

Expand Your Simulation Programs with *Fire in the OR* Virtual Reality

Surgical fires are still a patient safety issue and each year a small number of cases result in serious injuries or death. While the rate of operating room fires has decreased over the past 10 years, operating room fires still remain a constant danger.

The use of Virtual Reality (VR) provides a new and unique ability to provide high quality simulation-based training that is a challenge to administer in traditional simulation at scale. By adding VR based simulation, hospital administrators have the ability to broadly deploy simulation for OR fires that is cost effective and possible at large scale.

The Health Scholars *Fire in the OR*TM Virtual Reality Simulation is based on AORN guidelines and provides .5 continuing education hours. To learn more contact: PeriopSolutions@aorn.org or go to: www.healthscholars.com.

Using VR to simulate operating room fire responses is a novel and highly-effective use of VR to extend high quality, scalable simulation to low occurrence, high risk situations.

- **Supplement** – VR provides a rich simulation supplement to traditional learning.
- **Proven Results** – Learners who used **VR fire simulation training performed 250% better** than those who only had traditional didactic teaching methods¹
- **Scale** –VR enables simulation training at a scale not economically possible in the past
- **Mitigate risk** – national guidelines call for training and drills that VR enables at a lower cost and higher frequency

¹ Sankaranarayanan, G., et al. Immersive virtual reality-based training improves response in a simulated operating room fire scenario. *Surgical Endoscopy*. Springer Nature 2018.

AT-A-GLANCE:

Fire in the OR is a room-scale virtual reality (VR) simulation app using the HTC Vive designed to simulate key scenarios related to surgical fires.

Fire in the OR is designed to provide a simulation of real-world events and to allow users to:

- Identify fire risks
- Safely practice key skills
- Understand the causes of operating room fires

Fire in the OR consists of three course modules for about 20 minutes of contact time:

1. **Tutorial:** users learn how to use VR and navigate the simulation
2. **Fire Triad:** users identify items in the OR related to the three parts of the fire triad
3. **Fire on a Patient:** users manage a fire on a patient and are debriefed on root cause

“Interactive VR-based hands-on training was found to be a relatively inexpensive and effective mode for teaching OR fire prevention and management scenarios.”¹

- Sankaranarayanan, G., et al., *Surgical Endoscopy*, 2018.

“We believe that perfect practice makes perfect performance... VR is the future and the transformation of our on-the-ground training.”

– Janice Schmidt, RN-BC, MSNed, NPDS, PeriAnesthesia Clinical Practice Educator, St Charles Health System

Fire in the OR Product Overview

TUTORIAL

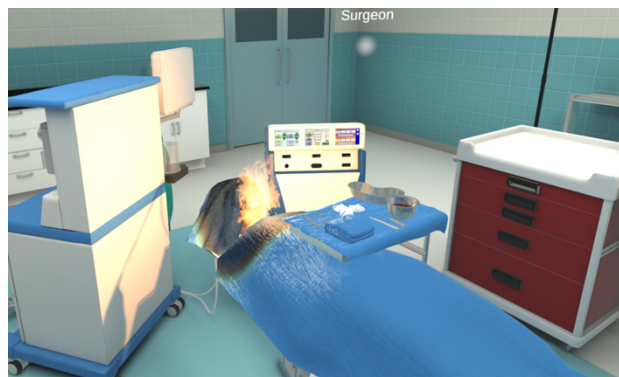
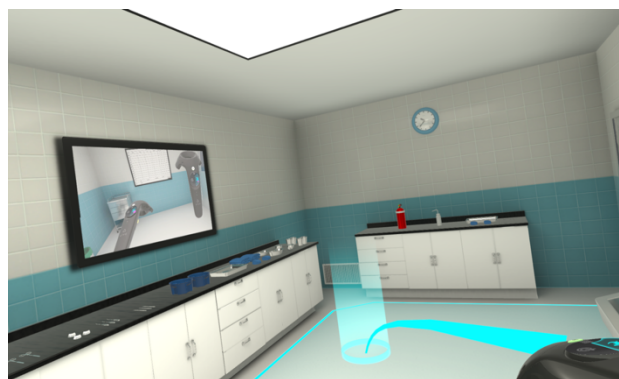
Most learners will be new to VR. Health Scholars invested significant time in building *Fire in the OR* for non-gamer professionals. The tutorial teaches learners to interact in VR and provides opportunity to practice skills required to interact with the environment.

FIRE TRIAD

The fire triad is a core concept in understanding and preventing operating room fires. Learners explore the room and identify the elements of the fire triad. A detailed, interactive debriefing is provided to reinforce the concept.

FIRE ON A PATIENT

Learners will practice the skill needed to manage and extinguish a fire on a patient. After a structured, interactive debriefing, learners will explore the root cause of the fire to understand how this fire could have been prevented.



Contact us at PeriopSolutions@aorn.org to request information.