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# Focus on Humans
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ABSTRACTS

# Application of virtual reality technology to health and safety education

Cidlinová, Anna[1]; Bárdy, Marek[2]; Kočkár, Samuel[3]; Gonzalez, Barbara[4]

1 - Occupational Safety Research Institute
anna.cidlinova@gmail.com
2 - XR institute
bardy@cie-group.cz
3 - University of Žilina, Faculty of Security Engineering
samuel.kockar@uniza.sk
4 - Occupational Safety Research Institute
gonzalez@vubp-praha.cz

At present, there is a clear trend of digitization and new modern technologies in all directions, including occupational health and accident prevention. Virtual reality (VR) is a new trend here. VR has a number of benefits. These include, for example: 3x faster learning process, autonomous solution that does not require training staff - saves supervision staff time; 30% increase in the quality of routine work; allows you to experience hard-to-simulate scenarios; facilitates training coordination and reduces training costs in the long term.

Priorities in the field of VR in OSH currently focus primarily on risk identification, process learning of critical procedures, process learning in eliminating dangerous events, emergency management, training in operating certain types of machinery and equipment, initial training in various segments, occupational safety training when operating equipment and machines, some types of training on protection at work at heights and protection against falls, etc.

We decided on the advantages of VR technology within the Occupational Safety Research Institute (OSRI) under the auspices of the Ministry of Labor and Social Affairs, to create an educational system of safety and health protection at work, while due to the COVID-19 pandemic, we focused primarily on the medical segment. This is the most effective and flexible way of training employees, which can currently be offered to employees and thus increase their knowledge and experience in health and safety. Specifically, it is a training software that, in the form of credibly processed situations / procedures from the environment of medical facilities, ensures the acquisition of knowledge about skills in health and safety, thanks to which health professionals increase their knowledge and skills in the field and other negative impacts related to insufficient experience and knowledge.