

All About Virtual Reality Training



What is Virtual Reality?

Virtual reality, or VR, is a cutting-edge technology that puts the users in simulated environments, allowing learners to interact with and experience them as if they were real. Wearing a VR headset and using hand controllers immerses learners in a digital realm that engages your senses and can revolutionize the way we learn and train. Through simulated environments, VR creates practical, hands-on learning experiences that enhance skill development.

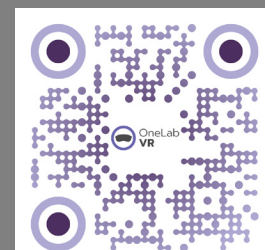


CDC's VR-Ready Laboratory Program

VR training is highly effective and impactful, as demonstrated by numerous studies and real-world applications. In 2019, the CDC's Division of Laboratory Systems (DLS) and the Center for Preparedness and Response (CPR) launched a three-year pilot project to develop and test VR training. In 2022, as part of the CDC OneLab™ Initiative, the Virtual Reality PushPack Program explored the potential of VR as a training format for laboratory staff. Currently, the VR-Ready Laboratory program provides VR headsets to public health laboratories, academic laboratories, and educational programs within clinical laboratories. To request VR headset(s), contact us at VR@cdc.gov.

Scan to Learn more about

CDC's
VR-Ready
Laboratory
Program



Virtual Reality vs. Traditional Training



VR training is not meant to replace traditional training options, such as eLearning or hands-on training. Rather, VR training complements them. By using traditional and VR training, laboratories can create a comprehensive and effective training program that enhances learner engagement, promotes practical application of knowledge, provides realistic experiences, and delivers measurable training outcomes.

Here are some examples of how VR training can complement your traditional laboratory training options:



Hands-On Training:

Traditional laboratory training often involves instructor-led lectures and procedure-oriented training. VR can supplement these activities with virtual hands-on experiences in a realistic environment, enhancing the level of immersion and engagement. Trainees can safely practice their skills in a virtual laboratory, reinforcing what they've learned through traditional training methods without the need to work in, then decontaminate, active laboratories or use valuable supplies.



Remote Training and Accessibility:

Traditional training options may face limitations when trainees are in remote or inaccessible locations. VR training overcomes these challenges by allowing trainees in different geographic areas to access virtual training scenarios at the same time.



Preparing for Real-World Scenarios:

Traditional training methods often focus on theory and hypothetical scenarios. VR training bridges the gap between theory and real-world application by immersing trainees in realistic, simulated environments where they can practice and develop their skills.



Assessment and Feedback:

While traditional training methods often rely on post-training assessments or evaluations, VR training offers real-time assessment. Trainers can observe trainees' performance within the virtual environment, provide immediate feedback, and track progress.