

New COVID-19 and Vaccine Misinformation Narratives

Report for Governments and the WHO

June 18, 2021

Fingerprint Name: Soccer star Christian Eriksen received COVID-19 vaccine before on-field collapse

The Myth: Denmark national soccer team midfielder Christian Eriksen received a COVID-19 vaccine days before he collapsed during a game against Finland.

The Facts:

Eriksen collapsed on the field during a June 12, 2021, match between Denmark and Finland, and went into cardiac arrest before being resuscitated. However, Giuseppe Marotta, director of Eriksen's club Inter Milan, told Italian sports TV channel Rai Sport, "He didn't have COVID and wasn't vaccinated either."

PolitiFact reported in a June 2021 article that speculation that Eriksen's collapse was connected to vaccines was fueled by Luboš Motl, a Czech physicist and blogger who has shared false claims about COVID-19 and vaccines. In a June 13, 2021, tweet, Motl claimed, "The chief medic and cardiologist of that Italian team confirmed on an Italian radio station that Eriksen has received the Pfizer vaccine on May 31."

The official Twitter account for the Italian station, Radio Sportiva, denied that anyone from Inter Milan had confirmed Eriksen had been vaccinated on its station. In a June 13, 2021, tweet, the station said, "We have never reported any opinion from the Inter medical staff regarding Christian Eriksen's condition. Please remove the content from the tweet author, otherwise we will be forced to take action."

Fingerprint Name: SM-102, an ingredient in Moderna COVID-19 vaccine, is dangerous

The Myth: SM-102, an ingredient in Moderna’s COVID-19 vaccine, is dangerous and has been listed as not being safe for human or veterinary use by a company that sells the ingredient.

The Facts:

SM-102 is a lipid, or a fatty molecule that is not soluble in water, which is used in Moderna’s COVID-19 vaccines to protect the messenger RNA that provides instructions to the body’s cells on creating antibodies against the COVID-19 virus, according to a May 2021 FactCheck.org article.

The claim that the ingredient is dangerous relied on misrepresenting a safety fact sheet from Michigan-based Cayman Chemical, which sells a SM-102 product as a “solution in chloroform,” a potentially toxic chemical that is not an ingredient in the Moderna vaccine.

The Cayman Chemical fact sheet does state that its SM-102 product is “not for human or veterinary diagnostic or therapeutic use.” However, its health warnings are related to the *chloroform solution* that makes up 90 percent of the product, not SM-102 itself. The fact sheet listed only chloroform under “dangerous components,” while SM-102 is listed under “other ingredients.”

In a May 2021 press release, Cayman Chemical stated, “Neither the National Institute for Occupational Safety and Health (NIOSH), Registry of Toxic Effects of Chemical Substances (RTECS), or the European Chemicals Agency (ECHA) Classification and Labelling Inventory list any hazards associated with SM-102.”

Fingerprint Name: Misrepresenting VAERS data

The Myth: The U.S. Vaccine Adverse Events Reporting System (VAERS) provides definitive evidence of serious injuries and deaths caused by vaccines.

The Facts:

VAERS is a database run jointly by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Food and Drug Administration (FDA) for the purpose of serving as “national early warning system to detect possible safety problems in U.S.-licensed vaccines,” according to its website.

However, reports submitted to VAERS are unverified and can be submitted by anyone, without including their name or contact information, or any proof that the vaccine was responsible for an adverse effect. Indeed, the database includes events that lack a plausible link to a vaccine, such as someone dying in a car accident on their drive home after being vaccinated.

The VAERS website is clear about the database’s limitations, including a disclaimer that states that VAERS data “cannot be used to determine if a vaccine caused or contributed to an adverse event or illness” and “cannot be used to determine rates of adverse events.” Dr. Tom Shimabukuro, deputy director of the CDC’s Immunization Safety Office, told NewsGuard in an April 2021 phone interview, “As a passive surveillance system, VAERS is not designed to determine cause and effect.”

In an example of how VAERS data can be misrepresented, an April 2021 article on CaliforniaGlobe.com stated: “We are already seeing some vaccine injuries with the COVID vaccines. As of April 26, 2021, 230.77 million COVID vaccines have been administered. Of those, according to the CDC’s Vaccine Adverse Event Reporting System (VAERS) database website, 86,080 vaccine injuries are from a COVID vaccine. Of those vaccine injuries, 10,152 were serious vaccine injuries. And of those 86,080 vaccine injuries, 3,186 vaccine-injured have died.”

CaliforniaGlobe.com neglected to mention any of the limitations of VAERS data, or the fact that as of April 2021, the CDC had found no deaths caused by COVID-19 vaccines. “A review of available clinical information, including death certificates, autopsy, and medical records has not established a causal link to COVID-19 vaccines,” according to a page on the CDC website.

The CDC says that it follows up on every death reported by VAERS by requesting medical records, autopsy reports and death certificates. It was during this process, according to a May 2021 email to NewsGuard from CDC spokesperson Kristen Nordlund, that the agency discovered that a March 5, 2021, report submitted to VAERS claiming that a two-year-old in Virginia died two days after receiving the Pfizer COVID-19 vaccine — which was not authorized for use in children that young — was a fabrication.

Fingerprint Name: Face masks contain carcinogens

The Myth: Face masks worn to prevent the spread of the COVID-19 virus contain carcinogens and other toxic chemicals. When worn long-term, these masks raise a person's risk for developing cancer.

The Facts:

The claim that surgical face masks contain a mix of harmful, cancer-causing chemicals was apparently first published in April 2021 by Ecotextile News, a magazine aimed at the textile industry. In an article it called an “exclusive,” Ecotextile News interviewed two German scientists — Michael Braungart and Dieter Sedlak — who claimed to have independently conducted research on face masks and found that their long-term use could result in people inhaling hazardous chemicals.

The Ecotextile News article relied solely on Braungart's and Sedlak's claims to support its assertion of a “chemical cocktail found in face masks,” and did not offer additional evidence. Braungart's and Sedlak's claims were never subjected to a peer-review and were never published in a scientific journal.

There is no evidence that wearing face masks — even long-term — causes health issues, including cancer. In fact, research published in the peer-reviewed journal *Environmental Science & Technology* in March 2021 found that surgical masks were effective in blocking not only virus particles, but also many airborne carcinogens.

According to Moffitt Cancer Center, which addressed claims of carcinogenic chemicals in face masks in a November 2020 post on its website, single-use surgical masks are typically made from a plastic known as polypropylene. Polypropylene is recommended for use in face masks by the World Health Organization. The U.S. Centers for Disease Control and Prevention states on its website that Polypropylene “may enhance filtering effectiveness” of face masks.

Moffitt Cancer Center stated that another synthetic chemical known as polytetrafluoroethylene (PTFE) is also used in some masks. The American Cancer Society does not recognize PTFE as a probable or known human carcinogen, and Moffitt said on its website that “although PTFE is used in some reusable masks like those containing filters, there is little evidence showing that exposure to PTFE can cause health problems.”

Dr. William Cance, chief medical and scientific officer for the American Cancer Society, told the *New York Post* in November 2020 that “There is no evidence to support the claim that the presence of PTFE in a mask causes cancer. As a surgical oncologist, I, along with thousands of colleagues in the health-care profession, have been wearing masks for years to protect patients from the spread of infections.”

One known human carcinogen, ethylene oxide, is used to sterilize some medical equipment, and *USA Today* reported in November 2020 that it had identified “a limited number of online listings where manufacturers claim their masks are sterilized with ethylene oxide.” However, the U.S. Food and Drug Administration says that approximately 50 percent of all sterile medical devices are sterilized with ethylene oxide, and for many devices, it might be the only appropriate option for sterilization. Additionally, the FDA says that it reviews premarket submissions for medical devices to ensure that sterility information is in accordance with safety standards.

Fingerprint Name: COVID-19 vaccine magnet challenge

The Myth: Videos posted on social media show magnets sticking to people's arms after they received COVID-19 vaccines, which proves that the vaccines contain magnetic ingredients such as microchips.

The Facts:

Dr. Stephen Schrantz, an infectious diseases specialist at the University of Chicago Medicine, called the videos “a hoax” in a May 2021 article by Agence France-Presse. “There is absolutely no way that a vaccine can lead to the reaction shown in these videos posted to Instagram and/or YouTube,” he said. “It is better explained by 2 sided tape on the metal disk being applied to the skin rather than a magnetic reaction.”

None of the COVID-19 vaccines authorized for widespread use in the U.S. and Europe contain magnetic ingredients or microchips. Lisa Morici, an associate professor at the Tulane University School of Medicine who studies vaccines, told FactCheck.org in May 2021 that the ingredients in the Pfizer, Moderna, and Johnson & Johnson COVID-19 vaccines “are simply RNA/DNA, lipids, proteins, salts, and sugars.”

Dr. Edward Hutchinson, a lecturer at the Centre for Virus Research at the University of Glasgow, told Newsweek in a May 2021 article that “you would need to introduce a large lump of magnetic material beneath the skin to get the action through the skin that the videos claim to show — if you want to give this a go, try getting a fridge magnet to pick up anything, particularly tiny bits of metal, through the skin between your thumb and index finger.”

One variation of the magnet myth misrepresents recommendations to delay some medical imaging following vaccination as proof that COVID-19 vaccines contain magnetic “nanobots.” The Radiological Society of North America did recommend in February 2021 that some medical imaging screenings should be delayed for six weeks after a person's final COVID-19 vaccine dose, because the vaccines are known to cause swollen lymph nodes, which could affect the results of routine screenings such as mammograms.

“Swollen lymph nodes are a common occurrence when vaccination prompts a strong immune response,” RSNA spokesperson Maureen Morley told NewsGuard in a May 2021 email. “On mammography and chest images, this can mimic the appearance of serious conditions like cancer. The 6-week delay is to allow the lymph nodes to return to normal size, so as to avoid the potential for additional follow-up testing.” She noted that RSNA explicitly recommends against delaying any urgent medical imaging, such as when a fully vaccinated patient is showing acute symptoms of cancer.

Variations

- The fact that vaccinated individuals are supposed to delay medical imaging after vaccination is proof that the vaccines contain magnetic nanobots.

Fingerprint Name: COVID-19 vaccinations caused India's COVID surge

The Myth:

The increase in COVID-19 cases and deaths in India between February and May 2021 was caused by COVID-19 vaccinations.

The Facts:

While the COVID-19 surge in India did begin after the country started administering COVID-19 vaccines on Jan. 16, 2021, the two events are not associated. Only 9.8 percent of the country's population had received one dose of a COVID-19 vaccine as of May 10, 2021 -- and the rate of vaccination was even lower when COVID-19 cases had begun to increase in February 2021, according to a May 2021 fact-checking article from Reuters. According to Johns Hopkins University, India's seven-day average of new COVID-19 cases went from a low of 11,145 on Feb. 11, 2021, to a peak of 391,232 on May 8, 2021.

Sumit Chanda, director of the immunity and pathogens program at Sanford Burnham Prebys Medical Discovery Institute in San Diego, told USA Today in May 2021, "There's actually an inverse correlation between those people who got the vaccine and those people are getting sick," meaning that vaccinated individuals were less likely to get COVID-19.

Bhramar Mukherjee, an epidemiologist at the University of Michigan, told Reuters in May 2021 that if vaccines had been administered more quickly, India may have prevented more COVID-19 cases. "If anything, the sluggish start to the vaccination program in January instead of rapid acceleration in January-March is hurting India bigtime with the management of the pandemic," she said.

Fingerprint Name: Vaccine shedding

The Myth: All vaccines can “shed,” meaning vaccinated individuals will infect others with the disease.

The Facts:

According to a May 2021 article by PolitiFact, only vaccines that contain a live virus can shed enough virus to potentially infect other people. USA Today reported in a May 2017 article that this occurred with the oral polio vaccine, which was distributed beginning in 1961, because children who received the vaccine shed the virus through their feces, and could spread it to others who didn’t wash their hands after using the bathrooms.

Dr. Paul Offit, director of the Vaccine Education Center at the Children's Hospital of Philadelphia, told USA Today that while in rare cases, live polio vaccines shed in a way that caused polio, the shedding was actually useful in helping one vaccinated child indirectly vaccinate others. The oral polio vaccine stopped being used in the U.S. by 2000 and Offit told USA Today that no other type of vaccine has ever been shown to shed in a manner that caused disease.

Other vaccines that do not contain a live virus cannot infect others with that virus, including COVID-19 vaccines. "There is absolutely no biological mechanism for any COVID-19 vaccine side effects or vaccine components to shed to others," Dr. Shruti Gohil, associate medical director for epidemiology and infection prevention at the University of California, Irvine, told PolitiFact in May 2021.

One variation on this myth relates to COVID-19 vaccines made by Pfizer and Moderna that rely on messenger ribonucleic acid (mRNA), which carries genetic information needed to make proteins, according to the U.S. National Cancer Institute. These vaccines instruct cells to produce a protein that resembles part of the COVID-19 virus called the spike protein, triggering the body’s immune system to respond and produce antibodies.

A group called America’s Frontline Doctors, which NewsGuard found to have repeatedly published false content, claimed in an April 2021 article that these mRNA vaccines could spread the virus to others. “Patients who are vaccinated can shed some of these (spike protein) particles to close contacts. The particles have the ability to create inflammation and disease in these contacts,” the article on the group’s website stated. “In other words, the spike proteins are pathogenic (‘disease causing’) just like the full virus.”

Dr. Daniel Kuritzkes, chief of the infectious diseases division at Brigham and Women’s Hospital, told Reuters in a May 2021 article that the mRNA vaccines “contain only instructions for making spike protein and are incapable of generating virus particles, so nothing can be shed.”

Variations

- People vaccinated with COVID-19 mRNA vaccines can shed disease-causing particles to others.

The myth: Pfizer's COVID-19 shot caused more deaths than the AstraZeneca vaccine.

The facts:

There is no evidence of a causal link between the Pfizer-BioNTech COVID-19 vaccine and deaths among its recipients. Claims that the Pfizer vaccine is deadlier than other vaccines often cite unverified reports of deaths following vaccination, with no proof that the deaths were caused by the vaccine.

[As of May 2021](#), the CDC said that it has not found any deaths directly related to the Pfizer COVID-19 vaccine. Multiple clinical trials and additional studies following emergency authorization have shown that the Pfizer vaccine is safe and effective at preventing symptomatic cases of COVID-19.

Several European news organizations, including French tech news site [Numerama](#) and German broadcaster [Deutsche Welle](#), reported in May 2021 that a Russian-linked advertising agency attempted to run an anti-Pfizer disinformation campaign on social media, using similar arguments. French and German YouTubers and influencers said that an advertising agency called Fazze offered them money to post social media videos and messages warning against the Pfizer vaccine and claiming that “the death rate among the vaccinated with Pfizer is almost 3x higher than the vaccinated by AstraZeneca,” Numerama reported.

According to a May 2021 Wall Street Journal [report](#), French counterintelligence authorities were investigating whether the Russian government was behind the Fazze emails and the related disinformation campaign. A [2021 report](#) by the Alliance for Securing Democracy, an advocacy group that studies state disinformation, found that Russian state media outlets have repeatedly drawn unsubstantiated links between the Pfizer vaccine and deaths of vaccine recipients. Although it is not clear why Pfizer received such negative treatment by the Russians, the Alliance for Securing Democracy report notes that the Pfizer vaccine was the first Western vaccine to compete with the Russian state-backed Sputnik V vaccine.

This report was produced using two proprietary datasets from NewsGuard.

The ***Misinformation Fingerprints*** dataset, a catalogue of data about top misinformation narratives, contains related keywords and search terms for all of the top misinformation and disinformation narratives spreading online--produced using human intelligence but designed for use with AI/ML/NLP tools to identify content matching specific false claims. NewsGuard analysts used the Misinformation Fingerprints dataset to identify relevant searches related to misinformation narratives about COVID-19 and other topics.

The second dataset used was the ***News Website Reliability Ratings***, which consists of credibility ratings for over 6,000 news and information websites that account for 95% of online engagement with news in the U.S., U.K., France, Germany and Italy. Each site's rating is based on nine basic, apolitical journalistic criteria. Based on the criteria, each site receives an overall designation of green (generally trustworthy) or red (generally not trustworthy) and a trust score of 0-100. NewsGuard's analyst used the News Website Reliability Ratings dataset to identify misinformation sources that appeared in the results for searches conducted as part of the analysis.

For the purposes of this analysis, we focused on searches for which the searcher's intent could reasonably have been to search for accurate information about a topic. The analysis used the same searches across all search engines analysed to ensure parity. Examples selected for the report represent an illustrative, but by no means exhaustive, list of search results that contain misinformation sources. Both the Misinformation Fingerprints and the News Website Reliability Index are available to be licensed for research and other purposes.