This report was created by analysts from the Virality Project, a coalition of research entities focused on real-time detection, analysis, and response to COVID-19 vaccine mis- and disinformation. The Virality Project aims to support information exchange between public health officials, government, and social media platforms through weekly briefings and real-time incident response.

Public officials and health organizations interested in officially joining this collaboration can reach the partnership at info@viralityproject.org.

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Key Takeaways

- While it is too early to determine the impact of the suspension of Johnson & Johnson’s COVID-19 vaccine on vaccine hesitancy, initial findings from the Virality Project’s rapid response piece this week suggest that the impact has been more limited than expected.
- Individual stories of women experiencing irregular menstrual cycles and dysmenorrhea have spread. Online holistic medicine accounts have exploited the conversation to spread conspiracy theories about vaccine safety concerns for unvaccinated women who come into contact with vaccinated women.
- Comments from Pfizer about a potential third dose and reports about a DARPA subdermal implant to detect COVID-19 were both incorporated into anti-vax and conspiracy theorist concerns about pharmaceutical companies’ intentions.

Events this week:

This section contains key events from this past week as identified by our analysts and stakeholder partners.

Contextualizing the J&J suspension — fears and doubt stay contained within anti-vaccine community; too soon to tell if it’s affected vaccine hesitancy broadly

- Last week, Virality Project researchers tracked narratives around the J&J halt, the announcement of which had raised questions about its potential impact on vaccine hesitancy. Our analysts looked into the narratives, framing, and spread of the discussion about the J&J pause both within and outside of the anti-vaccine community. We published a comprehensive analysis of the event.
- While anti-vaccine activists used the suspension to promote distrust in vaccines, these narratives appeared to primarily stay contained within the anti-vaccine community.
- Both international and domestic news coverage of the J&J halt was primarily neutral; it wasn’t used to spin mistrust or doubt in the J&J vaccine.
- Of note, a segment from right-wing talk show host Tucker Carlson was the most engaged with J&J-focused post on Facebook this past week. The clip insinuated that the safety and efficacy of the vaccine was still an open question, at one point speculating whether there might be more than six known cases of blood clots. It was pushed to his 5M followers and had 55K shares.
- Our analysts used Meltwater to determine that the number of mentions of J&J across Twitter continued to be minimal compared to AstraZeneca, which suggests that news of the J&J pause did not break into or dominate the global conversation the same way AstraZeneca has.
- Takeaway: It is still too early to know how the pause on Johnson & Johnson vaccine will ultimately affect vaccine hesitancy or vaccine demand globally. An initial look at the varied framings of this incident suggests that while specific groups of incentivized anti-vaccine activists used the J&J incident to undermine confidence in vaccines, the topic was not picked up or widely spread by the broader public in online spaces.
Conspiracy theory about vaccines causing irregular menstrual cycles and pain for unvaccinated women who are around vaccinated individuals moves through anti-vax community

- There have been **growing concerns about the vaccine's impact on irregular menstrual cycles and dysmenorrhea for women**.
- This past week, an [Instagram Live video](https://www.instagram.com/live/) pushed a conspiracy theory that **unvaccinated women who are physically close to vaccinated people** have experienced irregular periods, severe menstrual pain, and menopausal and post-menopausal bleeding.
- The original video on Instagram received 329K views, though it has also been shared in shorter segments by several health and wellness influencers, including conspiracy theorist Dr. Naomi Wolf on Twitter. The story has picked up some traction in fringe, right-wing, and conspiracy circles, the top contributors being Dr. Naomi Wolf, Dr. Bradley Campbell, and selfhealingmama.
- The same account shared another Instagram video from a holistic medicine doctor that similarly claims that the vaccine causes irregular periods in both vaccinated and unvaccinated women.
- **Concerns about the impact of the COVID-19 vaccine on women’s menstrual cycles** were also expressed in mainstream discussions. While many women have reported differences in their menstrual cycles after receiving a COVID-19 vaccine, medical studies have yet to prove a connection, allowing more extreme claims from natural health and conspiracy influencers to spread.
- **Takeaway:** Concerns about vaccine impact on menstrual cycles appeared in mainstream and general discussion as well as holistic medicine communities online this week. Although some menstrual-related side effects may indeed be founded, the framing of ‘contagious’ side effects impacting the unvaccinated are evocative of past anti-vaccine narratives about ‘vaccine shedding’ and should be monitored.

Pfizer discussion of 3rd dose used to support anti-vax narrative that Big Pharma is making us take more doses for their profit’

- On April 15, Pfizer CEO Albert Bourla stated that a [third vaccine dose](https://www.bourla.com/) might be necessary within 12 months of the first dose to respond to viral variants. Since Bill Gates initially mentioned the possibility of a third vaccine dose in mid-February, anti-vaxxers have been using rumors about the need for multiple doses of vaccines to claim that vaccines are just for pharmaceutical profits and otherwise are unnecessary.
- Overall, the story has been picked up by mainstream media outlets and has made its way to alternative media (both right and left-wing) and some conspiracy/anti-vax pages as well. The story has received roughly 429K interactions on Facebook in the past week with engagement peaking on April 15th.
- Pfizer’s statement has been shared in a wide range of online communities. It appeared within anti-vax communities framed as proof of these concerns about profits and the necessity of COVID-19 vaccines. It seems to have gone most viral on Instagram, particularly in the African-American community. The story has also been picked up and shared by Russian and Chinese state media.
Additionally, Rapper 50 Cent, who has 26.5M Instagram followers, shared headlines about this and expressed personal vaccine hesitancy connecting this news to concerns about J&J.

Reactions to posts sharing Pfizer’s comments about a third dose appear mixed. Some comments Virality Project analysts observed express ongoing safety and efficacy concerns about the vaccines while pro-vaccine stances mention the flu shot as an example of a vaccine people receive annually.

Takeaway: Some online communities appear concerned that a potential need for a third vaccine dose indicates a lack of efficacy or an ulterior motive for pharmaceutical companies selling these vaccines.

News of DARPA subdermal implant to detect COVID-19 interpreted as proof of microchip conspiracy

- Concerns about coronavirus vaccines containing microchips have been around since at least as early as November 2020. This week, a CBS 60-Minutes special revealed that researchers at the Defense Advanced Research Projects Agency (DARPA) have created a subdermal implant to detect blood for diseases. “It's not some dreaded government microchip to track your every move,” said a DARPA scientist in the article, “but a tissue-like gel engineered to continuously test your blood.”
- The story is being reported by various mainstream and fringe news outlets as a “microchip to detect COVID-19” and is being picked up by right-wing pundits and conspiracy theorist accounts as supporting evidence of prior microchip concerns.
- Posts containing keywords about microchips and the Pentagon have gotten roughly 213.6K interactions on Instagram and 134.8K interactions on Facebook since April 10th, with the most interacted posts coming from conspiracy theorists, including in Spanish. This has also gotten traction from Libertarian and right-wing accounts, and amplified by Russian state media.
- The tone is slightly different between platforms: while most comments Virality Project researchers observed on Facebook were serious and upset about the situation, Instagram and Reddit saw mixed reactions, with some treating it as a joke and mocking conspiracy theorists.
- Takeaway: Microchips are a recurring symbol in anti-vaccine conspiracy theories. Journalists should be aware of the connotations of the word “microchip” and take care to distinguish efforts such as DARPA’s research on subdermal implants from microchip narratives.

Non-English and Foreign Spotlight:
This section highlights content in additional languages and content spread by foreign state media. The non-English content and foreign state media targets users in the U.S. though may also have international spread.

President Bolsanaro and supporters continue to promote unproven COVID-19 treatments
- In Brazil, members of the Bolsonaro family — including the president himself — continued to use social media to promote unproven cures against COVID-19.
● President Bolsonaro, during his public live stream this week, amplified a drug unproven to treat COVID-19, a male hormone-blocker Proxalutamide, which he said had shown strong results in clinical trials. Similar claims about Proxalutamide have been flagged as misleading by fact-checkers.

● Bolsonaro supporters amplified the hashtag #EuTomoIvermectina (#ITakeIvermectin), as well as a misspelled version of the hashtag #EuTomoInvermectiva (#ITakeInvermectin), shared alongside messages encouraging people to use the drug to treat COVID-19. Associated tweets included images of people showing Ivermectin medicine packages and arguing “the drug is safe to use since it is used to treat COVID-19 in many other countries.”

Johnson & Johnson vaccine suspension used to promote conspiracy theories in Spanish and Chinese

● Chinese dissident virologist Dr. Li-Meng Yan seized on the recent pauses in the distribution of the Johnson & Johnson vaccine to promote her theory that vaccines cannot be effective against COVID-19 because the virus was develop in a Wuhan lab as a biological weapon. Her tweets, in both English and Chinese, have garnered more than 10K engagements.

● A Chinese YouTuber and Trump supporter echoed the former president’s claim that the Johnson & Johnson vaccine pause could be political. She claimed that this was because all of the vaccines have caused blood disorders, but only Johnson & Johnson has been paused. The video has received more than 13K views.

● A Latina TikTok creator re-posted her popular satirical video imagining a future in which people who received the Johnson & Johnson vaccine are eligible to “receive substantial financial compensation” due to health issues caused by the vaccine. The reposted video has received 11K engagements. The original video received more than 3.6M engagements.

Miguel Bosé, Spanish singer, spreads pandemic, vaccine conspiracy theories in interview

● Miguel Bosé, a famous Spanish singer and actor who has spread conspiracy theories and other misinformation about the pandemic and vaccines, was recently interviewed by a popular Spanish television journalist, Jordi Évole.

● Bosé discussed his views about the pandemic and vaccines, including a conspiracy theory about Bill Gates. Anti-vaccine, pandemic skeptical and QAnon accounts have shared parts of the interview on Telegram (22K views across three channels. Parts of the interview have also been posted to Facebook and Instagram but received low engagement. The interview has also been uploaded to YouTube (27K views).

● Takeaway: Journalists should be careful of giving a large or uncritical platform to those who espouse anti-vaccine views, as this could promote further hesitancy.
Doctors and health professionals promoting anti-vaccine narratives in Spanish and Chinese

- Dissident doctors and other healthcare professionals continue to spread anti-vaccine disinformation in Spanish and Chinese across platforms. Some are from medical professionals unique to the community, and others are translations of prior English content.
- In a Spanish language video uploaded to UACD.tv, a video sharing site run by “Un Abogado contra la Demagogia” (A Lawyer Against Demagoguery) that shares many anti-vaccine videos, Dr. Karina Acevedo claims that the COVID-19 vaccine will increase the number of COVID-19 cases. The video has received more than 110K views. The link to the video has been shared in at least two Telegram channels (28K post views), Facebook (1.4K engagements), and Twitter (223 engagements).
- A conservative Chinese Telegram group (6K members) shared a video of Dr. Simone Gold of America’s Frontline Doctors (4.7K post views). This video, in English with Chinese subtitles, has previously circulated on WeChat. The text accompanying the video warns that the vaccine could cause infertility and that hydroxychloroquine should be used to treat COVID-19.
- A translated version of Dr. Wolfgang Wodarg’s petition to the European Medicines Agency is spreading on WeChat. The since-removed 2020 petition makes many false claims about COVID-19 vaccines and calls for their halt. The translated petition has been published by at least 11 WeChat public accounts, receiving more than 31K views in total.
- In an English language video with Chinese subtitles, Dr. Richard Urso (who has appeared with America’s Frontline Doctors) claims that individuals should take hydroxychloroquine rather than be vaccinated. He claims that hydroxychloroquine “kills an industry better than it kills a virus.” The video has been shared on Twitter (13K views) and GNews.
- An English-language video from Health Impact News from 2020 is currently spreading on WeChat. The video includes several scientists, doctors, and other health care workers from around the world spreading disinformation about COVID-19 vaccines and the pandemic more generally, including that the pandemic is not real, that mRNA vaccines have not been adequately studied, and that the COVID-19 vaccines will cause negative long-term health effects.
Ongoing Themes and Tactics:

This section highlights ongoing themes and tactics that we track each week including notable vaccine injury stories and overall key statistics about online vaccine discussions.

Key Statistics

Here we contextualize the above narratives by examining the engagement of other posts from this week.

- The top Facebook post from this week containing the word “vaccine” was from UNICEF. The post, which garnered 409K interactions, celebrated the success of a COVID-19 vaccination campaign in Nepal. The top comments express gratitude toward UNICEF.
- This week’s top Instagram post containing the word “vaccine” is an announcement from Selena Gomez that she is hosting Vax Live, a concert promoting COVID-19 vaccine equity. The post has received 1.9M likes.
- The top post with the word “vaccine” on Reddit shares a news article reporting on a statement made by the CEO of Pfizer explaining that a third dose will likely be needed. Comments express a mix of opinions, including that the vaccine will need to be administered annually and that lower-income countries will be left behind. The post has received 68.2K upvotes.
- The top post from a recurring anti-vax influencer on Facebook was from Erin at Health Nut News. The post shares an article that discusses Chelsea Clinton’s call for Donald Trump to post photos of him receiving the vaccine to encourage vaccination among Republicans. The post has received 1.8K interactions.
- The top Tweet from a recurring anti-vax influencer on Twitter was from Alex Berenson, with 7.8K interactions. The Tweet claims that VAERS, a vaccine reaction database that is frequently weaponized by anti-vaxxers, is overwhelmed by the number of reports.

Appendix

We have included some notable screenshots from the above incidents. More screenshots and assets can be made available, upon request and as needed!

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<td>A graph from the Virality Project’s rapid response analysis on the J&amp;J halt shows that J&amp;J has been discussed far less online than the AstraZeneca vaccine, even immediately following the recommendation to suspend use.</td>
<td><img src="image" alt="Graph" /></td>
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An Instagram Live video spread on multiple platforms to promote the conspiracy theory that unvaccinated women who come into contact with people who have received COVID-19 vaccines are experiencing pain and irregular menstrual cycles. This conspiracy is spreading as the general public expresses concerns about the impact of vaccines on menstrual cycles.

Anti-vax and conspiracy theorist pages have falsely taken reports of Pentagon scientists developing a subdermal implant to support their theory that vaccines contain microchips.

A new platform, UACD.tv has hosted several anti-vax videos and conspiracy theories.