Introduction

COVID-19 has increased the need to explore innovative methods to conduct large scale and rapid education and training to complement existing face to face opportunities. Virtual care provides an effective platform to engage and provide safe and efficient care to patients during the COVID-19 pandemic. Virtual reality is used in many other industries as a method of education and training.

The objective of this guide to provide information on how to clean virtual reality (VR) equipment to minimise the risk of transmitting pathogenic microorganisms between users.

Different types of VR equipment have different cleaning options. Each manufacturer of virtual reality equipment offers options on how to clean their products. Here we offer general tips that could be applied to most VR equipment.

Virtual Reality (VR) Head Mounted Displays (HMD) are non-critical devices used for VR based clinical education. The HMD comes in contact with the face and hair of the user; and the VR’s controllers come in contact with users’ hands. The headsets may be used in a user’s home or in the healthcare setting shared between different users.
1. When using HMDs consider and address the following:

- Velcro elements of the HMD cannot be cleaned or disinfected and should be replaced with a fastening system such as buckle clip that is cleanable.

![Figure 3 – Example of Velcro covering on HMD](image)

- Ensure the facial interface is wipeable and replaceable. If not use a disposable impervious barrier layer between the user and the facial interface.

![Figure 4 - Wipeable facial interface](image)  ![Figure 5 - Disposable facial interface](image)
• Distribute only the required equipment in a cleanable case or disposable bag with label “CLEAN” ready for use or “DIRTY” to be cleaned depending on the situation.

Figure 4 - example of safe coverings

1.1 When using VR equipment always adhere to the following:

Do not use the device:

• If you have any cold or flu like symptoms
• If you have any open cuts or sores on the face or hands (non-intact skin).

1.2 How to clean and disinfect your virtual reality headset

• Remove disposable face pads (interface) and discard
• Clean reusable face pads with a detergent solution or wipe
• Clean hands with alcohol-based hand rub or soap and water
• Use a new wipe to clean the inner surface of HMD
• Using a new wipe, clean the outer surface
• Clean the handheld devices with a new detergent wipe
• Disinfect the reusable components with a Therapeutic Goods Administration (TGA) and manufacturer approved disinfectant
• Once the items are dry store in a clean sealable and disposable bag
• Perform hand hygiene after completion.
1.3 At home user instructions:

1. Only the designated health worker who borrowed the HMD should use the device
2. Perform hand hygiene prior use of the HMD
3. The HMD should be thoroughly wiped down with neutral detergent (solution or wipe) prior to returning the unit to the hospital or educational facility (refer to section 1.2 for cleaning and disinfection)
4. The controllers should be wiped down with neutral detergent (solution or wipe) prior to returning the unit
5. The whole device should be cleaned with a neutral detergent, once the item is dry, place in a clean bag prior to return of the device to the hospital or educational facility
6. The disposable facial interface should be removed and replaced by the designated co-ordinating educator or health worker wearing appropriate PPE
7. The reusable facial interface should be cleaned with a neutral detergent and left to dry. For more information on cleaning and disinfection see How to clean and disinfect your virtual reality headset

1.4 In hospital use:

1. Perform hand hygiene prior use of the HMD
2. The facial interface should be disposed of and changed or cleaned by the designated co-ordinating educator or health worker between users (refer to section 1.2 for cleaning and disinfection)
3. The HMD and controllers should be wiped down with neutral detergent (solution or wipe) and allowed to adequately dry by the designated co-ordinating educator or health worker between users.

The content of this document was informed by resources developed by Nathan Moore Lead for Educational Innovation and Technology, Research and Education Network - WSLHD