

Location, Location, Location! Labor and Delivery

Jeanne S. Sheffield, MD
Director of the Division of Maternal-Fetal Medicine
Professor of Gynecology and Obstetrics
The Johns Hopkins Hospital

Disclosures

- ▶ Nothing to disclose

Learning Objectives

- ▶ Recognize the vital role that each team member plays in response to a public health emergency
- ▶ Identify unique challenges to infection control
- ▶ Formulate effective strategies to protect healthcare providers and staff

“By failing to prepare, you are preparing to fail.”

- Benjamin Franklin

The Caveats of Labor and Delivery

- ▶ At least 2 patients
- ▶ Several components
 - ▶ Triage
 - ▶ Labor and delivery room
 - ▶ Operating room
 - ▶ Postpartum care
 - ▶ Nursery care : NBN, NICU



The Caveats of Labor and Delivery (cont.)

- ▶ **Blood and body fluid exposure**
 - ▶ Mean blood loss of a vaginal delivery is 500 cc and of a Cesarean delivery is 1,000 cc
 - ▶ Amniotic fluid
- ▶ **Multiple people exposed throughout the process**



The Labor and Delivery Team

- ▶ Triage RNs
- ▶ Nurse practitioners and midwives
- ▶ Labor and delivery RNs
- ▶ Medical staff
- ▶ Obstetricians, residents, fellows, and medical students
- ▶ Lab personnel
- ▶ Pediatricians and the NICU team
- ▶ Environmental services
- ▶ Surgical team
- ▶ Postpartum ward
 - ▶ RNs
 - ▶ Lactation consultants
 - ▶ Social work
 - ▶ Pediatric services

The Caveats of the Obstetric Patient

- ▶ Pregnant women have increased morbidity and mortality with certain infectious agents
- ▶ Anatomic and physiologic changes in pregnancy
 - ▶ Impacts absorption, distribution, metabolism, and excretion of certain medications
 - ▶ Trauma and increasing resource needs
- ▶ Physical and emotional stress worsens obstetric outcomes

Recent Legislation Regarding Emergency Preparedness and Pregnancy

- ▶ **Pandemic and All-Hazards Preparedness Reauthorization Act of 2013**
 - ▶ Pregnant women are classified as a population with special clinical needs
- ▶ **Special Medical Needs: Definitions and Related Terms**
 - ▶ DHHS document



Hospital Disaster Preparedness for Obstetricians and Facilities Providing Maternity Care

- ▶ Standing Emergency Preparedness Team at the state and local level with an obstetrician/gynecologist, a pediatrician, and maternity nursing leadership on the team
 - ▶ Dallas Ebola response
 - ▶ Zika preparedness



ACOG Committee Opinion 555:2013.

Hospital Disaster Preparedness for Obstetricians and Facilities Providing Maternity Care

- ▶ Regionalization of maternity care
 - ▶ Levels of care
 - ▶ Stabilization and transfer to a central facility if possible
 - ▶ Surge capacity protocols
 - ▶ Obstetric and neonatal needs
 - ▶ Resource allocation for mother and neonate
 - Increase in preterm neonates



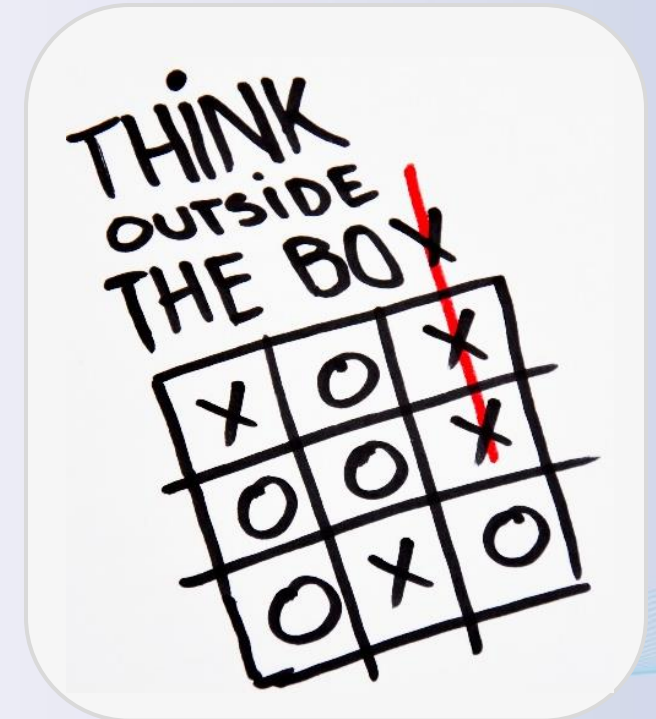
ACOG Committee Opinion 555:2013.

Labor and Delivery Considerations

- ▶ **Family involvement**
 - ▶ Visitation restrictions
- ▶ **Lactation and early parental bonding**
- ▶ **Critical care team relationship**
 - ▶ ICU care and the pregnant woman
- ▶ **Dealing with the organized chaos of labor and delivery**
- ▶ **Extra space and providers**

Thinking Outside the Box

- ▶ Changes in “Standard of Care”
 - ▶ Early discharge
 - ▶ Portable triage and labor and delivery units
 - ▶ Telemedicine
 - ▶ Telephone triage
 - ▶ Home birth kits
- ▶ The use of simulation
 - ▶ Johns Hopkins Biocontainment Unit
- ▶ Social media



Ethical Considerations

- ▶ Allocation of resources when demand exceeds supply
 - ▶ Where in the allocation list should a pregnant woman be?
 - ▶ Does “pregnancy” move her up?
- ▶ The practical versus the subjective
 - ▶ “Save my baby at all costs”
 - ▶ Mom versus baby

Protection of Healthcare Providers

Morbidity and Mortality Weekly Report (*MMWR*)

[CDC](#) > [MMWR](#)

Preventing Transmission of Zika Virus in Labor and Delivery Settings Through Implementation of Standard Precautions – United States, 2016

Guidance for Screening and Caring for Pregnant Women with Ebola Virus Disease for Healthcare Providers in U.S. Hospitals



**Pandemic Influenza Preparedness
and Response Guidance for
Healthcare Workers and Healthcare Employers**

National Emergency Preparedness Guidance

- ▶ **Reproductive Health Emergency Preparedness Training Course** www.cdc.gov
 - ▶ An online course for federal, state, and local public health and other health professionals that highlights preparedness and response resources and tools specific to the field of reproductive health in emergencies

Birth and emergency preparedness in antenatal care

INTEGRATED MANAGEMENT OF PREGNANCY AND CHILDBIRTH (IMPAC)

Standards
for Maternal and
Neonatal Care

World Health Organization

Clinical Expert Series



Emergency Preparedness in Obstetrics

Sina Haeri, MD, MHS, and David Marozzi, MD, MHS CL

Obstetrics and Gynecology

Conclusions

- ▶ There are many components (both physical plant and personnel) that need to be involved in planning and carrying out an emergency response on Labor and Delivery
- ▶ The rights of the patient, her unborn child/neonate, and her family need to be weighed against the required response
- ▶ Education and preparedness are vital for a safe and effective response

Additional Resources

- ▶ US Healthcare Workers and Settings. Centers for Disease Control and Prevention.
www.cdc.gov/vhf/ebola/healthcare-us/index.html