HORIZON WORLDS EXPOSED

Bullying, Sexual Harassment of Minors and Harmful Content are Rife in Meta’s Flagship VR Product
Meta fails to protect minors from explicit content and harassment in its flagship VR app

Minors are being routinely harassed and exposed to adult content on Meta’s flagship virtual reality social network, Horizon Worlds, new research has found.

The research follows Meta’s announcement that Horizon Worlds will be opening up to 13–17 year olds as soon as March, showing that Meta is already failing to prevent minors from accessing mature content despite a supposed ban on minors accessing its VR apps.

Researchers logged into Horizon Worlds 100 times, recording footage from each visit. Horizon Worlds is the flagship social app in Meta’s family of ‘metaverse’ VR products, and is currently supposed to be limited to users aged 18 and up.

Analysis of recording showed that minors already routinely use the platform, with minors present in 66 of the 100 recordings collected. Within these recordings researchers identified 19 incidents of abuse directed at minors by adults, including sexually explicit insults and racial, misogynistic and homophobic harassment.

Minors were also spotted in multiple ‘Mature Worlds’ where Meta permits sexually explicit content, legal drugs and gambling. Mature Worlds must be marked as 18+ but there are no further safety measures and they are easily accessible from the main menu or in-world ‘portals’.

Sexually explicit insults were not uncommon, with researchers encountering four incidents of adults harassing minors in this way. One adult repeatedly shouted at a group of young girls “I don’t want to cum on you”, continuing even after the girls said they were minors.

Minors also faced harassment based on race, sexuality and gender with six incidents recorded. In a virtual courtroom a young girl with a black avatar was told “you’re black, you’re sentenced to death” by an adult player.

Researchers entered Mature Worlds 19 times and found minors present on five occasions. One minor was found inside a virtual strip club named The Rabbits Den serving alcoholic drinks for in-app money. In a separate incident, a portal to Chicago Penthouse, a strip club, was opened in front of a minor, creating direct access to the Mature World.

Researchers collected this data by entering Horizon Worlds and filming 100 visits to the most popular worlds. Worlds were selected from the Top 100 menu which ranks worlds by
popularity. Researchers explored the worlds fully, spending a maximum of five minutes inside.

Recordings were then analyzed to identify underaged users and incidents of abuse. Horizon Worlds does not provide information on the declared ages of users, and so users were considered to be minors if they stated that they were under 18 or if two researchers agreed that the voice of the user sounded under 15 years old.
Summary

- Meta will soon be opening up their flagship VR social network Horizon Worlds to teens aged 13 to 17, but new research has found that minors are already being failed by the VR social network.

- Despite Horizon Worlds currently being limited to users aged 18+, researchers found that young teens are joining the network where they have easy access to virtual sex clubs and drug boutiques.

- Researchers made 100 recordings of visits to the most popular social spaces in Horizon Worlds and found minors were present in 66 out of 100 worlds.

- Analysis of the recordings identified 19 incidents where minors were harassed by adult users, including sexually explicit harassment, racist abuse and misogyny.

- Researchers also found minors in 1 in 4 Mature Worlds, Meta’s name for worlds that are sexually suggestive, promote legal drugs or contain gambling.

- Three Mature Worlds were found to have sexually explicit content, including wearable naked bodies, naked pole dancers and group sex games. These worlds do not have any additional controls to prevent minors from accessing them.

Minors present in nearly 7 out of 10 worlds

- Researchers logged into the most popular ‘worlds’ in Meta’s flagship Horizon Worlds social app for VR 100 times and found minors present in 66 out of 100 worlds.

  - On each log in to Horizon Worlds, researchers visited worlds with a high number of active users from the app’s ‘Top 100’ worlds menu, exploring the world fully for a maximum of five minutes.

  - Worlds are virtual social spaces, some of which have been created by Meta but the majority have been created by users.

- Meta does not provide information on the declared ages of users in Horizon Worlds. To conduct our analysis two researchers assessed recordings to determine if minors were present, marking a World as containing minors if the recording contained:
○ Users who stated that they were younger than 18
○ Users with voices that both researchers agreed were aged 15 or younger

● This analysis revealed that users determined to be under 18 were present in 66 of the 100 recordings.

● Meta has stated that Horizon Worlds is currently only open to users aged 18 and up.

**Minors are accessing ‘Mature Worlds’**

● Across our recordings we logged in to ‘Mature Worlds’ 19 times, found that minors were present on five occasions.

● “Mature Worlds” is Meta’s name for worlds where users can create sexually suggestive content, promote legal drugs, or contain gambling. These worlds must be labeled 18+.

● Mature Worlds are recommended through Horizon World’s Top 100 menu where they mingle freely with non-mature worlds.

● Minors were identified as being present in four different Mature worlds, three of which were virtual strip clubs. In these worlds we recorded:
  ○ A minor serving alcoholic drinks in a strip club for in-game money.
  ○ A minor convinced adult users he was over 18 and was allowed to stay in a world with drugs and alcohol. Researchers found his Facebook profile which confirmed he was underage.
  ○ Two adults offered minor sexual images of their feet before realizing he was a minor. The young user had set his username to “SendToePics”.

● Throughout our investigation of the Mature Worlds, we found sexually explicit content created by users, including:
  ○ A group sex game, with questions such as “Have you ever sent a nude photo to someone in the Metaverse?”.
  ○ A lockable bedroom for “seven minutes in heaven”, where two users enter for seven minutes together.
  ○ A “Hot Girl Playhouse” where users are awarded points if they complete a list of increasingly suggestive tasks, complete with a leaderboard and strip pole.
A naked body in a sexually explicit position, wearable naked body parts, and rotating naked pole dancers.

- We recorded two instances of portals to Mature Worlds being opened in normal worlds.

- Portals are gateways to other worlds and Meta allows users to place them anywhere, leading other users to any World of their choosing, including Mature Worlds.

- We recorded:
  - A portal to a Mature World dedicated to Marijuana opened at the entrance of the “Venues” World, the main World users first enter. A Meta employed moderator was present and encouraged the users who placed the portal.
  - A portal to a Mature World was opened in front of an underage user, leading anyone who entered to a strip bar serving alcohol and marijuana.

**Minors subjected to harassment and abuse in 19 incidents**

- Researchers recorded their visits to popular worlds 100 times and found 19 incidents of minors being harassed or abused by adult users.

- In four of these incidences minors were on the receiving end of sexually explicit insults:
  - In a world modeled on a stand-up comedy club, an adult asked a young user “Do you have a cock in your mouth?” after being heckled by the minor.
  - One adult user told a minor he was going to “suck his balls”.
  - An adult user repeatedly shouted “I don’t want to cum on you” at a group of young girls, even after they asked him to stop and said they were underage.

- Researchers recorded three instances of racist harassment, including:
  - In a virtual courtroom, a minor with a black avatar was told “you’re black, you’re sentenced to death, get out of here”.
  - A user at a stand-up comedy club called a minor with a black avatar a “monkey”.

- Researchers recorded five instances of gendered harassment. Including:
  - An adult man shouted “Yeah boys, run most of the country and protect y’all, dumb ass hoes” at a group of young girls.
How we conducted this study

- We recorded 100 instances of in-app footage inside the most popular worlds.
- Worlds were selected from the Top 100 worlds menu, which ranks worlds by how many likes they have.
- Some high ranking worlds were empty, and so the researcher only entered worlds that were populated at the time of recording.
- In each recording the researcher entered one world and stayed there until the world had been fully explored, staying for a maximum of five minutes.

How we determined if a user was under 18

- Meta does not provide information on the declared ages of users in Horizon Worlds. To conduct our analysis two researchers reviewed the recordings and marked the world as containing minors if either:
  - A user declared they were under 18.
  - Both researchers agreed that a user sounded under 15 years old.

Horizon World’s age policy

- Meta announced in December 2021 that Horizon Worlds was open to all users aged 18 and up.


- Meta is planning to open up the social network to teens aged 13 to 17, potentially as soon as March 2023.

• Meta’s app store for its Quest headsets gives Horizon Worlds a ‘Parental Guidance’ maturity rating.

• Researchers tested this and found that Horizon Worlds can only be downloaded by users who set the age of their Meta account to 18 or older.

• However, researchers found cases where minors spoke to Community Guides, in-app moderators employed by Meta, and were not removed from Horizon Worlds.

Meta’s safety commitments

• Mark Zuckerberg committed to building safety into the Metaverse from day one when launching the Metaverse.

> “Like I said earlier, interoperability, open standards, privacy and safety need to be built into the Metaverse from day one. And with all the novel technologies that are being developed, everyone who’s building the metaverse should be focused on building responsibly from the beginning.”


• Meta has detailed their standards for user behavior in the “Code of Conduct for Virtual Experiences”, violations include the sexual harassment of minors, bullying, harassing, stalking or hateful behaviour, and any form of non-consensual intimate behaviour.

> Code of Conduct for Virtual Experiences, Meta, November 24 2022,

Minors in Mature Worlds

• “Mature Worlds” is Meta’s term for worlds where users can create sexually suggestive content, promote legal drugs, or contain gambling. These worlds must be labeled 18+.

Meta Horizon Worlds Mature and Prohibited Worlds Policy, Meta, September 2022,
• Despite Meta’s claims that Horizon Worlds is open only to users aged 18 and over, our investigation found minors present in five of the 19 Mature Worlds that researchers visited, equivalent to finding minors in 1 out of 4 Mature Worlds.

• The instances were across four worlds, three of which were virtual strip clubs:
  o The Vibe (18+) – A club with an interactive strip pole, bar serving alcohol, and private rooms.
  o The Rabbit’s Den – A club with an interactive strip pole, private rooms, and a bar where users can serve alcoholic drinks for in-game money.
  o Black Magic Comedy, Karaoke & Chill – A bar with alcohol and marijuana.
  o Coyote Fugly Bar – A bar with interactive strip poles, a bar serving alcohol, and interactive sex toys.

  Coyote Fugly Bar, Horizon Worlds

• When an underaged user entered Coypte Fugly Bar two adult users offered to sell him sexual pictures of their feet before realizing he was under 18. His username was ‘SendToePics’.

• We found a minor serving alcoholic drinks in The Rabbits Den, following recipes provided by the world’s creator.
An underage user was allowed to stay in Black Magic Comedy after convincing the other users that he was 23. Researchers found the Facebook profile connected to his Oculus account, confirming that the user was under 18.
Explicit content in Horizon Worlds

- Throughout this investigation we found sexually explicit content made by other users in Horizon Worlds.

- We found group sex games with questions such as “Have you ever sent a nude photo to someone in the Metaverse?” and “Show the group your sexiest moan for 10 seconds”.

The Adult Club, Horizon Worlds

- A ‘Hot Girl Playhouse’ with a strip pole, where users are awarded points if they complete a list of increasingly suggestive and risky tasks, such as 45 points for going “all the way in front of an audience”, complete with a leaderboard for high-scoring users.
Hot Girl Summer, Horizon Worlds

- A bedroom that can be locked for two users to have ‘7 minutes in heaven’ together.
- Pressure, a strip club with a wearable naked body, rotating naked pole dancers, and naked bodies in sexually explicit positions.

Shadow_bebop, Instagram, 26 October 2022, https://www.instagram.com/p/CkMELYzOBON/
Through our investigation we also found worlds dedicated to marijuana, including interactive bongs and pipes.

Minors receive racial and sexual harassment in the metaverse

- Researchers recorded 100 visits to popular worlds and found 19 instances of minors being harassed by adult users.

- In four instances minors were on the receiving end of sexually explicit insults.

- At a stand-up comedy club an adult asked a minor “Do you have a cock in your mouth?” after being heckled by the minor.
In another instance, an adult user told a minor he was going to “suck his balls”.
• After losing a game in one world, an adult user repeatedly said “I don’t want to cum on you”, despite the minors asking him to stop and saying they were minors.

• An adult told a young girl that “your dad should have swallowed”, to which the girl replied “I’m only 12”.

• We recorded three instances of racist harassment and five instances of gendered harassment directed at minors by adult users.

• In a virtual courtroom a minor with a black avatar was told “you're black, you're sentenced to death, get out of here”.

Party House, Horizon Worlds
At a virtual house party an adult user shouted misogynistic insults at a group of young girls, “Yeah boys, run most of the country and protect y’all, dumb ass hoes”.

At a stand-up comedy club a user on the stage called a minor with a black avatar a “monkey”.

The Soapstone Comedy Club, Horizon Worlds
Horizon Worlds provides easy access to adult content

- Mature Worlds have to be marked as 18+, but they are otherwise accessible to any Horizon Worlds user through the menu or portals.


- Portals are doorways to other worlds. Meta allows users to place portals anywhere in Horizon Worlds, and these portals can lead to any worlds including Mature Worlds.

- We found that users are opening portals to Mature Worlds in worlds frequented by minors, leading minors directly to adult content.

- Two users opened a portal to CANNACULTURE, a world dedicated to marijuana, at the entrance to Venues which is the main hub for Horizon Worlds and the first world most users visit.

- Meta employs in-app moderators called Community Guides. One spoke to the users who opened the portal but encouraged the users and did not mention that a portal to a Mature World was inappropriate for the main hobby.
• In another instance a portal to *CHICAGO PENTHOUSE 18+*, a strip club and bar, was open in front of an underage user.

*Party House, Horizon Worlds*

• Going through the portal, our researcher was asked to confirm their age by a user holding a gun.

*CHICAGO PENTHOUSE (18)+, Horizon Worlds*