

# Virtual reality



## What is virtual reality training?

Virtual reality (VR) training is the simulation of lifelike scenarios in a computer-generated environment. Virtual reality training immerses users into a 3D virtual setting. Trainees are able to engage and interact in a real world environment where hazards feel real but there is no risk.

Types of VR include:

- Desk-based VR, using a computer monitor to display a 3D virtual world on a desktop screen
- Immersive VR that relies on specific hardware
- 3D, game-based VR that uses computer-based, video game-like training scenes via a combination of visual, interactive networks and multi-user operating technologies
- Building Information Modelling (BIM)-enabled VR allows users to access BIM data to simulate construction, processes and operations

## What problem does it solve?

Safety training is a crucial component of maintaining any safe and healthy workplace. This is particularly true for high-risk tasks and for new employees at highest risk of being hurt on the job. But finding the time and resources to conduct effective safety training can be a challenge. Virtual reality (VR) helps employers provide quality, repeatable training while also reducing the time and money associated with employee education.

Not only is the training engaging, but it's also highly effective. A recent study published by PwC ([pwc.to/3FRERBc](https://www.pwc.com/to/3FRERBc)), a large consulting firm, found that VR learners were:

<b>4x</b>	<b>275%</b>	<b>3.75x</b>	<b>4x</b>
faster to train than in the classroom	more confident to apply skills learned after training	more emotionally connected to content than classroom learners	more focused than their e-learning peers

## Where does it apply?

While VR is not yet widespread in the workplace, it represents a promising business value and shows strong potential to improve the effectiveness of training for hazardous work. VR has the greatest application potential for employers that rely heavily on comprehensive health and safety training and/or have working environments with highly hazardous conditions that make it difficult to provide hands-on training. Employers that work with hazardous materials, use vehicles for goods transportation and services, conduct work at heights, or operate and work with heavy machinery and equipment are particularly good candidates for this technology.

## Resource

Virtual Reality and Augmented Reality for Hazardous Work Training ([bit.ly/3egXiTb](https://bit.ly/3egXiTb))

## Safety and Health Innovation and Programs

SAIF's Safety and Health Innovation and Programs (SHIP) is exploring ways to assist policyholders in their injury prevention efforts by identifying problems and seeking out ideas, products, and processes that could be part of solutions.