

VR training for real-life emergencies and maximizing readiness

VR CPR - a game changer of training for cardiopulmonary resuscitation

Sudden out-of-hospital cardiac arrest is the leading cause of death globally. With each minute that passes, the chances of survival diminish, underscoring the critical need for immediate resuscitation. Layperson cardiopulmonary resuscitation (CPR) is crucial in improving survival rates. Effective resuscitation efforts are often hindered by insufficient skills and a fear of failure. Prompt and accurate performance of CPR can double or triple survival rates. VR CPR training boosts confidence and ensures proper technique.

BENEFITS OF VR CPR

Cutting-edge VR technology immerses participants in lifelike emergency scenarios, enhancing learning through experience and ensuring mastery of critical skills in a risk-free environment.

- VR offers a secure environment for practicing emergency responses, allowing trainees to refine their skills without endangering real patients.
- The immersive quality of VR aids in improving skill retention and boosting confidence, as trainees can practice scenarios repeatedly until mastering them.
- VR training simulates real situations and allows learning from mistakes and work under high stress.
- Immediate, precise feedback is received through integrated sensors, providing real-time insights into training progress and skill development.
- VR programs can be expanded and implemented across training facilities at a reduced cost compared to traditional methods, which often necessitate expensive equipment and facilities.
- 2 versions of VR CPR – for amateur rescuers, the edition with AED defibrillator and professionals with medical devices. The scenarios follow ERC standards.

KEY FEATURES

- Connecting manikins to the virtual accident scene
- Realistic sounds, lifelike visual cues
- Creating genuine, high-stress simulations
- Authentic patient responses
- Instant feedback and training assessment
- Training for additional devices such as a defibrillator, pulmonary ventilator, etc.
- 4 Distinct environments – hospital, workshop, ambulance, main road



SUPERVISION OF INTERNATIONAL ADVISORY BOARD

The scenarios are created based on practice requirements and in collaboration with experts. The request for VR training came from the German ASB rescue service. An international advisory board oversees the development of scenarios and procedures. A prototype of the VR CPR app has been tested by paramedics, doctors, and other medical staff in several countries and the app is continuously modified and expanded according to their feedback.

PROVEN RESULTS

4x

V-learners can be trained 4 times faster than in traditional classrooms

275 %

more confident in applying skills learned after training

96 %

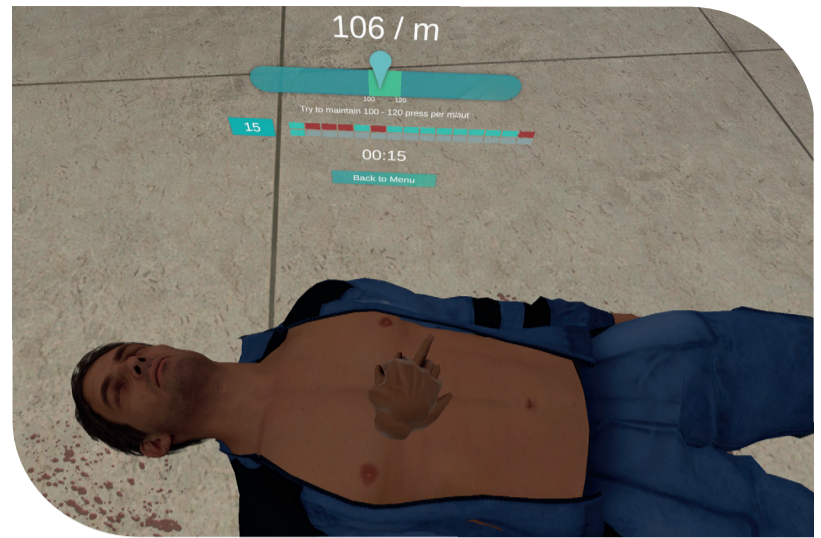
of V-learners want to continue with VR training

FUTURE: INTEGRATING MULTIPLAYER TRAINING SOLUTION

Multiplayer allows trainees to join from different locations, cities and continents. A trainer can lead and oversee the training from one location.

SIGNIFICANCE OF MULTIPLAYER SOLUTION

- Increase sustainability by reducing carbon footprint.
- Improving accessibility and quality of training.
- Ensuring accessibility of training in regions with limited transport options.



SAYING ABOUT VR CPR

"The simulation feels so real; as a trainee, I completely lose track that it's a practice session. The emotional impact is significant too."

JAN FENCL

Participant of first aid training

"It's just like a genuine emergency scenario. It's not merely about chest compressions - it's about handling stress, dealing with distractions, racing against time, monitoring your performance, and feeling the pressure."

DOMINIK MAYER

Leiter Simulationstraining MKT-Institut für Notfallmedizin- und Katastrophenschutz- ausbildung in Bayern gGmbH, Munich

"You learn to keep your cool in difficult situations, which is probably the hardest thing."

PETER REICHARTZ

Bereichsleitung und Produktmanager Digital Learning Malteser Hilfsdienst Aachen

TRUSTED PARTNERS



Virtual Lab, a distinguished Czech company, excels in crafting practical VR/AR solutions and ensuring their seamless implementation. Renowned as a frontrunner in training and development, Virtual Lab has made significant strides in the MedTech and educational sectors. The company is acclaimed for its bespoke solutions tailored precisely to the unique requirements of each client. Noteworthy products include the state-of-the-art VR ICU®, designed to train healthcare professionals on ICU equipment, and VR CPR, enhancing the life-saving skills of laypersons and first responders in CPR and related therapies.

Standing at the forefront of the industry, Virtual Lab is unmatched in developing sophisticated solutions for specialized training environments, customized to meet the specific needs of individual companies.



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Others
+25 Senior Developers,
Testers and App Architects

AWARDS



Top 13 CEE
2023



3rd place CZ
2023



Winner
2023



Finalist CEE
2023



Winner
2022