

Best Practices - VR Event

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The following is a description of best practices for large virtual or mixed reality events e.g. in a gymnasium

Space

Recommended: Minimum 8x8 feet (2.5 x 2.5 meters):

Non slip floor: Make sure there are no liquids or slip hazards.

Tape/pylons: Painters tape in a color that contrasts well with the floor or carpet color is recommended for sectioning off the VR stations. There should also be a 2 foot buffer between the VR stations so that participants don't accidentally bump into each other. However, painters tape can be expensive, so pylons are an excellent alternative.

Personal space: Make sure neither staff/volunteer or other participants step inside the designated VR space, unless to instruct. Then leave the space. Do not touch participants (e.g. to guide them to turn right, left or walk backwards. Provide only verbal instructions. Do not allow anyone to startle the person experiencing VR.



Staffing

Supervision recommended. One staff/volunteer (1:1) per VR station is recommended. However 1 to 3 might be safe if carefully planned.

Close supervision: Volunteers must watch participants closely at all times (not unlike lifeguarding). Participants in an immersive VR experience are unable to see the outside world and may become disoriented, dizzy and fall. While this might be a rare event, staff members or volunteers should be prepared to catch someone if they start to stumble or faint, if only to protect the head from striking the ground.

Devices

Controllers: Have staff/volunteers ensure that participants use the straps to prevent the controllers from being dropped/thrown inadvertently.

Passthrough: some VR experiences enable passthrough which means that the participant can see the core VR content (e.g. Multi Brush, Nanome) while also seeing the real world. Several

headsets have this capability. Passthrough makes it theoretically safer as the participant can see potential obstacles or people while still enjoying the VR experience.

Staff Debrief

Know the VR experience: Staff/volunteers should be familiar with the VR experience they will be showcasing. See information above about supervision, protecting boundaries¹ and handling the controllers.

Reset: Inform the staff/volunteer that after a VR experience, they will likely have to reset the experience.

Hygiene

Hand hygiene: Frequent hand washing should be facilitated by providing each staff/volunteer with a hand sanitizer. Headsets and controllers should be cleaned between uses (see hygiene)

Clean headsets and controllers between users. See [infection control guide](#).

VR experience Recommendations

Room scale experiences. Room scale experiences allow the participant to walk. Participants should be advised to walk at a normal to slow pace. Running or walking briskly can exceed the VR experience's frame rate (ability of the video to keep up) and this can lead to dizziness and injury.

VR experiences to avoid

Avoid experiences that involve VR scene motion or fear based experiences. When showcasing VR experiences, you should avoid experiences that are likely to induce motion sickness (e.g. social VR, 360 videos with the scene in motion). You should also avoid VR experiences that might be traumatizing to some participants or cause participants to lose their balance and fall (e.g. experiences at heights or violence).

VR Motion

Avoid smooth motion: Room scale VR allows the participant to walk around within a limited space, but to get to areas further away, the participant might have to teleport (the preferred way to move when walking there is not possible). Some VR experiences allow for "smooth motion" which allows you (your avatar) move smoothly in various directions. The conflict between the body being stationary and the visual experience of moving (gliding) will cause motion sickness in a significant number of participants.

Walk and/or teleport: These should be the only forms of motion allowed for VR events.

Time in VR

5-10 minutes: