Emergency and All-Hazards Preparedness: AWHONN Practice Brief Number 22

An official practice brief from the Association of Women's Health, Obstetric and Neonatal Nurses.

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The information herein is designed to aid nurses in providing evidence-based care to women and newborns. These recommendations should not be construed as dictating an exclusive course of treatment or procedure. Variations in practice may be warranted based on the needs of the individual patient, resources, and limitations unique to the institution or type of practice.

Recommendations

- Engage nurses in all phases of hazard preparedness and response, including planning, education, direct care, and recovery efforts at local, state, and national levels.
- Ensure nurses are trained to meet the unique needs of pregnant, postpartum, and newborn populations during hazards, addressing physical, emotional, and nutritional care.
- Integrate maternal and newborn considerations into all hazard plans, encouraging nurses to advocate for their inclusion and to collaborate with emergency preparedness officials.

Background

Nurses serve a critical role in emergency preparedness at the local, state, and national levels through planning, community and consumer education, and direct care provided during disasters. "All-hazards preparedness" is a term that suggests the need to have a deliberate plan for responding to a variety of emergencies and disasters (natural, accidental, or deliberate). Multiple entities; including state and local governments, health care facilities, and businesses; have developed plans for potential crises. Emergency preparedness is a continuous process of identifying and assessing risks, determining and building necessary capabilities, coordinating plans with key parties, validating efforts through simulation, and regularly reviewing and updating plans to adapt to evolving threats and resources (Federal Emergency Management Agency [FEMA], 2020).

Despite the ongoing work of institutions to develop all-hazards plans, considerations for pregnant and postpartum patients and newborns are often not addressed or given minimal separate attention. The void in guidance related to obstetric and neonatal populations is a significant oversight considering that each year there are more than 3.5 million births in the United States (National Center for Health Statistics, 2025). Because of the high number of births, visits, and hospitalizations, disasters are likely to cause major disruptions to obstetric services. Pregnant, birthing, and postpartum patients, along with their newborns, represent a large and particularly vulnerable population requiring special consideration in disaster planning. Hospitals with obstetric and newborn units should establish comprehensive strategies for patient stabilization, safe transfer when necessary, surge capacity management, access to specialty support, and shelter-in-place procedures. These hospitals should also collaborate with regional facilities that do not provide obstetric and newborn care (American College of Obstetricians and Gynecologists, 2017).

Implications for Practice

All-hazards preparedness in obstetric settings requires a structured approach that prioritizes maternal and newborn safety while adapting to rapidly evolving situations. For example, in a hurricane, hospitals may initially shelter in place but later require lateral transfers within the facility or a full evacuation if conditions worsen. Unlike emergency plans based on disaster types, this practice brief focuses on response actions, ensuring flexibility and continuity of care for pregnant, laboring, postpartum, and neonatal patients. By organizing all-hazards preparation efforts and being adaptable and proactive in the response, health care facilities can ensure the safety of patients and staff in any disaster scenario.

1. *Shelter in place:* Hospital remains operational, but external conditions prevent safe evacuation.
    - A. Activation & leadership
        - I. Hospital incident command system (HICS) activated with an OB/newborn representative.
        - II. OB/newborn disaster team assigned, including
            - a. OB medical director
            - b. Charge nurses representing obstetric and newborn service lines

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c. Nursing supervisor
d. Neonatologist and/or pediatric provider
e. Anesthesiologist

B. Staffing & accommodations
I. Prearrange shelter accommodations for essential OB/newborn staff.
II. Plan for extended shift coverage (48–72 hours) with sleeping arrangements.
III. Maintain an emergency staffing backup list (on-call providers and transport teams).

C. Patient care & safety measures: high-risk patient prioritization
I. Medically unstable pregnant patients
II. Preterm labor less than 34 weeks
III. Patients requiring continuous fetal monitoring
IV. NICU infants on electric machines such as ventilatory support

D. All-hazards birth & surgery readiness
I. Emergency vaginal birth kits ("precip packs") stocked.
II. Operating room stays operational with emergency power backup.
III. Mobile fetal monitoring and neonatal resuscitation units available.
IV. Battery-operated Dopplers or fetoscopes ready for use.
V. Maternal emergency supplies such as adult self-inflating resuscitation bags available.

E. NICU all-hazards readiness
I. Adequate oxygen, total parenteral nutrition, and IV supplies maintained.
II. Neonatal transport Isolette and self-inflating bag/mask for newborn resuscitation ready for use.

F. Communication & command center
I. Maintain clear communication between OB/newborn, hospital command center, and local emergency agencies.

G. Electronic medical record (EMR)
I. Backup available in case of cyber failure or power outage.
II. Establish alternative documentation methods (paper charting files).

2. *Lateral transfer:* Internal relocation of patients if specific hospital areas become unsafe but complete evacuation is not required

A. Activation & coordination
I. Incident command determines the need for lateral transfer based on facility damage.
II. OB disaster team leads patient relocation within the hospital (e.g., moving labor & delivery to another unit).

B. Patient prioritization for transfer
I. Stable postpartum patients move first (accompanied by newborns).
II. Laboring patients moved cautiously:
a. Low-risk patients transferred to a designated labor area.
b. High-risk or active labor patients stay near operating room.
III. NICU infants
a. Relocate stable neonates first.
b. Keep neonates on electronic machines in areas with power backup.

C. Supplies & continuity of care
I. Transfer mobile fetal monitors and adult and neonatal resuscitation equipment with patients.
II. Designate an OB triage area for laboring patients.
III. Maintain access to emergency birth and surgical supplies.
IV. Ensure access to breast milk, donor milk, and formula.

3. *Full evacuation:* When hospital conditions deteriorate to a point at which patient safety cannot be ensured

A. Decision-making & activation
I. Hospital command center initiates evacuation with clear triage protocol.
II. OB/newborn leadership coordinates patient prioritization & transport logistics.
III. Collaborate with EMS, maternal transport, and neonatal transport teams for regional coordination.

B. Patient prioritization for transport
I. Priority 1: pregnant patients in active labor (ground transport only)
II. Priority 2: critically ill neonates requiring NICU transport (coordinate with neonatology teams)
III. Priority 3: postpartum patients and newborns (ensure mother–baby dyads stay together)

C. Transport considerations
I. OB/neonatal transport teams
a. Neonatal transport teams must have ventilatory support and self-inflating bag/mask.
b. Maternity teams must have precipitous birth packs for emergency births en route.
c. Consider infectious disease precautions, including the need for PPE.

D. Documentation & continuity of care
I. Transfer patient records (printed and/or electronic copies).
II. Assign OB/newborn liaison at the receiving hospital for smooth handoff.

E. Post-evacuation family support: Ensure displaced families are reunited with newborns at receiving hospitals.

4. Additional considerations

A. Specific hazard types
I. Cyberattack & EMR failure
a. Prepare backup EMR and paper charting files.
b. Use standardized paper documentation files for vital signs, medications, and fetal monitoring.

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II. Limited data access & resource availability (downtime)
  a. Download and print critical resources in advance.
  b. Create a backup system for essential resources.
III. Active shooter/violence in the facility
  a. Establish secure lockdown areas for laboring patients and newborns.
  b. Train staff on rapid concealment and lockdown procedures.
IV. Severe weather (region specific)
  a. Preplan extended staff accommodation and 72-hour shift coverage.
  b. Identify safe shelter-in-place and evacuation areas.
V. Power outage/utility failure
  a. Ensure backup generator functionality and fuel supply.
  b. Prioritize critical equipment (i.e., incubators, ventilators, fetal monitors) on emergency power.
VI. Fire & facility evacuation
  a. Establish evacuation routes and neonatal transport protocols.
  b. Maintain fire-resistant infant transport incubators.
VII. Mass casualty/patient surge
  a. Prepare triage and resource allocation protocols.
  b. Establish overflow capacity for labor & delivery and newborn.
VIII. Supply chain disruption
  a. Identify critical medications, formula, and oxygen needs.
  b. Secure alternate vendors and emergency supply agreements.
IX. Infectious disease outbreak/pandemic
  a. Develop protocols for isolation and visitation restrictions.
  b. Develop maternal–newborn separation protocols for high-risk infections (e.g., Ebola):
    i. Include guidance on rooming-in, safe breastfeeding, and milk expression.
    ii. Integrate video conferencing for times when in-person visitation is not possible.
  c. Establish designated isolation areas within OB triage, labor & delivery, postpartum, and newborn units.
  d. Train OB/newborn staff in proper donning/doffing procedures and use of enhanced PPE for high-risk pathogens (e.g., Ebola).

B. Essential planning for all hazards
I. Advance preparations
  a. Prepare emergency birth and surgery supplies:
    i. Precipitous birth packs (emergency vaginal birth kits)
    ii. Operating room on emergency power backup
    iii. Neonatal resuscitation supplies, equipment, and medications
    iv. Essential obstetric medications (e.g., oxytocin, methylergonovine, carboprost tromethamine, misoprostol, magnesium sulfate, calcium gluconate) for immediate use
    v. Emergency kits (e.g., postpartum hemorrhage, hypertensive disorders of pregnancy)
    vi. Mobile fetal monitors
    vii. Dopplers and/or fetoscopes
    viii. Portable oxygen tanks
    ix. Emergency cesarean birth kits
  b. Establish process for communication and documentation:
    i. Alternative communication with a command center
    ii. Downtime forms and processes
    iii. Emergency language services for limited English-proficient patients
II. OB/newborn-specific advocacy & representation
  a. Ensure OB/newborn presence on hospital disaster planning committees.
  b. Develop hospital policies outlining where obstetric and neonatal care fit into overall hazard response priorities.

5. Post-hazard recovery & debriefing
  A. Conduct a structured, nonjudgmental debriefing for staff.
  B. Provide mental health resources for staff, patients, and families experiencing trauma.
  C. FEMA & national guidelines should inform protocol updates post-event.
  D. Gather nurse and provider testimonials to refine future response strategies.

Education Strategies

Education is essential for strengthening all-hazards preparedness in perinatal and neonatal populations because these patients face unique vulnerabilities and require highly specialized care during crises. Targeted training ensures that health care providers are equipped to respond effectively in emergency situations. By incorporating obstetric-specific scenarios into all-hazards preparedness education, care teams build the skills, coordination, and confidence needed to safeguard the obstetric population.

1. Hazard-specific training & simulation
  A. Provide training scenarios to ensure staff competence.
  B. Conduct both scheduled and unscheduled hazard-specific simulations and hands-on simulations (hurricane, mass casualty, cyberattack, etc.).
  C. Ensure all interdisciplinary team members and departments (e.g., emergency department, operating room, NICU, ancillary departments) are present and involved in training and simulations.

2. Post-hazard feedback and improvement
   A. Provide structured debriefing strategies post-event to direct response plans.
   B. Create auditing protocols to establish action items for improvement (e.g., availability of supplies, equipment, medications, personnel).

Summary

The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) encourages nurses to participate actively in all phases of all-hazards preparedness and response within their institutions and communities. Within their facilities, nurses should engage in hazard assessments and planning prior to a disaster, respond during a crisis, and assist with mitigating hazards throughout the recovery phase. These actions are especially critical when planning for pregnant and postpartum patients and newborns, who have unique needs during emergencies and disasters. During and after a crisis event, nurses can facilitate rapid response and recovery to minimize the impact of the disaster and ensure the safety of these vulnerable patients.

AWHONN's Contextual Statement

AWHONN recognizes the existence of diverse gender identities and acknowledges that patients may not identify as women, exclusively or otherwise. AWHONN strives to use gender-inclusive language where possible. In some instances, words like "women" (and related pronouns "she" and "her") have been retained for accuracy (e.g., to preserve the terminology of a published study) and specific case scenarios. To provide appropriate, respectful, and sensitive care, the health care provider is encouraged to always ask individuals what words they use to describe themselves, their bodies, and their healthcare practices.

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Resources

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