

PRINT-High-Tech 'Victoria' prepares OSF for birth emergencies

Health care providers with OSF HealthCare are training for rare but high-risk childbirth emergencies inside a mobile [OSF OnCall pregnancy and postpartum van](#), using a new high-tech birthing simulator designed to replicate real-life labor and delivery situations.

Advanced practice providers (APPs) staff the mobile OB unit which serves a dozen communities in Illinois considered maternity care deserts, meaning the county has no hospitals providing obstetric care, no birth centers, no OB/GYN and no certified nurse midwives. Recently completed hands-on simulation training is helping prepare the OB/GYN APPs for unexpected deliveries and complications that could occur while caring for patients on the road. Although delivering a baby inside the van is unlikely, leaders say readiness is critical.

Amy Mefford, an advanced practice registered nurse with OSF OnCall, says the training focuses on managing both routine and emergency situations.

"What can happen, how do we manage this and be able to comprehend and evaluate and take care of this situation in real life. And sims training (with Victoria) has just been amazing for us," Mefford shares.

Focusing on hemorrhage

One of the most important scenarios providers practice is postpartum hemorrhage – a leading cause of maternal complications.

"I think doing the hemorrhage sims repetitively on a regular basis is extremely helpful for our team. It's not something we hope we see on this van, but when we do, we want to feel confident, know the steps on managing hemorrhage," Mefford stresses. "We have what we need on the van to manage those scenarios and to get the EMS team to us as soon as possible."

The training relies on a lifelike manikin named Victoria, a high-fidelity instrument of sorts who simulates a full range of obstetrical events to facilitate teamwork and deepen critical thinking skills. Jake Wilson, who oversees simulation training at [Jump Trading Simulation & Education Center](#) at OSF HealthCare in Peoria, says Victoria can simulate a variety of birthing emergencies.

"We can do normal vaginal deliveries. We can do C-sections. She has an ultrasound belly. She has a maternal hemorrhage feature. She even has a belly that can simulate a baby being the wrong direction and they can manipulate the baby to turn it around. She has a ton of features that have been a big help to us," Wilson shares.

Lifelike simulation of birthing experience

Victoria talks, blinks, breathes and responds to questions. The enhanced manikin from previous models used at OSF includes new interactive eyes with automatic visual object tracking and lifelike movements. She also has a fully programmable airway to control breathing and circulation physiological parameters so she can become flushed or sweat.

During the recent simulation, from a tablet, Wilson changes conditions in real time and allows teams to practice decision-making under pressure. Wilson says the technology represents a major advancement. The manikin is fully wireless and mobile, allowing training to take place not only in simulation labs, but also inside mobile units such as the OSF OnCall pregnancy and postpartum van. It is part of regular, required training according to Wilson.

“We have regular Family Birthing Center simulations for the nurses and doctors across the street here at OSF Saint Francis who come through and practice maternal hemorrhage simulations. They do maternal hypertension simulations, and that is an annual simulation that they are required to do.”

Because Victoria is mobile, she can also be transported to other hospitals within the OSF Ministry to be used for on-site training. Practicing common emergencies such as hemorrhage, breech or C-section in a realistic environment, Wilson says, helps teams react more quickly and effectively when seconds matter.

OSF leaders say Victoria’s realistic features and functions, combined with ongoing education and collaboration, help strengthen maternal care and should improve outcomes across the region. The simulations with Victoria are part of a comprehensive OSF strategy to improve maternal-fetal health and birthing outcomes.

Here are other stories featuring additional approaches:

[OSF HealthCare offers another layer of monitoring for moms and babies](#)

[OSF OnCall to offer enhanced obstetric care in the I-80 region](#)

[24-7 connection through OSF OnCall empowers patients and improves outcomes](#)

[Virtual breastfeeding support available through OSF OnCall](#)