


July 1st, 2025

- Announcements: None
- John Lynch: *Information Assessment*
- Facility Question



Contested Information: Misinformation Disinformation and Malinformation

Understanding the infodemic and misinformation in the fight against COVID-19

Misinformation:

False information
shared without intent
to harm

Misinformation:

Sharing outdated
vaccine efficacy
data

Disinformation:

Deliberately using
false information to
deceive

Disinformation:

False claims about
vaccine impacts on
fertility

Malinformation:

Using true
information out of
context

Malinformation:

Highlighting rare
vaccine side effects to
discourage vaccination



World Health
Organization

Ten threats to global health in 2019

Ten threats to global health in 2019

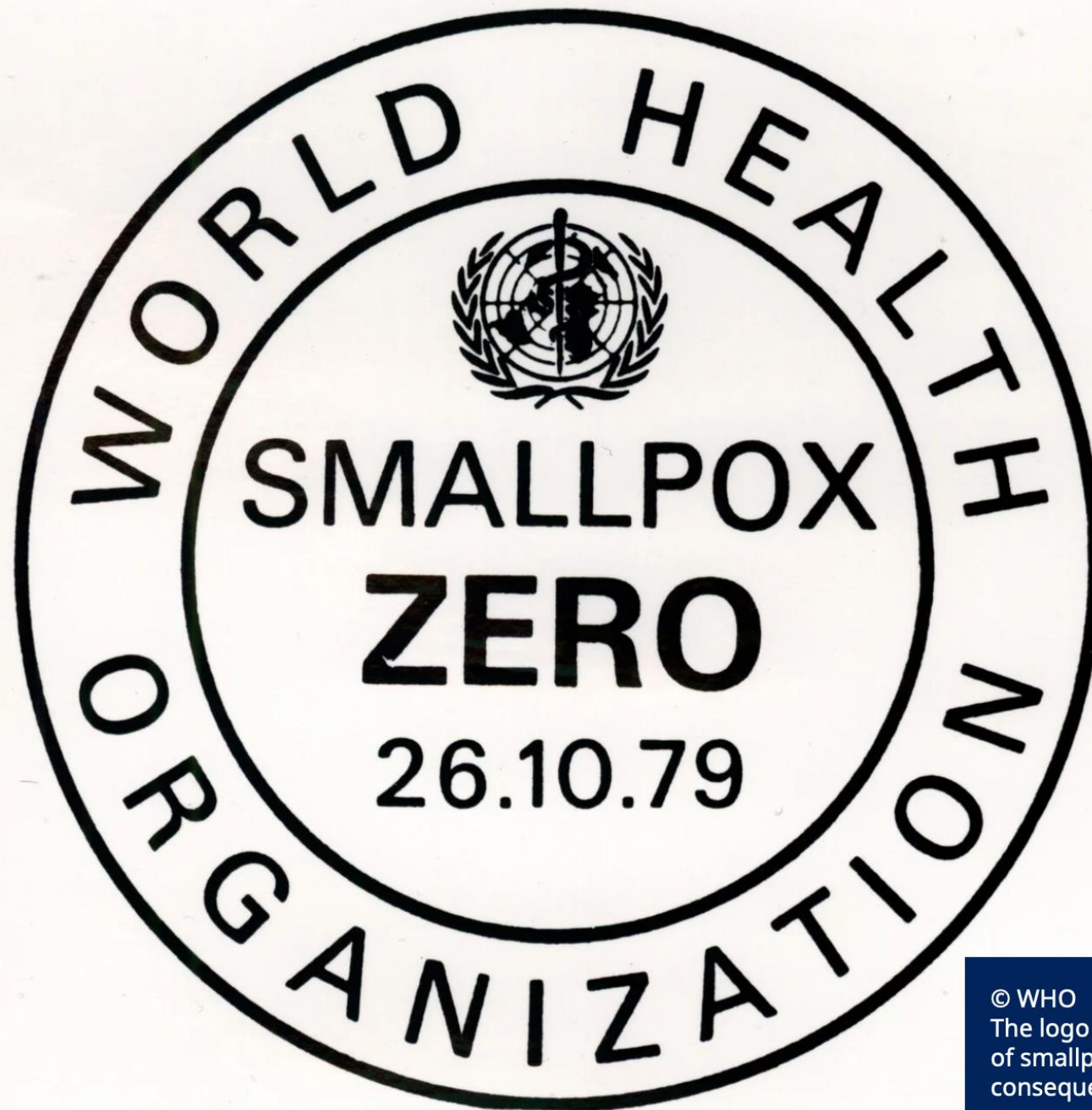
1. Air Pollution/Climate Change
2. Noncommunicable Diseases
3. Global Flu Pandemic
4. Fragile/Vulnerable Settings
5. Antimicrobial Resistance
6. Ebola/HRP
7. Weak Primary Care
- 8. Vaccine Hesitancy**
9. Dengue
10. HIV



The Cow-Pock or the Wonderful Effects of the New Inoculation!—vide.

Wellcome Library, London via
Wikimedia Commons
Edward Jenner among patients in
the Smallpox and Inoculation,
coloured etching after J. Gillray,
1802.

Credits

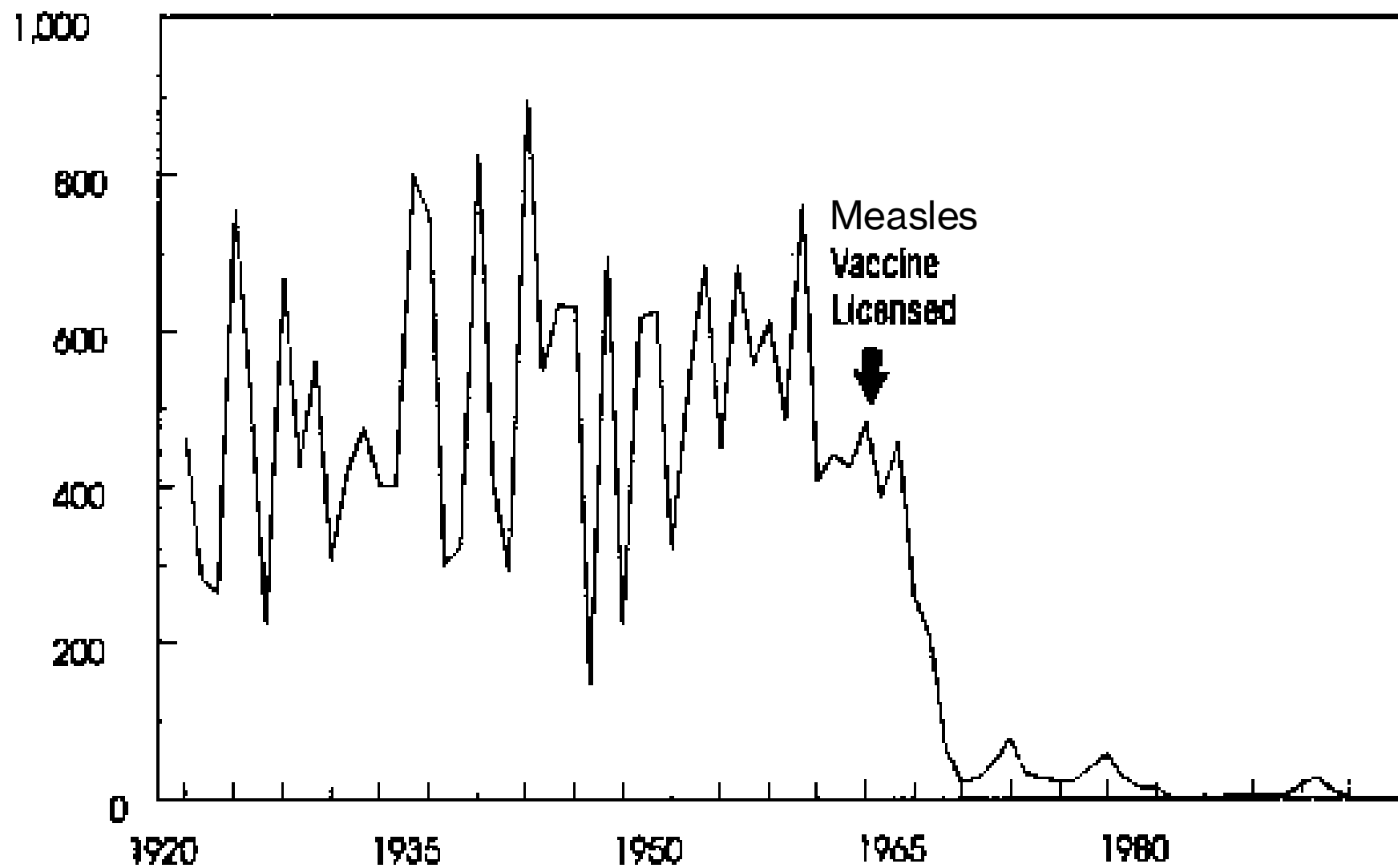


© WHO
The logo certifying the eradication
of smallpox in Somalia, and
consequently, in the world

Credits

—

Cases (x 1,000)



A timeline of the Wakefield retraction

28 February Gastroenterologist Andrew Wakefield reports in The Lancet that his team has found a “genuinely new syndrome”—a link between the measles, mumps and rubella (MMR) vaccine and an increased risk of autism (Lancet **351**, 637–641, 1998).

2002–2004 Numerous studies published in BMJ, The New England Journal of Medicine, The Lancet and other journals find no link between MMR and autism.



28 January The UK General Medical Council rules that Wakefield acted “dishonestly and irresponsibly,” and showed “callous disregard” for the suffering of children involved in his controversial research.

1998

6 April Wakefield and Dublin pathologist John O’Leary present research to a US congressional committee showing that 24 of 25 autistic children tested had traces of the measles virus in their gut.

2000

2004

6 March Ten authors on the 1998 paper issue a retraction (Lancet **363**, 750, 2004), and The Lancet’s editor says the journal, in hindsight, should not have published the study (Lancet **363**, 747–749, 2004).

2010

2 February The Lancet retracts Wakefield’s 1998 paper, noting elements of the manuscript proved to be false (Lancet doi:10.1016/S0140-6736(10)60175-7, 2010).

State of denial

Scientists regularly debate hypotheses and interpretations, sometimes feverishly. But in the public sphere, a different type of dissension is spreading through media outlets and online in an unprecedented way—one that challenges basic concepts held as undeniable truths by most researchers. ‘Science denialism’ is the rejection of the scientific consensus, often in favor of a radical and controversial point of view. Here, we list what we see as a few of today’s most vocal denialists spreading ideas that counter the consensus in health fields.



—**Mark and David Geier:** This father-son duo, based in Washington, DC, was among the first to publish claims that the thimerosal preservative used in certain vaccines causes autism (J. Am. Physicians Surg. **8**, 6–11, 2003). Mark Geier holds a doctorate in genetics; his son, David, has a bachelor’s degree in biology. Together, they promote therapies for autism including chelation, the use of chemicals to remove heavy metals from the body, and Lupron, a drug used to treat prostate cancer and chemically castrate sex offenders. Mark Geier has testified in support of the thimerosal-autism link as an expert witness at vaccine trials across the US; numerous rigorous studies, however, have dismissed this link.



—**David Rasnick:** A biochemist who studied protease inhibitors in the pharmaceutical industry, Rasnick is the former president of Rethinking AIDS, an activist group that calls for the reappraisal of the ‘belief’ that HIV causes AIDS. Rasnick was also a member of South African president Thabo Mbeki’s AIDS Advisory Panel; as part of the panel, Rasnick argued that AIDS does not exist and suggested that HIV testing be outlawed and antiretroviral drugs no longer used in the country.

Although not linking their findings to Rasnick, two studies have independently estimated that more than 330,000 lives were lost in South Africa between 2000 and 2005 because of the delayed use of antiretrovirals (J. Acquir. Immune Defic. Syndr. **49**, 410–415, 2008; Afr. Aff. **107**, 157–176, 2008).

—**Sandy Szwarc:** A food editor and writer, Szwarc has rejected the idea that individuals with obesity face a heightened risk of premature death. Szwarc, a registered nurse, calls government antiobesity efforts “a grossly exaggerated and fabricated scare campaign.”

On her blog “Junkfood Science,” Szwarc presents the ‘obesity paradox,’ which refers to the alleged health benefits associated with obesity, such as reports that obese individuals may have higher survival rates of coronary artery disease than their normal-weight counterparts. Scientists reviewing this data, however, have suggested that this higher survival rate might be due to more aggressive treatment of people with obesity and other factors.



—**Wolfgang Wodarg:** Wodarg is a German physician and past head of health at the Council of Europe. Wodarg recently made headlines accusing flu drug and vaccine makers of influencing the World Health Organization (WHO) to declare swine flu a pandemic. In a recent interview, Wodarg called the H1N1 outbreak “one of the greatest medical scandals of the century,” and he has made a motion that the Parliamentary Assembly of the Council of Europe begin an immediate investigation into the matter. The WHO has called allegations by people who say that it created a false pandemic as “scientifically wrong” and “irresponsible.” The health agency stressed that “[t]he world is going through a real pandemic.”



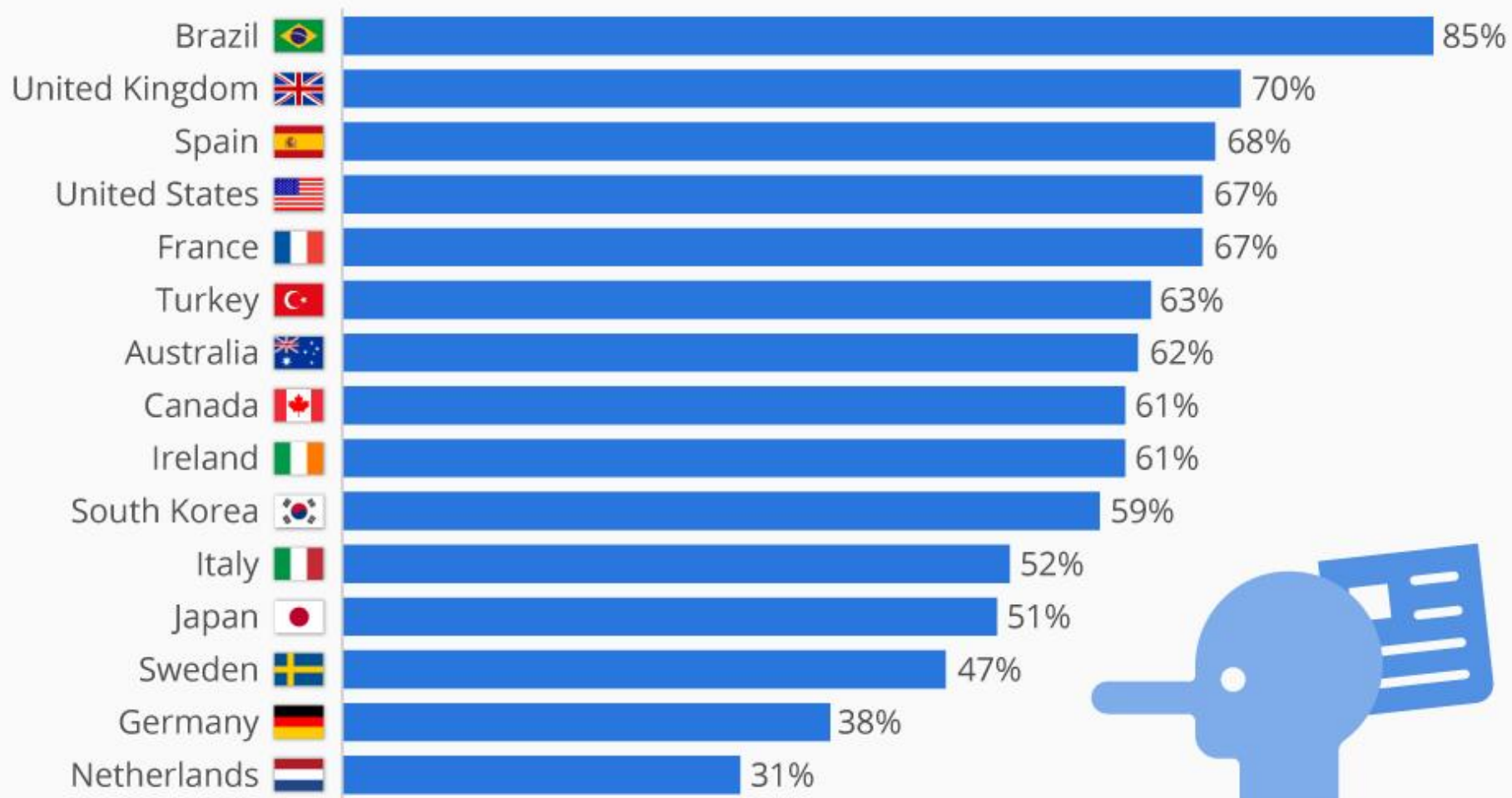
—**Michael Fumento:** Fumento is a journalist and author of several books, including *The Myth of Heterosexual AIDS*. He writes regularly about the promise of adult stem cells and the danger of embryonic stem cells on his blog, “Advise and Dissent,” and for such outlets as the New York Post and Forbes Online. Fumento claims embryonic stem cell research is both “a dead end,” fueled by a greedy lobby, and dangerous, despite evidence from animal studies suggesting its promise. He uses a picture of a tumor with teeth and hair growing from it to illustrate his point.



Megan Scudellari, Durham, North Carolina

Where Concern Is Highest About Fake News On The Internet

Share concerned about what is real and fake on the internet when it comes to news in 2019*



@StatistaCharts

* Selected countries

Source: Reuters Institute Digital News Report

statista



10 TYPES OF MIS- AND DISINFORMATION



FALSE CONNECTION

When headlines, visuals or captions don't support the content



FALSE CONTEXT

When genuine content is shared with false contextual information



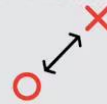
MANIPULATED CONTENT

When genuine information or imagery is manipulated to deceive



SATIRE OR PARODY

No intention to cause harm but has potential to fool



MISLEADING CONTENT

Misleading use of information to frame an issue or individual



IMPOSTER CONTENT

When genuine sources are impersonated



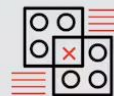
FABRICATED CONTENT

Content that is 100% false, designed to deceive and do harm



PROPAGANDA

When content is used to manage attitudes, values and knowledge



SPONSORED CONTENT

Advertising or PR disguised as editorial content



ERROR

When established news organisations make mistakes while reporting

STOP THE SPREAD OF MISINFORMATION.
THINK BEFORE YOU SHARE, REACT OR RESPOND.

Misinformation Ecosystem

- Social media platforms
- Echo chambers/confirmation biases
- Influencers, celebrities, conspiracy theorists
- Monetization

VAERS Analysis

Weekly analysis of the VAERS data



HOME

REPORTS ▾

ALL POSTS

PURPOSE

ABOUT ▾

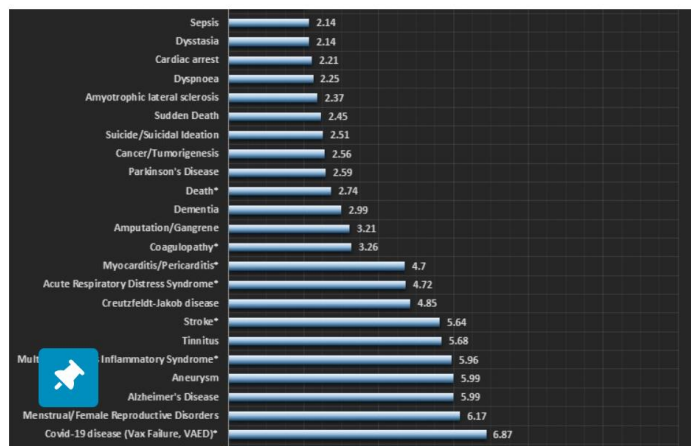


Latest Post

[y Signals Summary for COVID-19 Vaccines through 2/28/2025](#)

[➔ VAERS Summary for COVID-19 Vaccines through 2/28/2025](#)

[➔ CDC VAERS Safety Signals Summary for COVID-19 Vaccin](#)



VAERS WEEKLY SUMMARY

CDC VAERS Safety Signals Summary for COVID-19 Vaccines through 3/28/2025

🕒 APRIL 8, 2025

Since the CDC has chosen egregious dereliction of duty in not performing the weekly PRR Analysis as specified in their VAERS Standard Operating Procedure document of Jan 29, 2021, it...

VAERS WEEKLY SUMMARY

VAERS Summary for COVID-19 Vaccines through 3/28/2025

🕒 APRIL 8, 2025

All charts and tables below reflect the data release on 4/4/2025 from the VAERS website, which includes U.S. and foreign data, and is updated through: 3/28/2025 High-Level Summary COVID19 vaccines...



International Journal of Risk & Safety in Medicine
OnlineFirst
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Sage Journals

Review Article

Pharmaceutical product recall and educated hesitancy towards new drugs and novel vaccines

Peter Rhodes ^{1,2} and Peter I Parry ^{3,4}



Pathology - Research and Practice
Volume 253, January 2024, 155030



Gene-based COVID-19 vaccines: Australian perspectives in a corporate and global context

Peter Rhodes ^{a,1}, Peter Parry ^{b,c}

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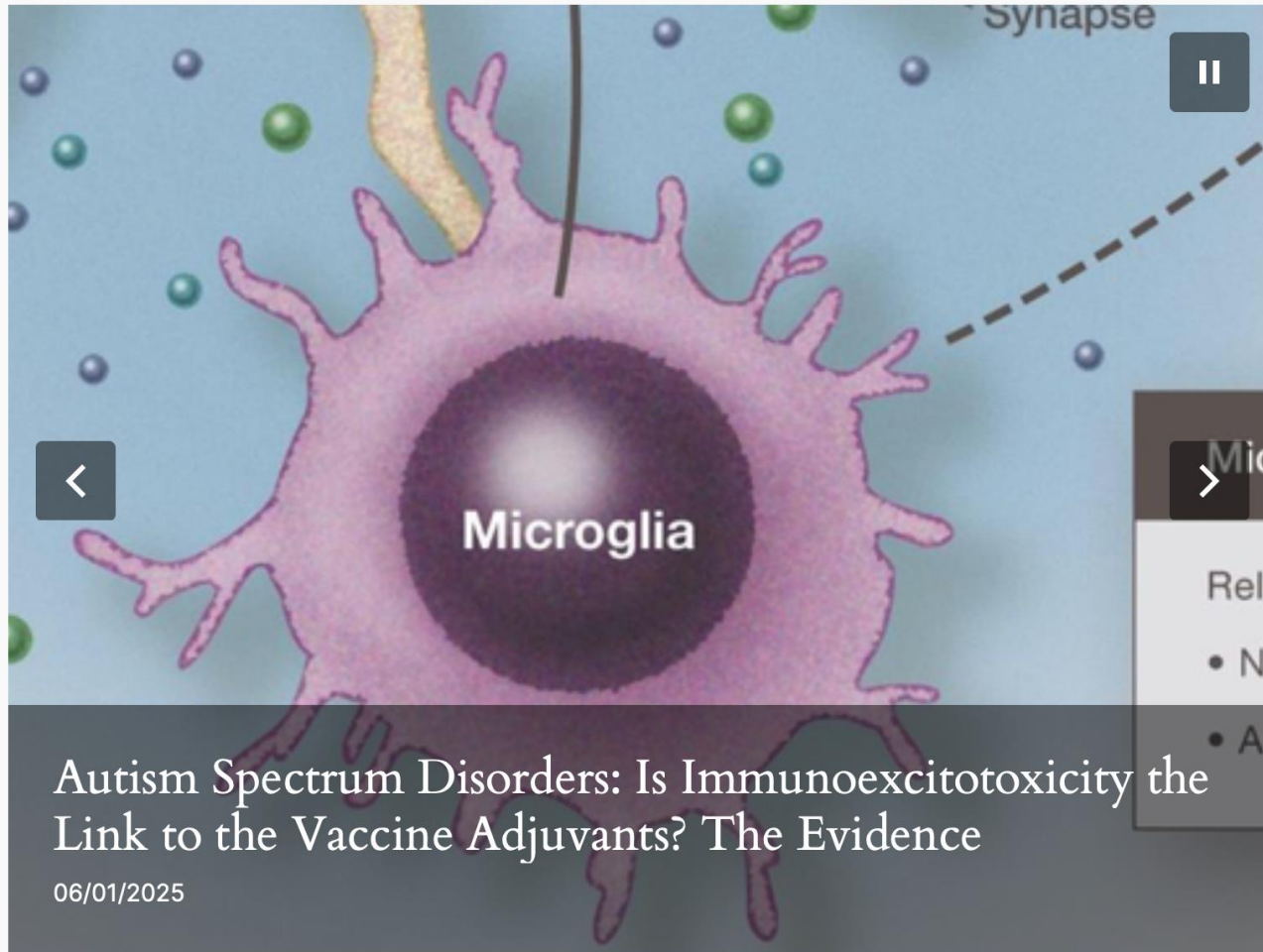
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<https://doi.org/10.1016/j.prp.2023.155030>

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made visible and this is most likely due to a huge backlog being tended to. The fact that the data sets have converged is due to the backlog being sufficiently dealt with. This phenomenon was found to exist to varying degrees in all AEs checked. Figure 9 shows 3 representative plots for Chills, Death and Breakthrough COVID-19 AEs. It is fortunate (in a way) that the death data does not seem to have been a victim of the lag like some others. This phenomenon was also present in other VAERS data or severe but the degree to which the phenomenon occurred in each AE is yet to be ascertained. This can be checked.

Critical Appraisal of VAERS Pharmacovigilance: Is the U.S. Vaccine Adverse Events Reporting System (VAERS) a Functioning Pharmacovigilance System?

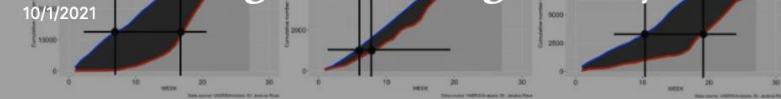
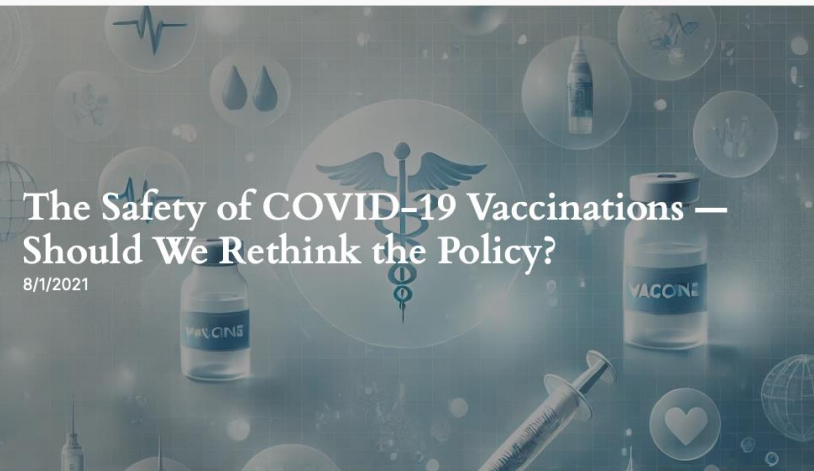


Figure 9.



Why? (Cognitive Biases)

1. Confirmation bias
2. Availability heuristic
3. Dunning-Kruger effect
4. Motivated reasoning

Why? (Emotions/Social)

1. Fear and anxiety
2. Need for control
3. Distrust of authority
4. Community and identity
5. Cognitive dissonance

Consequences 1

- 💀 Vaccine hesitancy
- 💀 Loss of herd immunity
- 💀 Mistrust in healthcare
- 💀 Increased preventable diseases

Consequences 2

- 💀 Delayed/avoided medical tx
- 💀 Use of ineffective/harmful remedies
- 💀 Increased costs
- 💀 Increased disparities

How Can HCWs Respond?

- 😊 Motivational interviewing
- 😊 Active listening and empathy
- 😊 Debunking myths w/o repeating them

How Can PH/Society Respond?

- 😊 Trusted messengers
- 😊 Storytelling + transparency
- 😊 Prebunking vs. debunking

SIFT Method

1. Stop
2. Investigate the source
3. Find better coverage
4. Trace claims to the source

Key Takeaways

1. Med misinformation is a serious public health threat
2. Psychological and social factors makes us all vulnerable
3. Critical evaluation skills help us identify reliable health information
4. We all share a responsibility to prevent the spread of misinformation
5. Building trust and improving health literacy are long-term solutions

Moving Forward

The fight against medical misinformation requires a coordinated effort from individuals, healthcare workers, technology companies, policymakers, and society as a whole.

Remember: In an age of information overflow, our ability to distinguish reliable from unreliable health information is a survival skill that literally saves lives.