

Malignant Hyperthermia Virtual Reality Simulation

Though rare, the death of a patient due to malignant hyperthermia is tragic for both family and operating room staff. Malignant hyperthermia causes complications in 1 in 100,000 surgical procedures in adults and 1 in 30,000 surgical procedures in children. (MHAUS, 2021) Though uncommon, when considering the 234 million major surgical procedures that occur worldwide per year, being prepared for malignant hyperthermia is crucial to any perioperative team member. (Thomas G Weiser, 2008)

It is crucial that every person in an operating room is confident and capable of identifying early signs of malignant hyperthermia. Stimulating and immersive simulation training increases retention and reduces skill decay. Utilizing Health Scholars AI-enabled voice technology, learners practice team communication skills, while handling the identification, management and treatment protocol for malignant hyperthermia; all in an ultra-realistic hospital environment.

Health Scholars perioperative experiences do not stop at Malignant Hyperthermia VR. Our Fire in the Operating Room™ application ensures your perioperative team is ready to recognize fire risks and put out an operating room fire. Together, Malignant Hyperthermia VR and Fire in the Operating Room™ are the perfect solution for your perioperative team's annual training requirements.

Developed in partnership with MHAUS



AT-A-GLANCE:

Perioperative providers need to have the competencies to identify and manage a patient experiencing malignant hyperthermia (MH).

Malignant Hyperthermia Virtual Reality (VR) simulation enables learners to practice these competencies in a risk-free environment utilizing best practices from MHAUS and AORN.

Learning Objectives:

- Demonstrate recognition of early signs and symptoms of MH
- Identify and discontinue MH triggering agent
- Provide or ensure prompt airway management
- Demonstrate call for help, MH cart, code cart, and use of MH checklist
- Demonstrate effective leadership & teamwork communication skills
- Dilute and administer the first dose of dantrolene within 10 minutes of decision to treat
- Determine the total dose of dantrolene

Malignant Hyperthermia VR takes users an average of 15-20 minutes to complete. Your perioperative team will learn critical MH skills in a highly-immersive environment, while you save time and resources.

Malignant Hyperthermia Product Overview

CAPABILITIES

- Models a patient experiencing malignant hyperthermia in an ultra-realistic operating room environment
- Utilizes objective feedback to instruct, evaluate, and refine malignant hyperthermia competencies.
- Provides learners a readiness score, determined by assessing core competencies.
- Features Health Scholars' AI-enabled voice technology.
- Configurable managements to meet your organization's protocols based on MHAUS and AORN recommendations.
- 24/7 accessibility and schedule training software.
- Turnkey implementation to seamlessly scale across any size organizations.
- Available on the Oculus Quest 2 headset.

BENEFITS

- Incentivizes and challenges the periop team through gamification to learn from mistakes, practice, increase retention and reduce skill decay.
- Enables learners to feel like they are in a hospital setting through a highly-immersive experience.
- VR learners are 275% more confident to apply skills after training. (The VR Advantage, 2020)
- Strengthens teamwork and communication skills with your perioperative team.
- Saves crucial training budget dollars.
- Saves resources and time by reducing time the periop team is out of service to train.
- Finds, assesses and addresses skill gaps with objective readiness reports for individuals and entire organizations.



Contact AORN at PeriopSolutions@aorn.org for more information