



# Perinatal Emergency Preparedness for Rural EMS and Community Hospitals

November 2025



1

---

---

---

---

---

---

---

---

## Objectives



- Defining Regionalization in WNY
- Mapping our Reach amid Changing Landscapes of WNY
- Assess the readiness of rural EDs and EMS teams to respond to perinatal emergencies
- Bridging the gaps of Perinatal Education to first responders and ED teams: providing checklists, emergency delivery kits, and in-situ simulation based training
- Enhancing Interdisciplinary Communication by identifying roles and responsibilities in managing emergencies
- Increase awareness of escalation and transport protocols using the Maternal and Neonatal Hotlines
- Expand access to foundational training: STABLE, NRP, FHM and skills applications with team-based practice

2

---

---

---

---

---

---


---

---

## The RPC of WNY in Buffalo, NY

John R. Oishei Children's Hospital (OCH) is a safety net, anchor institute for MATERNAL and PEDIATRIC health care in the region and is the only standalone children's hospital in New York State. Located next door to Gates Vascular Institute and Buffalo General Hospital.

The RPC is inclusive of all the routine and specialty care services provided at Oishei Children's Hospital, and the specialty services available at Buffalo General Medical Center and Gates Vascular Institute. This partnership allows for the best possible care for birthing people across Western New York.



3

---

---

---

---

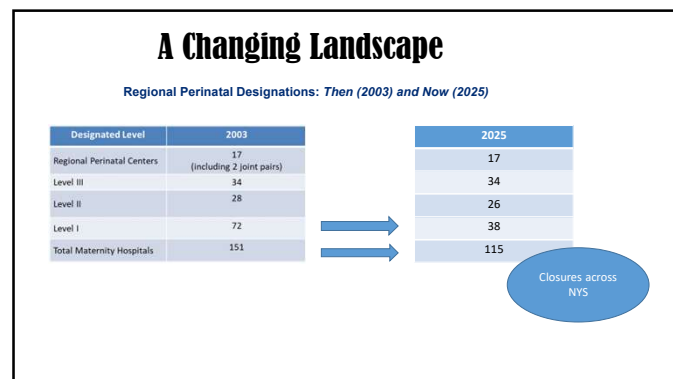
---

---

---

---





7

---

---

---

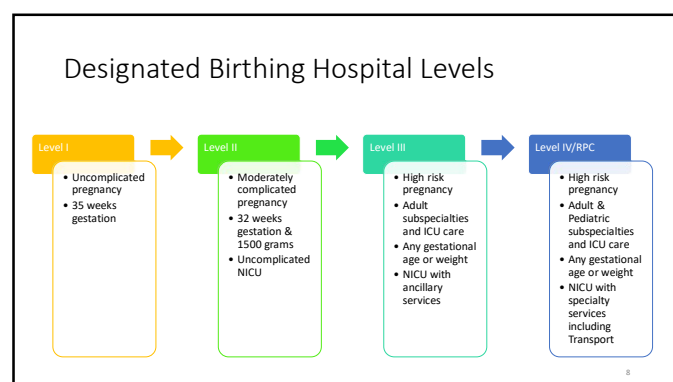
---

---

---

---

---



8

---

---

---

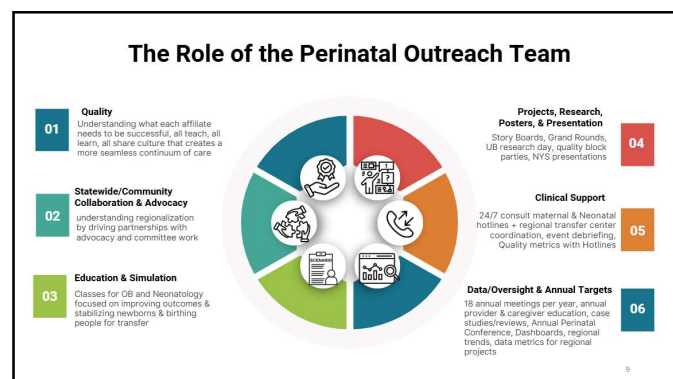
---

---

---

---

---



9

---

---

---

---

---

---

---

---

## Regional Barriers for Perinatal Education & Outreach

### Changing landscape of our region regarding obstetric care and access

- Closure of birthing units
- Declining population
- Regionalization

### Rural/Cultural differences

- Amish
- Native American
- Migrant workers

### Value of combining obstetrical and neonatal education

- Mother baby dyad
- One affects the other

## Common Challenges in Rural Perinatal Care

- Limited OB/neonatal-trained staff on shift
- Lack of appropriate equipment and resources
- Variability in NRP competency maintenance
- Weather/transport delays
- Infrequent exposure → decreased confidence
- Most Neonatal emergencies are *unexpected* and occur in non-NICU environments
- Rural hospitals may stabilize but not sustain critical infants—importance of **early recognition, timely hotline activation, and proper stabilization**

10

## OB + Neonatal: Two Halves of the same Emergency



11

## The Mother-Baby Dyad is the Foundation of EVERY Perinatal Response



12

## Curriculum Backed by Evidence-Based Practice

### AIM communities of learning

- Iowa mobile sim unit
- ER triage
- Safe patient transport
- Community Birth Transfer Resource Kit (August 2024)
- Obstetric Emergency Readiness Resource Kit (May 2023)

### ACOG/ACEP

### CMQCC

### AWHONN

### NRP

### AAP

### High Fidelity (HF) vs Low Fidelity (LF)

- HF expensive
- HF may lead to "overinflated self-confidence"
- LF- more readily available
- LF- more mobile

13

---

---

---

---

---

---

---

---

---

---

## Objectives of the Outreach Education

- Aims to provide more healthcare professionals with essential, standardized training in **newborn and maternal care**, emphasizing practical skills and effective collaboration to improve patient outcomes
- Recognize signs and symptoms of an impending delivery
- Recognize if the birthing person is safe to transfer-should patient deliver where they are vs. possibility of delivering en route; to hospital, hallway, elevator etc
- List supplies, equipment, and personnel needed
- Understands and performs the basic maneuvers for a vaginal delivery
- Performs initial stabilization of the newborn
- Emphasize early, structured action during newborn resuscitation
- Performs basic postpartum assessment
- Recognizes signs and symptoms of postpartum complications
- Recognizes emergencies related to pregnancy

14

---

---

---

---

---

---

---

---

---

---

## The Power of the Mother-Baby Dyad Approach

### ➤ Shared Emergencies, Shared Outcomes

- Maternal and neonatal crises are *interconnected*—what affects one, affects the other
- Early recognition and management by a unified team improves both maternal and neonatal survival

### ➤ Continuity of Care Across Disciplines

- Promotes a seamless handoff from delivery room to stabilization & potential transport
- Builds mutual understanding between OB, ED, and EMS roles

### ➤ Efficient Use of Resources

- Joint outreach reduces duplication of training, travel, and time
- Supports smaller rural hospitals by combining education days for both maternal and newborn care

15

---

---

---

---

---

---

---

---

---

---

### Our Educational Strategy: From Knowledge to Practice

- Pre and Post evaluation
- Didactic Portion
- Low fidelity
- Equipment available at site
  - Is a warmer available
  - What size masks and ambu bags are available
  - ET tubes/ LMA size 1
  - Medications
  - Blood products
  - Team members
  - Space/room
- First responders vs. Emergency Departments
- Hands On
- Handouts
- Reference Binder

"The  
instructors  
were great!"

"Knowledge of  
instructors real  
world  
experience was  
the best part of  
training"

"Greatly appreciated all the  
clinical information related  
to EMS scenarios and  
especially valued the ability  
to practice hands on skills  
with the mannequins"

16

---

---

---

---

---


---

---

---

### OB Readiness

- Normal physiologic adaptations during pregnancy
- Brief maternal-fetal circulation
- Signs and symptoms of labor; stages
- Obstetric Emergencies
  - Signs and symptoms
  - Management
- Imminent birth
- Post partum
  - Assessment
- Different roles and capabilities
  - Basic EMS
  - Advanced EMT
  - Paramedic
  - Nurse
  - Provider



17

---

---

---

---

---


---

---

---

### Building Confidence in Neonatal Emergency Care

- Thermoregulation
  - Skin to skin
  - "Baby in a bag"
- Initial steps of stabilization
  - Full term
  - Preterm
- Resuscitation
  - "Helping babies breathe"
  - NRP
- Different roles and capabilities
  - Basic EMS
  - Advanced EMT
  - Paramedic
  - Nurse
  - Provider
- The "Golden Minute" determines outcomes
  - Initial steps: **warm, dry, stimulate, clear airway if needed, assess HR**
  - Effective ventilation = **Priority**
  - Ventilation is a **key life-saving step**



18

---

---

---

---

---

---

---

---



19

---

---

---

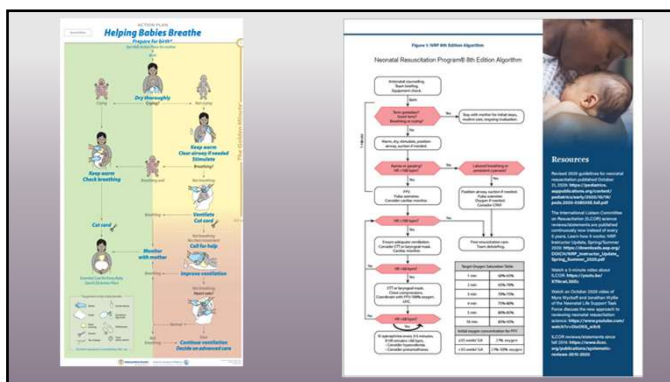
---

---

---

---

---



20

---

---

---

---

---

---

---

---



21

---

---

---

---

---

---

---

---


## WE NEED HELP!!!

**Maternal perinatal hotline 716-323-2303\***

- MFM available on call 24/7 for consultation
- OBGYN present on unit at Oishei Children's Hospital for consult and transport 24/7

**Neonatal transport line 716-323-2660\***

- Fellow/Neonatologist available 24/7 for consult
- Appropriate mode of transport for neonates
- Only one neonatal transport team at Oishei Children's



\* Please note that the hotline numbers listed only serve the RPC of Buffalo and the 8 counties of Western New York. \*

22

---

---

---

---


---

---

---

---

In perinatal emergencies,  
saving one often depends on the readiness of both



23

---

---

---

---

---

---

---

---



Thank  
you!

Questions?

Thank you for  
joining us today!

RegionalperinatalcenterforWNY@kaleidahealth.org



24

---

---

---

---

---

---

---

---

## References

1. Massoth C, Röder H, Ohlenburg H, et al. High-fidelity is not superior to low-fidelity simulation but leads to overconfidence in medical students. BMC Med Educ. 2019;19(1):29. Published 2019 Jan 21. doi:10.1186/s12909-019-1464-7
2. Quinlan, J., Henkle, J., & Thenuwara, K. (2023). Simulations for OB readiness in non-OB settings [PowerPoint slides]. Slides 22-35. Retrieved September 13, 2024, from [https://safetypregnancy.org/wp-content/uploads/OBPRE\\_CQI\\_Session-2\\_Final-VERSION.pdf](https://safetypregnancy.org/wp-content/uploads/OBPRE_CQI_Session-2_Final-VERSION.pdf)
3. Cash, R. E., Swor, R. A., Samuels-Kalow, M., Eisenbrey, D., Kaimal, A. J., & Camargo, C. A., Jr (2021). Frequency and severity of prehospital obstetric events encountered by emergency medical services in the United States. BMC pregnancy and childbirth, 21(1), 655. <https://doi.org/10.1186/s12884-021-04129-1>

25

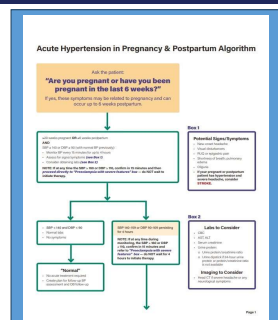
25

## Links for additional resources:

- [AIM PSB Learning Modules | AIM](#)
- [Simulation and Drills for Patient Safety | AIM](#)
- [Hypertension Prevention and Control Improvement Toolkit | Reproductive Health National Training Center](#)
- [Recognizing Urgent Maternal Warning Signs in the Postpartum Period Webinar | Reproductive Health National Training Center](#)
- [Resource Hub — Maternal Mental Health Leadership Alliance: MMHLA](#)
- [SMFM Learning: Critical Care In Obstetrics Online Course 2025](#)
- [PBAOB Toolkit - Women's Health - Services – FHN](#)
- [Signs and Symptoms of Urgent Maternal Warnings Signs | HEAR HER Campaign | CDC](#)
- [Toolkit for Improving Perinatal Safety | Agency for Healthcare Research and Quality](#)
- [Perinatal Regionalization](#)
- [ACOG Online Learning](#)
- [Safe Motherhood Initiative | ACOG](#) Find the free app!!

26

## ACOG/ ACEP Algorithm: Acute Hypertension in Pregnancy & Postpartum



27

27






## MMRB and MMMAC Reports


[New York State Maternal Mortality Review Report, 2018-2020 \(ny.gov\)](#)



[Maternal Mortality and Morbidity Advisory Council Report, 2023 \(ny.gov\)](#)





31

---

---

---

---

---

---
















---

---

---

---


### URGENT MATERNAL WARNING SIGNS

 Headache that won't go away or gets worse over time	 Dizziness or fainting	 Thoughts about hurting yourself or your baby
 Changes in your vision	 Fever	 Trouble breathing
 Chest pain or fast beating heart	 Severe belly pain that doesn't go away	 Severe nausea and throwing up (not like morning sickness)
 Baby's movements stopping or slowing	 Vaginal bleeding or fluid leaking during pregnancy	 Vaginal bleeding or fluid leaking after pregnancy
 Swelling, redness, or pain of your leg	 Extreme swelling of your hands or face	 Overwhelming tiredness

**If you have any of these symptoms during or after pregnancy, contact your health care provider and get help right away. If you can't reach your provider, go to the emergency room. Remember to say that you're pregnant or have been pregnant within the last year. Learn more: <https://nystatebirth.org/maternal-warning-signs/>**

© 2023 New York State Department of Health. All rights reserved. This document is for informational purposes only and does not constitute medical advice. Please consult your healthcare provider for more information.

10 September 2023



32

---

---

---

---

---

---

---

---

---

---



Tell us if you  
**ARE PREGNANT or  
HAVE BEEN PREGNANT**  
within the past 6 weeks




**Come to the front of the line if you have:**

<ul style="list-style-type: none"> <li>▶ Persistent headache</li> <li>▶ Visual change (floaters, spots)</li> <li>▶ History of preeclampsia</li> <li>▶ Shortness of breath</li> <li>▶ History of high blood pressure</li> <li>▶ Chest pain</li> </ul>	<ul style="list-style-type: none"> <li>▶ Heavy bleeding</li> <li>▶ Weakness</li> <li>▶ Severe abdominal pain</li> <li>▶ Confusion</li> <li>▶ Seizures</li> <li>▶ Fevers or chills</li> <li>▶ Swelling in hands or face</li> </ul>
--	---

33

---

---

---

---

---

---

---

---

---

---