she returns to work.

Recovery: The domestic violence shelter was able to secure additional masks two weeks after public health guidance was released which makes Camila feel more comfortable using common spaces, including the children's play area which continues to be important for her children's well-being. Camila continues to monitor public health information about the influenza virus through Spanish-language sources. She chooses to schedule her son's 6-month checkup through telehealth. Meanwhile, the free interpretation and translation service has helped Camila build relationships at the child care center, so she no longer must rely on a single point of contact for information about her children's safety and school operations. There have been several short-term child care closures since the outbreak began; Camila's supervisor is understanding of her child care responsibilities, but her income continues to fluctuate with child care closures.

Case Study 3 – Further Reflection

What elements in this case helped to make the emergency response successful?

Potential Responses:

- Camila has established relationships with and receives regular updates from Spanish-speaking health care providers. She is also familiar with her providers' telehealth capabilities, which make it easier to continue to seek care during the influenza outbreak. *For more information, see [Preparedness– Health Equity Considerations During Emergency Preparedness](#)*
- The shelter continued to provide meals and other necessary services, especially for children. It was equipped with a designated child play area and Camila was prepared with activities to help her children de-stress and stay engaged. *For more information, see [Preparedness – Planning Considerations for Young Children \(1 - 5 Years\)](#)*

What could be improved in this scenario?

Potential Responses:

- The child care center should have referred Camila to an interpreter at the beginning of the outbreak instead of waiting for the Spanish-speaking staff member to return. They should prioritize hiring more bilingual staff members. *For more information, see [Response – Health Equity Considerations During Emergency Response](#)*
- The shelter should have relationships with social service agencies and workers they can refer Camila to in case she needs additional support. For example, a social worker could provide her resources and information to secure additional financial support for food and supplies while she is unable to go to work due to lack of child care. *For more information, see [Planning – Overall Planning Considerations for MCH Populations](#)*
- The shelter should strengthen communication and alignment with local public health guidance to ensure that they can secure necessary supplies and PPE as soon as possible. Additionally, they should have implemented stricter social distancing guidelines by implementing alternatives to common play areas to reduce spread. *For more information, see [Response – Response Considerations for Infants and Young Children](#)*

Case Study 4

Gina, 25-year-old woman, four weeks postpartum caring for her infant



Gina is four weeks postpartum from an uncomplicated birth and exclusively breastfeeds her infant son. She lives in a rural area with her partner, and they have depended on a local network for breastfeeding and nutrition support since her pregnancy, including a non-profit food bank and lactation specialist. Gina drives an hour each way to take their son to doctor appointments and her son is due for a routine newborn screening this week. Gina is experiencing postpartum depression and has weekly telehealth appointments with a mental health provider from a local clinic. She is taking prescribed antidepressants and has a week left in her prescription.

Preparedness: Gina talked with her obstetrician-gynecologist (OB/GYN) about emergency preparedness prior to her son's birth because of her region's susceptibility to flooding and winter storms. She made an emergency kit at that time, but she has not added infant or breastfeeding supplies since giving birth. Gina's son's pediatrician established new telehealth capabilities a few months ago.

Emergency Scenario: *Gina's region is hit with a major winter storm that dumped 18 inches of snow in 36 hours. Gina is feeling overwhelmed with variables to ensure her own health and the health of her son. Her power went out 12 hours ago due to the heavy snow; she is concerned about temperature control for the supply of breast milk that she has in her freezer and refrigerator. She also typically pumps at least 1x/day to bolster her milk supply, but her breast pump battery is nearly depleted, and she doesn't have spare batteries. Her son was due for his newborn screening follow up yesterday, but the doctor's office closed due to unsafe travel conditions. Gina had depended on getting out of the house for walks with her partner or friends to treat her postpartum depression, but she has not left the house for two days.*

Response: Gina contacts her mental health provider to discuss exacerbated postpartum depression symptoms. Her mental health provider gives Gina names of a few local organizations that she can reach out to for help shoveling, portable phone charging, and picking up extra supplies. Her provider also asks permission to refer her to a local organization that supports women who are postpartum and/or lactating and infants. Gina talks through the situation with her partner and they work together to contact the local organizations. A few hours later, the local MCH organization drops off additional infant supplies, batteries, food, and clean water. Gina also receives a text message and email from her OB/GYN encouraging their postpartum patients who are breastfeeding to continue if they are able, and to drink plenty of water, eat healthy food, and rest. The support from her partner and information and supplies Gina received helps to lessen her worries about caring for herself and her son.

Recovery: After 18 hours Gina's power had been restored, enabling her to shelter-in-place and retain her milk supply. A couple of days later, the roads around Gina's house have been plowed and she is able to get to the store for additional supplies and pick up her prescription refill. However, conditions are still not safe for Gina to return to her walking routine and she has not seen her friends or spent time with her partner outside of the house since the storm. Gina continues to experience exacerbated postpartum depression symptoms. A week after the storm, Gina remembers to reschedule her son's newborn screening follow up but the only appointment available she could schedule through the online portal was two weeks after the initial follow up appointment date.

Case Study 4 – Further Reflection

What elements in this case helped to make the emergency response successful?

Potential Responses:

- Gina had established telehealth capabilities with her mental health provider and her son's pediatrician. *For more information, see [Preparedness – Preparedness Considerations for Women who are Pregnant, Postpartum, and/or Lactating in Various Emergency Scenarios](#)*
- Gina's mental health provider understood the local network supporting MCH populations and knew how to match Gina and her son's needs with specific partners. *For more information, see [Preparedness – Overall Planning Considerations for MCH Populations](#)*

What could be improved in this scenario?

Potential Responses:

- Newborn screenings and follow ups are important and time sensitive. Gina's son's pediatrician could have recommended a telehealth appointment, if appropriate for the purpose of the follow-up screening. Otherwise the pediatrician should have contacted Gina as soon as possible about rescheduling the newborn screening follow up to ensure the appointment was rescheduled at the earliest possible time. *For more information, see [Preparedness – Planning Considerations for Infants \(ages 0 -12 months\) in Emergencies](#)*
- Gina would have benefitted from text message and email from Gina's OB/GYN to check on mental health/postpartum depression. Her mental health provider could have explored options to adjust her medication to better support her. In these conditions, a home-visiting nurse who has access to emergency vehicle transport would also be beneficial. *For more information, see [Response – Response Considerations for Women who are Pregnant, Postpartum, and/or Lactating](#)*
- Gina should have updated her at-home emergency kit to include batteries and supplies to support infant feeding. *For more information, see [Preparedness – Support the Development of Individual Emergency Plans](#)*

Conclusion

The HHS Maternal-Child Health Emergency Planning toolkit highlights key resources, leading practices, and guidance for MCH health care, public health, and social services providers to prepare for, respond to, and recover from an emergency. This toolkit emphasizes the importance of health equity and providing holistic support to women who are pregnant, postpartum, and/or lactating and infants and young children in an emergency. This toolkit uses three frameworks to highlight health equity for MCH populations in emergency management: The Life-Course Approach, Trauma-Informed Approach, and Social Determinants of Health. Readers are encouraged to be advocates for emergency preparedness by sharing this toolkit and relevant resources with partners in your network.

For additional information, please review the resources listed at the end of each section and the references listed in **Appendix G: References**.

Appendix A: Healthy People 2030 SDOH Goals

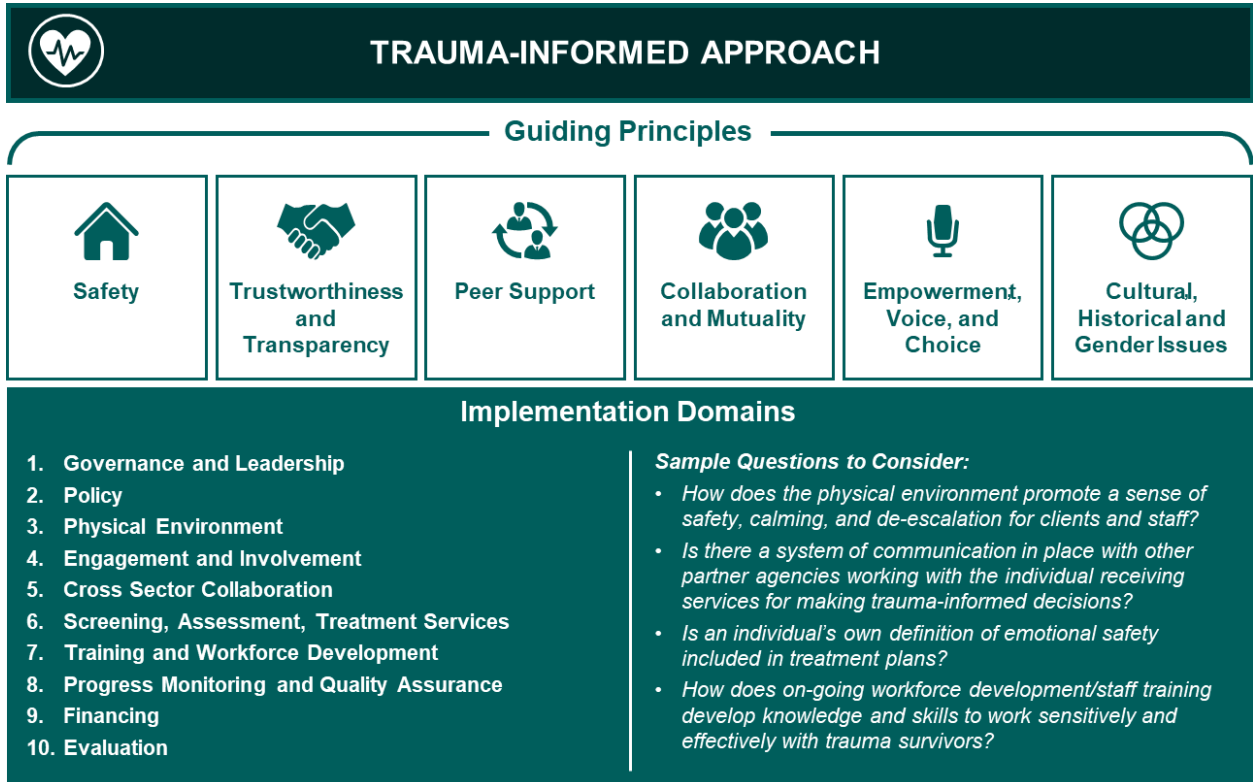
Objective	Goal
Increase the proportion of women who are pregnant who receive early and adequate prenatal care (MICH-08)	Raise the percentage of pregnant females who receive early and adequate prenatal care to 80.5 percent from the baseline of 76.4 percent in 2018
Increase the proportion of women who get screened for postpartum depression (MICH-D01)	This objective is currently in a developmental phase which means it has evidence-based interventions available, but does not yet have reliable baseline data
Reduce severe maternal complications identified during delivery hospitalizations (MICH-05)	In 2017, 68.7 per 10,000 delivery hospitalizations had severe maternal complications. The Healthy People 2030 target is a reduction to 61.8 per 10,000 delivery hospitalizations.
Reduce Maternal Deaths (MICH-04)	In 2018, 17.4 maternal deaths per 100,000 live births occurred. The Healthy People 2030 target is a reduction to 15.7 maternal deaths per 100,000 live births.
Increase the proportion of women who get screened for postpartum depression at their postpartum checkup (MICH D01)	This objective is currently in a developmental phase which means it has evidence-based interventions available but does not yet have reliable baseline data.
Reduce the rate of infant deaths (MICH-02)	In 2017, 5.8 infant deaths per 1,000 live births occurred within the first year of life. The Healthy People 2030 target is a reduction to 5.0 infant deaths per 1,000 live births.
Increase the proportion of children with developmental delays who get intervention services by age 4 years (EMC-R01)	This objective is currently in a research phase and may not yet have reliable baseline data and evidence-based interventions available.
Reduce emergency department visits for children under 5 years with asthma (RD-02)	Between 2013 – 2015, there were 129.6 emergency department visits for asthma per 10,000 children under 5 years. The Healthy People 2030 target is to reduce that rate to 65.7 per 10,000 children.
Increase the proportion of women who get needed publicly funded birth control services and support (FP-09)	In 2015, 42.9 percent of women ages 13 to 44 years in need of publicly supported contraceptive services and supplies received those services and supplies. The Healthy People 2030 target is to increase the percentage to 47.9.
Increase abstinence from alcohol among women who are pregnant (MICH-09)	Between 2017 – 2018, 89.3 percent of pregnant females aged 15 to 44 years reported abstaining from alcohol in the past 30 days. The Healthy People 2030 target is to increase the percentage to 92.2 percent.
Increase abstinence from illicit drugs among women who are pregnant (MICH-11)	Between 2017 – 2018, 93.0 percent of pregnant females aged 15 to 44 years reported abstaining from illicit drugs in the past 30 days in 2017-18. The Healthy People 2030 target is to increase the percentage to 95.3 percent.
Reduce the proportion of women who use illicit opioids during pregnancy (MICH-D02)	This objective is currently in a developmental phase which means it has evidence-based interventions available but does not yet have reliable baseline data.
Increase the proportion of infants who are breastfed exclusively through age 6 months (MICH-15)	24.9 percent of infants born in 2015 were breastfed exclusively through 6 months of age. The Healthy People 2030 target is to increase the percentage to 42.4 percent.

Appendix B: Overview of the Emergency Management Cycle

Emergencies have a continuous cycle. The emergency management cycle is a four-step, cross-cutting approach that can be used for public health emergencies, natural disasters, and human-caused disasters. This includes all levels: federal, state, local, tribal, and territorial.

Emergency Management Term	Definition
Preparedness	The Preparedness phase of the emergency management cycle includes continuous dedication of time and resources for adequate planning, organizing, education, evaluation, and training, especially for events that cannot be mitigated. The preparedness phase typically occurs before an emergency. Examples of preparedness activities include creating emergency preparedness plans and resources sheets, conducting drills, tabletop and full-scale exercises, identifying and storing supplies etc.
Response	The Response phase is a reaction to the occurrence of an emergency. It occurs during and in the immediate aftermath of the event and includes actions taken to save lives and prevent further damage. Response is the coordination and management of resources (including personnel, equipment, and supplies) and putting preparedness plans into action. Response activities include surging medical capabilities, conducting evacuations, conducting public health surveillance and clinical guidance, taking actions to protect oneself and family, etc.
Recovery	The Recovery phase begins immediately after the threat to human life has subsided. The goal is to restore normalcy and critical community functions to the affected areas. Recovery consists of activities such as providing basic necessities for affected populations in need, rebuilding damaged structures, reducing vulnerability to future emergencies, etc.
Mitigation	Mitigation is the effort to reduce loss of life and property by lessening the impact of emergencies. It refers to the actions and activities that reduce the chance of an emergency happening and prevent or minimize their effects. Mitigation activities can and should be done before an emergency occurs, and they are also essential in the aftermath of every emergency. Examples of mitigation activities include creating HCCs and including partners in local planning efforts. Implementation of hazard mitigation factors leads to building stronger, safer, and smarter communities that are better able to reduce future injuries and future damage.
Steady State	Steady state is the term used in emergency management to describe when conditions are not being impacted by an emergency. Planning and mitigation activities take place during steady state.

Appendix C: Trauma-Informed Approach



TRAUMA-INFORMED APPROACH

Guiding Principles



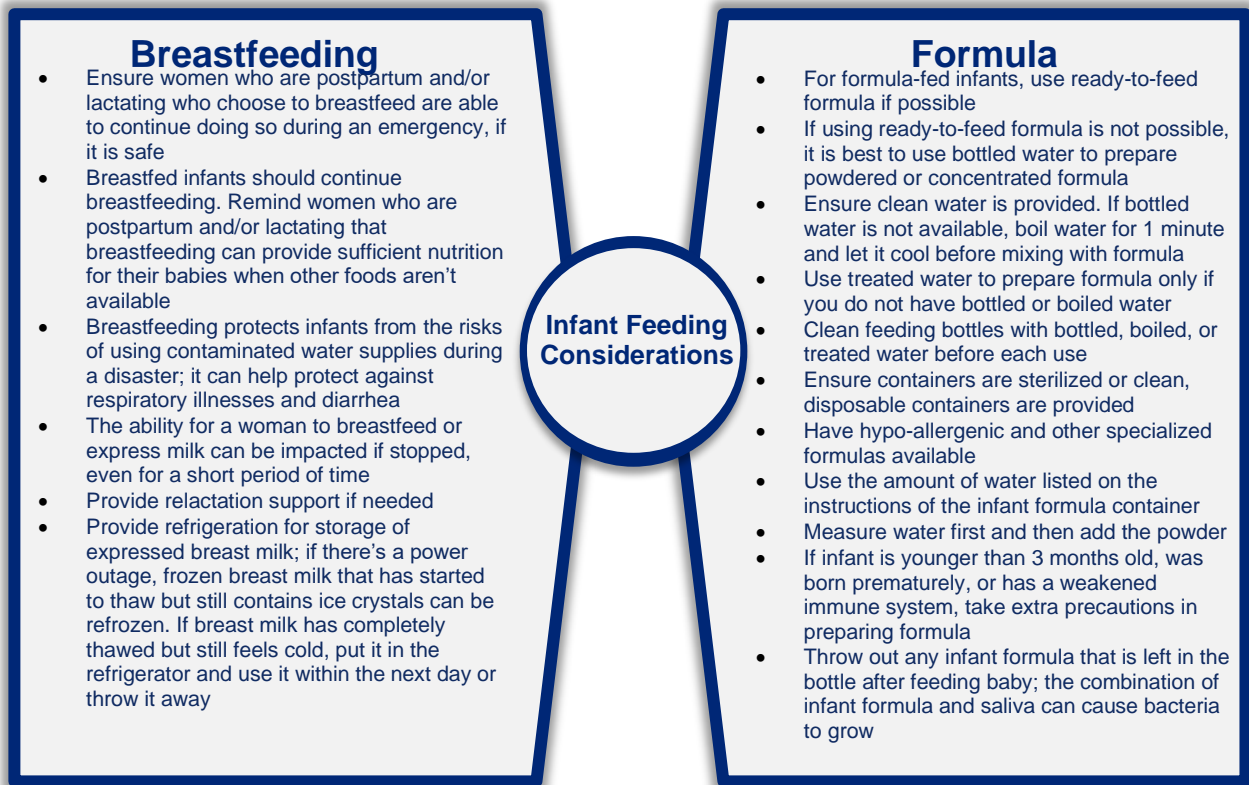
Implementation Domains

1. Governance and Leadership
2. Policy
3. Physical Environment
4. Engagement and Involvement
5. Cross Sector Collaboration
6. Screening, Assessment, Treatment Services
7. Training and Workforce Development
8. Progress Monitoring and Quality Assurance
9. Financing
10. Evaluation

Sample Questions to Consider:

- How does the physical environment promote a sense of safety, calming, and de-escalation for clients and staff?
- Is there a system of communication in place with other partner agencies working with the individual receiving services for making trauma-informed decisions?
- Is an individual's own definition of emotional safety included in treatment plans?
- How does on-going workforce development/staff training develop knowledge and skills to work sensitively and effectively with trauma survivors?

Appendix D: Considerations for Breastfeeding and Formula in Emergencies



Appendix E: Acronyms

Acronym	Definition
AACAP	American Academy of Child and Adolescent Psychiatry
AAFP	American Academy of Family Physicians
AAP	American Academy of Pediatrics
ACF	Administration for Children and Families
ACOG	American College of Obstetricians and Gynecologists
ADA	Americans with Disabilities Act
AFN	Access and Functional Needs
AI/AN	American Indian/Alaska Native
AMCHP	Association of Maternal and Child Health Programs
APHA	American Public Health Association
ASPR	Assistant Secretary for Preparedness and Response
ASTHO	Association of State and Territorial Health Officials
ASTHVI	Association of State and Tribal Home Visiting Initiatives
CACFP	Child and Adult Care Food Program
CDC	Centers for Disease Control and Prevention
CHIP	Children's Health Insurance Program
CLAS	Culturally and Linguistically Appropriate Services
CMIST	Communication, Maintaining Health, Independence, Support and Safety, and Transportation Framework
CMS	Centers for Medicare and Medicaid Services
COIN	Community Outreach Information Networks
COOP	Continuity of Operations Plan
DME	Durable Medical Equipment
EGLPCDR	Eastern Great Lakes Pediatric Consortium for Disaster Response
EIIC	Emergency Medical Services for Children Innovation and Improvement Center
ESAR-VHP	Emergency System for Advance Registration of Volunteer Health Professionals
ESL	English as a Second Language
F2F	Family-to-Family Health Information Centers
FEMA	Federal Emergency Management Agency
FQHC	Federally Qualified Health Centers
HCC	Health Care Coalition
HHS	Department of Health and Human Services
HRSA	Health Resources and Services Administration
HUD	Department of Housing and Urban Development
IHS	Indian Health Service
ILCA	International Lactation Consultant Association
IPV	Intimate Partner Violence

Acronym	Definition
KIND	Kids in Need of Defense
LEP	Limited English Proficiency
LGBTQ+	Lesbian, Gay, Bisexual, Transgender, Queer
MAT	Medication-Assisted Treatment
MCH	Maternal-Child Health
MCHB	Maternal-Child Health Bureau
NACCHO	National Association of County and City Health Officials
NCTSN	National Child Traumatic Stress Network
NIH	National Institutes of Health
NIWRC	National Indigenous Women's Resource Center
OASH	Office of the Assistant Secretary for Health
OB	Obstetrics
OB/GYN	Obstetrician-Gynecologist
OMH	Office of Minority Health
PAHPA	Pandemic and All-Hazards Preparedness Act of 2006
PAHPAIA	Pandemic and All-Hazards Preparedness and Advancing Innovation Act of 2019
PAHPRA	Pandemic and All-Hazards Preparedness Reauthorization Act of 2013
PPE	Personal protective equipment
PQC	Perinatal Quality Collaborative
PRAMS	Pregnancy Risk Assessment Monitoring System
PTA	Parent-Teacher Association
SAMHSA	Substance Abuse and Mental Health Services Administration
SEP	Special enrollment period
SIDS	Sudden Infant Death Syndrome
SNAP	Supplemental Nutrition Assistance Program
STI	Sexually transmitted infections
SUD	Substance use disorders
SDOH	Social Determinants of Health
TANF	Temporary Assistance for Needy Families
US	United States
USDA	United States Department of Agriculture
WIC	Special Supplemental Nutrition Program for Women, Infants, and Children
WRAP-EM	Western Regional Alliance for Pediatric Emergency Management

Appendix F: Glossary of Terms

Access and Functional Needs - Irrespective of a specific diagnosis, status, or label, access and functional needs may interfere with a person's ability to access or receive medical care or limit a person's ability to act before, during, or after an emergency. Examples of individuals with access and functional needs include individuals with disabilities, who live in institutional settings, from diverse cultures, who have limited English proficiency or are non-English speaking, are transportation.

At-Risk Individuals - Individuals who may have additional needs before, during, or after an emergency in one or more of the following functional areas: communication, medical care, maintaining independence, supervision, and transportation. At-risk individuals include children, older adults, pregnant women, and individuals who may need additional response assistance (e.g. individuals with chronic medical conditions, developmental disabilities/intellectual disabilities, limited mobility, mental health conditions, or substance use disorder).

Caregiver - Adults responsible for the health, safety, and care of infants and young children. Caregivers can include, but are not limited to, mothers, fathers, grandparents, relatives, legal guardians, and trusted child care providers (e.g., early childhood educator, teacher).

Child Health - The physical, mental, emotional, and social well-being of children from infancy through adolescence.

CMIST Framework - A recommended approach for integrating the access and functional needs of at-risk individuals who may have additional needs that must be considered in planning for, responding to, and recovering from a disaster or public health emergency. CMIST is an acronym for the following five categories: Communication, Maintaining health, Independence, Support and Safety, and Transportation. The CMIST Framework provides a flexible, crosscutting approach for planning to address a broad set of common access and functional needs without having to define a specific diagnosis, status, or label.

Continuity of Operations - Guidance and plans for personnel, communications, and facilities in the event of an emergency. A Continuity of Operations Plan (COOP) builds resilience and mitigates effects of an emergency on an organization and the people it serves.

Cultural Competency - The ability of individuals and systems to respond respectfully and effectively to people of all cultures, classes, races, ethnic backgrounds, sexual orientations, and faiths or religions in a manner that recognizes, affirms, and values the worth of individuals, families, tribes, and communities, and protects and preserves the dignity of each.

Cultural Humility - A lifelong process of self-reflection and self-critique whereby the individual not only learns about another's culture, but one starts with an examination of her/his own beliefs and cultural identities. This critical consciousness is more than just self-awareness, but requires one to understand one's own assumptions, biases, and values.

Disasters - Large-scale and cross geographic, political, and academic boundaries. Disasters require a level of response and recovery greater than local communities can provide.

Emergencies - Small-scale, localized incidents which are resolved quickly using local resources (e.g. disruption in municipal services such as water, natural gas, roads and transportation).

Emergency Management - The managerial function charged with creating the framework within which communities reduce vulnerability to hazards and cope with disasters and public health emergencies. Emergency management seeks to equip communities with the capacity to cope with hazards and disasters to promote and prioritize the safety of all, especially individuals most at-risk during an emergency.

Epidemic - Epidemic refers to an increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area.

Equity - The consistent and systematic fair, just, and impartial treatment of all individuals, including individuals who belong to underserved communities that have been denied such treatment, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality.

Health Equity - Every person has the opportunity to attain his or her full health potential and no one is disadvantaged from achieving this potential because of social position or other socially determined circumstances.

Human-Caused Disasters- Traumatic events that may cause loss of life and property (e.g., industrial accidents, shootings, acts of terrorism, incidents of mass violence).

Infants - Typically developing children ages 0-12 months (limited definition used for this toolkit).

Infant Mortality - Infant mortality is the death of an infant before his or her first birthday.

Life-Course Approach - An approach that recognizes the opportunity to prevent and control diseases at key stages of life from preconception through pregnancy, infancy, childhood and adolescence, through to adulthood and aging years.

Maternal Health - The health of women during preconception, pregnancy, childbirth, and the postpartum periods.

Maternal Mortality (or Pregnancy-Related Death)- The death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy.

Mitigation - The effort to reduce loss of life and property by lessening the impact of disasters and emergencies. It refers to the actions and activities that reduce the chance of an emergency happening and prevent or minimize their effects. Mitigation activities can and should be done before an emergency occurs, and they are also essential in the aftermath of every emergency.

Natural Disasters - Large-scale geological or meteorological events (e.g., hurricanes, wildfires, floods) that have the potential to cause loss of life or property.

Outbreak - Carries the same definition of epidemic but is often used for a more limited geographic area.

Pandemic - An epidemic that has spread over several countries or continents, usually affecting a large number of people.

Preparedness - Continuous dedication of time and resources, typically before an emergency strikes, for adequate planning, organizing, education, evaluation, and training, especially for events that cannot be mitigated.

Preparedness Exercises - Exercises, such as tabletop exercises and drills, that facilitate information sharing and collaboration among emergency management stakeholders and strengthen emergency plans by identifying gaps and areas for improvement and assigning responsibility to mitigate those gaps. A tabletop exercise is a discussion-based emergency preparedness exercise, conducted by partners involved in emergency management, that involves talking through the actions various stakeholders would

take during a specific emergency scenario. Drills involve the actual execution of emergency plans in response to a practice emergency scenario.

Psychological first aid - An evidence-informed approach that aims to reduce stress systems and assist in a healthy recovery following a traumatic event, natural disaster, public health emergency, or even a personal crisis.

Recovery - Beginning immediately after the threat to human life has subsided, this phase aims to restore normalcy and critical community functions to the affected areas.

Response - A reaction to the occurrence of an emergency. It occurs during and in the immediate aftermath of the event and includes actions taken to save lives and prevent further damage. Response is the coordination and management of resources (including personnel, equipment, and supplies) and putting preparedness plans into action.

Social Determinants of Health - Conditions in the environment where people are born, live, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks.

Steady State - When conditions are not being impacted by a disaster or emergency. Planning and mitigation activities take place during steady state.

Trauma - Results from an event, series of events, or set of circumstances that is experienced by an individual as physically or emotionally harmful or life threatening and that has lasting adverse effects on the individual's functioning and mental, physical, social, emotional, or spiritual well-being.

Trauma-Informed Approach - A program, organization, or system that is trauma-informed realizes the widespread impact of trauma and understands potential paths for recovery; recognizes the signs and symptoms of trauma in clients, families, staff, and others involved with the system; and responds by fully integrating knowledge about trauma into policies, procedures, and practices, and seeks to actively resist re-traumatization.

Underserved Communities - Populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life.

Women who are Lactating - Women who are producing breast milk. Postpartum and lactating groups are not mutually exclusive.

Women who are Postpartum - Women in the postpartum period, which begins immediately after birth and lasts up to 6 months postdelivery. Postpartum and lactating groups are not mutually exclusive.

Women who are Pregnant - Women who are experiencing pregnancy, the period in which a fetus develops inside a woman's womb or uterus, measured from the last menstrual period to delivery.

Young Children - Typically developing children ages 1-5 years (limited definition used for this toolkit).

Appendix G: References

HHS is not responsible for the availability or content of the resources provided, nor does HHS endorse, warrant, or guarantee the resources listed below. It is the responsibility of the user to determine the usefulness and applicability of the resources provided.

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