

OBLS[®] ARIZONA

Maternal Medical Emergencies
Study & Training Initiative

Statewide Implementation: 2024

National Institute of Health (NIH)
Grant Administered by:

University of Connecticut Health
(UCONN)

Arizona Collaboration Facilitated by:

Arizona Perinatal Trust (API)
and
Arizona Emergency Medical Systems
(AEMS)



<https://aems.org/obls>

Working in Collaboration with Our Arizona EMS Regional Partners and Other Organizations



Northern Arizona Emergency Medical Services (NAEMS)

Southern Arizona Emergency Medical Services Council (SAEMS)

Western Arizona Council of Emergency Medical Services (WACEMS)

Arizona Center for Rural Health (AzCRH)

What is OBLS®?



Obstetric Life Support (OBLS)® is an interdisciplinary simulation course that trains healthcare providers in prehospital and hospital-based settings in the prevention, etiologies, and skills needed when treating maternal medical emergencies and maternal cardiac arrest.

This course was developed and studied through an Agency of Healthcare Research and Quality grant and is the only course with level A evidence demonstrating course participant improvement in knowledge, skills, and procedural and communication confidence.

<https://www.obls.org/>

OBLIS[®] Learnings 2021-2023: Setting the Stage for OBLIS[®] Arizona 2024



Original Research

Validation of a Simulation-Based Resuscitation Curriculum for Maternal Cardiac Arrest

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<https://pubmed.ncbi.nlm.nih.gov/37708515/>



Testing of Curriculum:

- Interdisciplinary simulation training in pre-arrest, arrest and post-arrest care for a maternal medical emergency/maternal cardiac arrest through the OBLS® course is effective to improve:
 - 1. Knowledge**
 - 2. Performance as team leader**
 - 3. Self-confidence skills**
- Improvement occurred irrespective of professional level of training

Background



Most Maternal Deaths are Preventable

- The United States (U.S.) has the highest maternal mortality rate among developed countries¹ → 23.8 deaths per 100,000 live births in 2020 demonstrating an increase from 20.1 deaths in 2019²
- Approximately **1200 women die** each year from pregnancy-related complications, and disproportionately impacts persons of color³
- 80% of maternal deaths are preventable
- Despite published guidelines, there is no accessible standardized training available for training on maternal medical emergencies and maternal cardiac arrest (MCA)

Background



Health Inequities Threaten Maternal Health

- Maternal deaths disproportionately impacts persons of color³
- Over a third of all counties in the United States, most of which are in rural areas, lack maternity care resources including obstetric hospitals, birth centers, and obstetric providers.¹³
- Lack of obstetric care contributes to higher maternal mortality and SMM rates among rural, compared with urban, residents.¹⁴

Why Arizona?



- The **Arizona Perinatal Trust (API)** is the CDC recognized perinatal quality collaborative (PQC) for Arizona organized to lead, facilitate and partner with organizations to improve maternal and neonatal health outcomes
- 2022 March of Dimes report → 36% of counties nationwide constitute "maternity care deserts"
- Rural women have a 39% higher maternal mortality ratio compared with women living in large metropolitan counties (23.8 vs. 14.6 per 100,000 live births)⁽⁷⁾, and black women experience three times more deaths than White women (59.3 versus 19.7 deaths per 100,000 live births).
- Six of 15 counties in Arizona have limited access to (Level III or IV Perinatal Centers) or no maternal care
- 50% of counties in Arizona have a high Maternal Vulnerability Index, the first county-level, national-scale tool to identify where and why moms in the US are vulnerable to poor pregnancy outcomes and pregnancy-related deaths.

OBLIS[®] Development History



- 2021: UCONN Health researchers received \$1.9 Million from the National Institute of Health (NIH) to develop **Obstetric Life Support (OBLIS[®])**, a comprehensive simulation-based resuscitation program for both prehospital/EMS and hospital-based healthcare providers
- 35+ interdisciplinary national experts representing 20 organizations contributed

Study Aims: Train-the-Trainer Approach



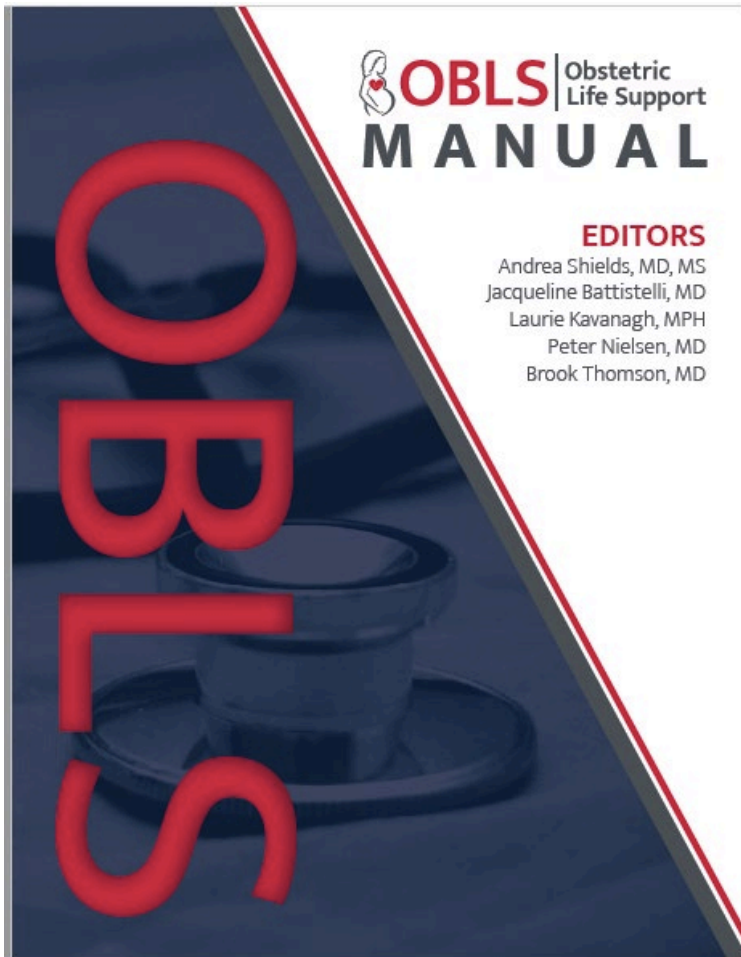
- (1) Identify and train Health Care providers from hospital and prehospital contexts in Arizona to be OBLS[®] instructors, **prioritizing rural and other marginalized communities with increased risk of adverse maternal health outcomes**
- (2) Implement OBLS[®] in hospital and prehospital contexts across the state, with the training being led by local instructors; and
- (3) Evaluate OBLS[®] implementation and process outcomes

OBLS[®]Arizona Objective



- To evaluate a train-the-trainer approach for implementing OBLS[®] in a diversity of hospital, freestanding birthing centers, and prehospital contexts throughout Arizona
- Consolidated Framework for Implementation Research (CFIR) and Intervention Mapping will guide the implementation planning and adaptation process.
- Research Design: Mixed Methods (Quantitative/Qualitative)

OBLIS[®] Arizona Deliverables



- Comprehensive manual and online course
 - Several algorithms/checklists/tools
- **Two training curricula: Prehospital/EMS AND Hospital**
 - Customized simulator
 - Training and Evaluation megacode scenarios with drivers
 - Validated cognitive assessment with defensible cut score
 - Validated megacode checklist for evaluation of team leader
- Train-the-Trainer course for future in hospital and prehospital instructors

OBLIS[®] Arizona Curriculum Components



Course Curriculum:

1. Online self-paced learning to occur before sim training (approx. 4 hours)
2. Instructor-led simulation-based mastery learning in interdisciplinary teams on custom designed low-cost simulator (approx. 6 hours)
3. Complete an on-line survey at 6- and 12-months after the course

2024 trainings to be provided in four regional hubs across Arizona

- Phoenix Metro
- Tucson
- Flagstaff
- Yuma

Note: Certification based on passing score on megacode evaluation as team leader and cognitive assessment

OBLS[®] Arizona Learning Objectives



- Understand common causes of maternal medical emergencies and maternal cardiac arrest.
- Recognize and treat the early signs of maternal deterioration.
- Review unique modifications to basic and advanced life support in maternal cardiac arrest.
- Understand post-stabilization management in maternal medical emergencies and maternal cardiac arrest.

How Your Participation May Impact Maternal Outcomes: Arizona and Beyond



- Contributes to the **national scale-up** of this important health care innovation to **improve patient safety and reduce inequities** in maternal mortality and severe maternal morbidity at the Arizona regional level
- Provides and refines an **optimal solution to simulation-based team drills** that are increasingly vital to elevate team performance
- Determine the most effective way to **disseminate best practices** to reduce pregnancy and postpartum maternal morbidity and mortality

Invitation to Arizona Healthcare Providers



Volunteers will be identified from **Prehospital/EMS** to take the OBLIS[®] course at one of four designated regional hubs throughout Arizona.

Additionally, participants who pass the course, may be selected to become OBLIS[®] instructors with the opportunity to assist with course implementation at their own sites or in their communities

2024 Training Dates To Be Announced

- OBLIS[®] Course Fee: **WAIVED (\$300)**
- **Free OBLIS[®] manual**
- **Some travel expenses may be reimbursed**
- **Continuing education credits provided - CEU, CME, CNE**



Prehospital/EMS Participant Eligibility



Arizona Prehospital and Emergency Medical Services (EMS) providers who may respond to maternal medical emergencies, especially those from underserved areas with at-risk populations and limited or insufficient maternity care, often referred to as maternity deserts.

Prehospital/EMS providers including but not limited to:

- EMCTs (All Levels)
- Prehospital / EMS Coordinators
- EMS Educators
- First Responders (law enforcement)

NOTE: BLS recommended but need not be current

Prehospital/EMS Interest Form



Please take a moment to complete our Interest Form. This form is **NOT** a training application. The Interest Form serves as an initial step to identify Prehospital/EMS providers who are interested in receiving OBLIS® training, with priority given to those who may wish to become instructors.

It also helps us assess and select the most appropriate individuals from across the state, with a focus on inclusivity for those serving areas with the greatest need.

Additionally, this form will allow us to create an OBLIS database that will keep individuals updated about future trainings, education, and other valuable resources.

Prehospital/EMS Interest Form:

<https://aems1975.wufoo.com/forms/z1g5phfy1d2snaf/>

Thank You!



Thank you for your interest in our Obstetric Life Support[®] (OBS) training initiative and the possibility of becoming an instructor for this vital grant study.

Your commitment to improving maternal care outcomes in underserved areas and at-risk populations throughout Arizona is truly commendable.

For More Information



<https://aems.org/obls>

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- www.obls.org
- Emerging updates
- OBLS[®] manual

