

VACCINES AND MISINFORMATION

"Multiplying entities beyond necessity"

Foreword:

Occam's Razor is a philosophical principle attributed to the 14th-century English friar and logician William of Ockham. Though he didn't coin the phrase himself, his writings emphasized a guiding idea: "Entities should not be multiplied beyond necessity." In modern terms, it means that when faced with competing explanations, the one that makes the fewest assumptions—and still accounts for the facts—is the most rational starting point. Occam's Razor isn't about being simplistic; it's about intellectual discipline. It matters because it protects us from the seductive pull of elaborate but unsupported ideas. In a world overwhelmed by information and misinformation, it remains one of our sharpest tools for cutting through chaos and confronting reality.

Occam's Razor slices through the noise with surgical precision: the explanation requiring the fewest assumptions is almost always the most defensible. A global conspiracy to sterilize humanity via vaccines demands a labyrinth of secrets, deception, and flawless coordination across rival governments, scientific bodies, doctors, and billions of silent participants—without a single credible whistleblower, biological fingerprint, or demographic collapse to show for it. Meanwhile, the visible, replicable reality—that vaccines are the imperfect but transparent result of science striving to reduce disease—requires none of that speculative machinery. To reject this simpler truth is not critical thinking; it is surrender—a retreat into fantasy dressed as inquiry. Occam's Razor does not wound the truth. It carves away illusion, leaving only what can endure in the clear light of reason.

Vaccines are not the product of a single company, country, or ideology — they are the outcome of an immense, decentralized, global enterprise. Over 13.5 billion COVID-19 doses have been administered worldwide, across 195 countries, using technologies developed through more than 48,000 registered clinical trials and studied in over 300,000 peer-reviewed publications. The science is scrutinized by more than 200,000 researchers in relevant fields like immunology, virology, pharmacology, and epidemiology, supported by thousands of universities, independent labs, and regulatory agencies. Safety is monitored by national and international surveillance systems — including VAERS (U.S.), EudraVigilance (EU), VSD (U.S.), Yellow Card (UK), and others — each with its own data standards, oversight boards, and transparency protocols. Legal, ethical, and investigative oversight spans hundreds of institutions, including FOIA watchdogs, malpractice attorneys, bioethics review boards, investigative journalists, and whistleblower protection offices. A true conspiracy to use vaccines for sterilization or depopulation would require the airtight coordination of thousands of institutions, hundreds of thousands of professionals, across every political, cultural, linguistic, and religious boundary on Earth, all maintaining perfect silence with zero credible leaks. That level of control has never been achieved by any government, war, religion, or intelligence agency in human history. It is not just implausible — it is statistically and philosophically indefensible.



THE SCIENCE: Do Vaccines Work? Are They Safe?

Mainstream scientific consensus is very strong that:

- Vaccines dramatically reduce the incidence of infectious diseases¹ (smallpox, polio, measles, etc.).
- Serious adverse events are rare, with frequency ranging from about 1 in 3,000 to 1 in over a million, depending on the vaccine and adverse effect considered.² For example, febrile seizures occur in approximately 1 in 3,000 children after the MMRV vaccine, while anaphylaxis is estimated at about 1 in a million doses.
- The benefits for both individuals and public health outweigh the risks in nearly all cases³

This view is supported by:

- Supported by **decades of peer-reviewed research**.
- Agencies like the **CDC, WHO, EMA, and FDA**. While these institutions have faced criticism over transparency and corporate influence, the scientific consensus is based on independently replicated findings across multiple countries and academic systems⁴
- Ongoing surveillance systems — such as VAERS (U.S.), EudraVigilance (EU), and VSD (Vaccine Safety Datalink) — are used to detect adverse event patterns and monitor vaccine safety after rollout.⁷ While VSD is not open to public access, it is actively monitored by independent researchers, and its data are regularly published in peer-reviewed journals.⁶⁴



BUT WHERE IS THE CONTROVERSY?

There **is** academic research and data that points to **concerns**, though often about:

- **Pharmaceutical practices and regulatory capture**, not vaccines per se.
- **Specific vaccine schedules**, ingredients, or lack of long-term data for newer vaccines.
- Ethical debates around **mandates**, not necessarily safety or efficacy.

Some concerns that come up in **scientific or medical journals** include:

1. Lack of Long-Term Trials for New Vaccines

- Especially during COVID-19, mRNA vaccines were approved under Emergency Use Authorization (EUA).
- Critics argue that **long-term autoimmunity, cancer, or fertility risks** are unknown.
- Example: BMJ Open published concerns about transparency and rushed approval timelines.

2. Pharmaceutical Industry Influence

- Research highlights concerns about the pharmaceutical industry's outsized influence on regulatory agencies like the FDA.⁸ This influence occurs through mechanisms such as the Prescription Drug User Fee Act (PDUFA), which allows drug companies to pay fees to the FDA for expedited review. This funding structure now accounts for over 45% of the FDA's drug regulatory budget⁹. Being both a validator and a fundee of the industries it regulates is a structural flaw that complicates public trust. However, the *data* behind vaccine safety often comes from independent academic researchers, not just regulatory summaries.
- Additionally, the “revolving door” phenomenon is a known problem¹⁰, where former pharmaceutical executives take positions in regulatory agencies, and vice versa. This raises concerns about conflicts of interest in the approval and post-marketing surveillance of drugs and vaccines.

3. Adverse Event Underreporting

- CDC and FDA acknowledge VAERS is a passive reporting system; estimates suggest **underreporting** of adverse events.¹¹
- A pilot report from Harvard Pilgrim in 2010 suggested underreporting in passive systems¹², though its findings were preliminary, unpublished, not peer-reviewed, and based on a system that was never fully implemented. While older studies suggested low passive reporting rates, more recent surveillance efforts (VSD, BEST) supplement VAERS and offer active monitoring for severe events.

4. Lack of Placebo-Controlled Trials for Childhood Vaccines

- Critics point out that many vaccines are tested against **other vaccines** or **adjuvants**, not inert placebo.¹³ While true inert placebo-controlled trials are rare in pediatric vaccines post-approval, pre-licensure trials typically use appropriate comparators and are supplemented by robust post-market safety monitoring. This approach follows ethical norms, as withholding standard vaccines from children would be unethical. Nonetheless, it complicates direct comparisons of baseline safety.
- It's true that these active comparators—such as aluminum adjuvants or existing vaccines—are not biologically inert, and this has been a point of valid critique. However, their use allows ethical continuity while still enabling safety evaluation relative to known standards.⁶⁶
- This has led to debate among critics who argue that it complicates interpretation of baseline reactivity, though ethical and regulatory frameworks justify the use of active comparators once a vaccine becomes standard of care

5. Aluminum Adjuvants

- Some studies, such as *Gherardi et al.* (2015) suggest aluminum-based adjuvants may remain in the body longer than expected.¹⁴ While these few studies have raised concerns about adjuvant persistence, most large-scale reviews have not found evidence of widespread harm from aluminum adjuvants. Gherardi's findings have not been replicated, and the hypothesis of widespread aluminum toxicity from vaccines remains unsupported by major health agencies such as the WHO, CDC, and European Medicines Agency, which have reviewed the available evidence and found no indication of population-wide harm.
-

LEGITIMATE DEBATES (“Pro-Transparency”)

Ethical and Scientific Questions Include:

- Should parents have the **final say** in vaccination decisions?
- Can we improve **post-market surveillance** and **compensation programs**?
- Are **combination vaccine schedules** optimal or excessive?
- What's the best way to **handle risks transparently** without losing public trust?

These are **valid areas of research and policy discussion**, even within mainstream circles.

Where Public Mistrust Diverges from Evidence

Not all controversial claims fall cleanly into ‘valid’ or ‘conspiratorial.’ Some arise from incomplete data, poor study design, or premature conclusions. Even well-intentioned skepticism can veer off-course when valid concerns become entangled with misinformation or lack clear data context. Navigating this gray zone requires open, ongoing review and intellectual humility. Be cautious of:

- Assertions that all vaccines cause autism — a theory **repeatedly disproven** by large-scale studies.¹⁵
- **Selective citation** of VAERS data without context or expert interpretation.
- Conspiracy theories that **lack empirical or peer-reviewed evidence**, such as claims of vaccine microchipping or global depopulation agendas.

What VAERS Is:

- A **passive surveillance system** — anyone can submit a report (doctors, patients, family members).¹¹
- Used to **detect patterns or signals** of unexpected or rare adverse events.¹¹
- A tool for early warning, not proof of causality.¹¹ For instance, over 20,000 VAERS reports included the word 'death' after COVID-19 vaccination, yet CDC investigations and insurance mortality records have **not found evidence of causal association**.^{12, 13}

Example: If 10,000 people report chest pain after a new vaccine, that might trigger further investigation — but it doesn't *prove* the vaccine caused the pain.

Strengths:

- Helps spot **rare side effects** that weren't caught in clinical trials²⁰ (e.g., blood clots with J&J COVID vaccine).
 - Publicly available and transparent (you can download and analyze the data yourself).
 - Encourages healthcare providers to be vigilant and track outcomes.
-

Limitations:

1. **Anyone can report**, which means some data may be inaccurate, incomplete, or coincidental.
 2. **No confirmation** that the vaccine caused the event — it's just a temporal association.²¹
 3. **Underreporting is common** — a 2010 Harvard study found fewer than 1% of adverse events were reported.¹⁴
 4. **No denominator** — it doesn't show how many people *didn't* have problems.
-

What's In a VAERS Report? <https://vaers.hhs.gov/data.html>

- Date of vaccination and date of symptoms
- Type of vaccine
- Description of the event
- Outcome (e.g., recovery, hospitalization, death)
- Demographics (age, sex, location)

Why Is VAERS Controversial?

- **Anti-vaccine groups often misuse it** by quoting raw numbers (e.g., “10,000 deaths after COVID vaccine!”) without noting that:
 - The reports aren’t verified.
 - Many are coincidental (e.g., elderly dying from unrelated causes).
 - The CDC does **investigate serious reports**, and many are later found to be unrelated to the vaccine.^{11, 21}
-

Do Vaccines Still Contain Mercury?

The short answer:

No, most vaccines **no longer contain mercury**, especially **not in childhood vaccines** given in the U.S.

The long answer:

The form of mercury used in some older vaccines was **thimerosal**, a **preservative** that contains **ethylmercury** (not the same as toxic methylmercury found in fish or the environment).²²

- **As of 2001**, thimerosal was **removed or reduced to trace amounts** in nearly all **routine childhood vaccines** in the U.S.²²
 - **Flu vaccines** may still contain thimerosal **in multi-dose vials**, but single-dose vials and most pediatric flu shots are **thimerosal-free**.²²
 - Thimerosal is still used in some multi-dose vaccine vials in low- and middle-income countries, where single-dose formats and ultra-cold storage may not be feasible. The World Health Organization continues to endorse these formulations, noting no evidence of harm at vaccine-relevant doses.⁶⁵
-

Does Thimerosal Cause Autism or Mental Health Problems?

The scientific consensus: No credible evidence supports a link between thimerosal in vaccines and autism or other mental disorders. This has been studied extensively.

What About Tics and Dr. William Thompson's Concerns?

 In 2014, Dr. William Thompson, a CDC researcher involved in studies on MMR and autism, expressed concerns that data showing a possible link in one subgroup (African American boys) had been downplayed in a 2004 paper. His statements were widely publicized in anti-vaccine media. However, multiple independent reviews of the original study and its data found no evidence of fraud or scientific misconduct. Notably, Thompson's concerns did not involve thimerosal, and the broader body of research has continued to find no link between vaccines and autism.^{17, 29, 67}

While most attention surrounding Dr. William Thompson's 2014 whistleblower statement focused on MMR and autism, internal CDC communications and follow-up commentary show he also expressed concern about the relationship between thimerosal-containing vaccines and motor tics. Thompson noted that the association between thimerosal and tics was statistically significant, consistent across datasets, and that this signal was not sufficiently emphasized in published interpretations.⁶⁸

Indeed, earlier studies like Verstraeten et al. (2003) did report a correlation between thimerosal exposure and tics, although not with autism.²⁸ However, this finding lacked consistent replication in subsequent large-scale analyses. As a result, while a link to tics has been acknowledged, it is typically classified as "limited" or "inconclusive" by public health authorities rather than dismissed altogether.

Importantly, Thompson himself did not claim that thimerosal caused broad neurological damage. His position was more restrained: that tics were a measurable, documentable neurological outcome worthy of further study, and that public health officials should have been more transparent about that data. His recommendation to begin with tics was based on their statistical clarity, not because he was certain about wider harms.

This case highlights the difference between acknowledging specific safety signals and asserting widespread harm. Thompson's internal criticism sparked valuable scrutiny and debate, but it did not overturn the broader body of evidence showing no consistent population-level neurodevelopmental harm from thimerosal.²⁹ Still, it demonstrates that scientific institutions are not immune to inertia or defensiveness and underscores the importance of ongoing transparency, curiosity, and good-faith debate.

Key Research Studies

◆ Institute of Medicine (IOM) — 2004

- Conducted a comprehensive review of available data and concluded: “The evidence favors rejection of a causal relationship between thimerosal-containing vaccines and autism.”²³

◆ NEJM & Pediatrics (multiple studies)

- A Danish study of **500,000+ children** found **no difference** in autism rates between those who got thimerosal-containing vaccines and those who didn’t.^{24, 25}
- Other large population studies from Sweden, the U.K., and the U.S. all confirmed this finding.^{26, 27, 28}

◆ CDC Studies

- Multiple studies conducted or funded by the CDC show **no link** between thimerosal and neurological or developmental problems.²⁹

◆ Cochrane Reviews

- Known for being ultra-strict in reviewing data, Cochrane Reviews have assessed vaccine safety and autism risk in large trials, though they have not directly evaluated thimerosal-containing vaccines. Broader population studies outside Cochrane have found no evidence linking thimerosal to neurological harm.³⁰

What About Other Vaccines or Combinations?

While most large-scale studies have focused on thimerosal or the MMR vaccine, broader concerns about “too many too soon,” aluminum adjuvants, or cumulative effects across the full pediatric schedule have circulated. These hypotheses have received less direct investigation, largely because the MMR and thimerosal claims dominated public and scientific attention. Some studies have looked at total antigen exposure, cumulative vaccine dose, or overall vaccination schedules, and to date, no consistent pattern has emerged linking them to autism.^{17, 23, 29}

Still, the data is thinner in these areas, and further research could help fill gaps and strengthen public trust. As it stands, no credible evidence has shown that any current U.S. childhood vaccines, whether alone or in combination, cause autism.

Where Did the Autism Claim Come From?

- The modern autism-vaccine panic took off after a now-retracted 1998 paper by Andrew Wakefield in The Lancet, which falsely suggested a link between the MMR vaccine and autism in children. While Wakefield did not invent the idea that vaccines might cause autism — earlier suspicions existed in fringe circles — his study was the catalyst that ignited a global media firestorm, prompting waves of parental anxiety, anti-vaccine activism, and a sharp drop in MMR uptake in the UK and elsewhere. Subsequent investigations revealed that his study was not only methodologically flawed but ethically compromised and financially conflicted. It was fully retracted in 2010. ^{31, 32, 33}
 - Wakefield's study:
 - Was based on only **12 children**.
 - Was later exposed for **fraud, ethical violations, and conflicts of interest**.
 - Led to Wakefield losing his medical license.
-

What About Mental Health or Neurotoxicity?

While **mercury exposure in general** (like from industrial pollution or fish) is linked to **neurotoxicity** ³⁴, **ethylmercury** in thimerosal:

- Is cleared from the body much more quickly than methylmercury. ³⁰
- **Does not accumulate** in the brain in the same way as methylmercury. ³⁵
- Inorganic mercury from ethylmercury breakdown does accumulate in tissues like the kidney and brain, but pharmacokinetic studies have shown that these levels remain far below known thresholds of toxicity. ^{30, 34, 35}
- Has not demonstrated evidence of harm at vaccine-relevant doses, based on pharmacokinetic and tissue distribution studies. ^{17, 23, 29, 30, 35}

Open Scientific Questions (Still Being Studied)

- Could some individuals be **more sensitive** to vaccine ingredients due to genetic or autoimmune factors? Variations in genes related to innate immunity, HLA types, or detoxification pathways (like GSTM1 or MTHFR) may influence how certain individuals process vaccine adjuvants or react to specific antigens. These susceptibilities are likely rare and not yet fully understood. However, they raise important questions about the future of individualized or precision vaccine medicine.³⁶ Expanding research in this direction could improve public trust by acknowledging biological diversity while preserving the core public health benefits of vaccination.
- Are there **better alternatives** to preservatives and adjuvants long-term? This is particularly relevant in cases involving autoimmune-prone individuals, or those with complex chronic illnesses, where the risk–benefit calculus may differ. Some exploratory research exists and should be approached as such. The ‘ASIA’ syndrome hypothesis remains highly controversial and is not recognized as a formal diagnosis by most medical bodies.³⁷ The World Allergy Organization has also stated that ASIA **lacks validated diagnostic criteria** and should not guide vaccine policy.³⁸
- Can public health policy improve **transparency and safety surveillance**?

These are valid areas of research — but as of now, there's no high-quality evidence that thimerosal (or vaccines in general) cause autism or other mental disorders.

THE MYTH OF POPULATION CONTROL

 **Short Answer:** Claims that vaccines are secretly being used for sterilization or population control have been thoroughly investigated and found to be without scientific basis.

- While isolated incidents of unethical medical conduct have occurred in specific populations, the hypothesis of a global sterilization agenda via vaccines requires a level of coordinated deception and scale that vastly exceeds what has ever been documented or shown plausible.
- However, **claims and fears** about this **do exist**, especially in certain parts of the world — and they often stem from **mistrust**, historical abuses, and **partial truths**, not supported by any verifiable evidence.

WHERE THE CLAIM COMES FROM

1. Historical Abuses in Public Health

- **Tuskegee Experiment (1932–1972):** Black men in the U.S. were denied syphilis treatment without informed consent. ^{39, 40}
- **Forced sterilizations:** Occurred in the U.S., Sweden, India, and others—often targeting minorities or disabled people. ^{41, 42, 43}
- **Population control programs:** The UN and NGOs have discussed population *growth* and *family planning*, which feeds mistrust when tied to vaccines. ⁴⁴

 These past abuses are real, and they've understandably made some communities skeptical of **global health efforts** — even when those efforts today may be well-intended.

2. Kenya, 2014 – Catholic Bishops vs. WHO

- **Claim:** A tetanus vaccine campaign was secretly spiked with **hCG**, a hormone that, if combined with certain vaccine adjuvants, *could* theoretically cause infertility. ⁴⁵
- **Reality:**
 - WHO and Kenyan health officials **denied** the allegations.
 - Independent labs found **no conclusive evidence** of sterilizing agents.
 - However, the church claimed 3 out of 6 vaccine vials they tested had hCG. The WHO countered that the testing methods were flawed and the samples possibly contaminated. ⁴⁶

 **What this shows:** No replicated independent evidence supports the population control narrative, and those claims have not stood up to rigorous scientific scrutiny.

3. Bill Gates & Population Control Claims

- Gates has talked openly about reducing population **growth rates** through: “Better healthcare, vaccines, and reproductive services.” ⁴⁷
- Critics often misinterpret this to mean he wants to *reduce population by force*, when in fact:
 - The idea is that **healthier, more secure families** tend to have **fewer children** voluntarily. ^{48, 49}
 - This is supported by decades of demographic data worldwide.

 Although conspiracy theories have falsely portrayed Gates as an architect of coercive population control, **no evidence supports this narrative**.



COMMON FALSE CLAIMS THAT CIRCULATE

- **Claim:** *COVID vaccines cause infertility*
 - **Reality:** Multiple large studies — including those by the CDC and in peer-reviewed journals — have found no impact on fertility, miscarriage risk, or long-term reproductive outcomes. However, temporary menstrual changes — such as delayed periods, heavier or lighter bleeding, or irregular cycles — have been observed in some individuals and confirmed in several observational studies. These changes are generally short-lived, resolving within a few cycles, and have not been linked to any form of impaired fertility. ^{55, 56, 57, 58, 59}
 - **Claim:** *HPV vaccine leads to sterility*
 - **Reality: Debunked.** Large cohort studies found **no association between HPV vaccination and infertility or premature ovarian failure.** ^{52, 60}
 - **Claim:** *Polio vaccine caused AIDS in Africa*
 - **Reality: Disproven conspiracy theory.** Genetic and virological studies have confirmed that HIV originated in simian populations **before polio trials**, and the hypothesis was **formally refuted.** ^{61, 62}
 - **Claim:** *mRNA vaccines alter your DNA*
 - **Reality: False.** mRNA remains in the cytoplasm, where it is used to produce proteins, and is rapidly degraded by normal cellular processes. ^{52, 63}
-



WHAT THE SCIENCE SAYS

- Vaccines undergo **toxicity, fertility, and developmental testing** before approval. ⁵⁰
- There's **no evidence** of modern vaccines causing, sterility, infertility, miscarriages (outside of very rare allergic or autoimmune events) ^{51, 52}
- Population trends worldwide show **fertility declines** correlate with, **urbanization, education, access to birth control, and economic development** — **not vaccines** ⁵³



WHEN SCIENCE FEELS LIKE DOGMA

Critics of vaccine policy often raise a deeper concern beyond safety data: that scientific consensus itself has become dogmatic. They argue that dissent is no longer welcome in the scientific community, especially when it challenges long-standing paradigms like the safety or effectiveness of childhood vaccination. According to this view, researchers, journalists, and public health professionals are not coerced into silence, but socially and professionally conditioned to avoid unpopular truths.

This critique is not entirely without merit. Institutional inertia, career incentives, and professional identity can all act as subtle but powerful constraints on what questions get asked, which findings get published, and who feels empowered to challenge the dominant view. Observer bias is real. Scientists, like anyone else, are influenced by their communities, reputations, and the emotional weight of their past decisions.²³

But acknowledging those pressures does not mean abandoning the idea that truth can still emerge from flawed systems. History shows that paradigm shifts have happened repeatedly in science—on smoking, on leaded gasoline, on hormone therapy, on dietary cholesterol. In each case, insiders eventually broke ranks, and the data, slowly and painfully, forced institutions to evolve. Resistance may be high, but it is not impenetrable.²⁹

Moreover, the notion that consensus is purely performative ignores the internal structure of science. Peer review is adversarial. Journals compete. Researchers are incentivized to publish novel results, including challenges to orthodoxy—especially if the data holds up. Scientists may lose grants for pushing against consensus, but they can also gain reputations for being right when the tide turns. Journalism is no different. Controversial investigations can cost careers, but they can also win Pulitzers.¹⁷

We should always question the motivations behind consensus, especially when it aligns neatly with institutional interests. But we should also avoid the trap of assuming that every shared belief is the product of collusion or cowardice. Sometimes, the consensus exists because the evidence is robust.

Scientific conformity is a risk. But so is reflexive contrarianism. The goal is not to trust blindly or doubt endlessly—but to apply consistent standards of scrutiny in every direction, and to ask whether the structures we distrust are broken beyond repair, or merely in need of constant pressure to stay honest.

WHAT'S WORTH WATCHING CLOSELY

While there's no evidence of vaccines being used as a mass sterilization or depopulation weapon, there **are valid concerns** worth exploring:

- **Informed consent and transparency** in global health campaigns
- **Pharma profits and influence** over policy and research
- **Ethical oversight** of new vaccine technologies (e.g., DNA, mRNA, CRISPR)
- **Monitoring for unintended effects** (especially in novel platforms)

IF YOU WANT TO READ MORE:

1. **The Vaccine Book**¹⁶ – by Dr. Robert Sears (*not anti-vax, but discusses risks openly*)
2. **“Vaccines: What Everyone Needs to Know”**¹⁷ – by Kristen A. Feemster, MD
3. **The BMJ** – independent medical journal with occasional critiques of pharmaceutical practice
4. **Cochrane Library Reviews** – rigorous meta-analyses, often include limitations of data
5. **Children's Health Defense** – a prominent source of vaccine misinformation, though reading it critically can help understand the origins of public mistrust.
www.childrenshealthdefense.org.

VACCINES AND AUTISM - CHOP SUMMARY

The Children's Hospital of Philadelphia (CHOP) website provides a lay-accessible summary⁵⁴ of major studies (like IOM, Madsen, Taylor, etc.) and is an **additional reinforcement source** for:

- General readers
- Media skeptics
- Parent-facing language

Final Thought

Given the history of medical abuses, it's understandable why mistrust exists in some communities. But elevating disproven or speculative claims—especially those unsupported by data—harms public health and distracts from real issues of accountability and equity. To date, the **scientific evidence does not support** the idea that vaccines are being secretly used to kill or sterilize populations. Most claims fall apart under scrutiny or are built on selective data, emotional appeal, or past trauma. That said, **asking hard questions** — especially about corporate power, medical ethics, and global governance — is not “anti-science.” It's actually essential for **keeping science honest**.

References:

1. Andre, F. E., et al. "Vaccination greatly reduces disease, disability, death and inequity worldwide." *Bulletin of the World Health Organization*, vol. 86, no. 2, 2008, pp. 140–146.
2. Institute of Medicine. *The Childhood Immunization Schedule and Safety: Stakeholder Concerns, Scientific Evidence, and Future Studies*. National Academies Press, 2013.
3. Centers for Disease Control and Prevention. "Vaccine Safety." CDC, 12 Jan. 2023, www.cdc.gov/vaccinesafety/index.html.
4. World Health Organization. *Global Vaccine Safety Blueprint 2.0 (2021–2030)*. WHO, 2021, www.who.int/publications/i/item/9789240032781.
5. "VAERS Data." Vaccine Adverse Event Reporting System, vaers.hhs.gov/data.html.
6. European Medicines Agency. "EudraVigilance." EMA, www.ema.europa.eu/en/human-regulatory/research-development/pharmacovigilance/eudravigilance.
7. Centers for Disease Control and Prevention. "Vaccine Safety Datalink (VSD)." CDC, 2023, www.cdc.gov/vaccinesafety/ensuringsafety/monitoring/vsd/index.html.
8. Light, Donald W., Joel Lexchin, and Jonathan J. Darrow. "Institutional Corruption of Pharmaceuticals and the Myth of Safe and Effective Drugs." *Journal of Law, Medicine & Ethics*, vol. 41, no. 3, 2013, pp. 590–600.
9. U.S. Food and Drug Administration. "PDUFA: Prescription Drug User Fee Act." FDA, 2022, www.fda.gov/industry/fda-user-fee-programs/prescription-drug-user-fee-act-pdufa.
10. Lenzer, Jeanne. "FDA Rep Says He'll Go Back to Industry." *BMJ*, vol. 344, 2012, e237.
11. Centers for Disease Control and Prevention. "VAERS: Vaccine Adverse Event Reporting System." CDC, www.cdc.gov/vaccinesafety/ensuringsafety/monitoring/vaers/index.html.
12. Shimabukuro, Tom T. *Hearing on COVID-19 Vaccine Safety Monitoring*. Testimony before the U.S. House of Representatives, Committee on Energy and Commerce, Subcommittee on Oversight and Investigations. 29 June 2021. www.congress.gov/event/117th-congress/house-event/112946.
13. Centers for Disease Control and Prevention. *Selected Adverse Events Reported after COVID-19 Vaccination*. CDC, 7 Mar. 2024, www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/adverse-events.html.
14. Lazarus, Ross, et al. *Electronic Support for Public Health–Vaccine Adverse Event Reporting System (ESP:VAERS)–Final Report*. Agency for Healthcare Research and Quality (AHRQ), 2010. digital.ahrq.gov
15. Doshi, Peter. "Pandemic Influenza: The Elusive History of Vaccine Safety." *BMJ*, vol. 337, 2008, a257.

16. Gherardi, Romain K., et al. "Biopersistence and Brain Translocation of Aluminum Adjuvants of Vaccines." *Frontiers in Neurology*, vol. 6, 2015, article 4.
17. Taylor, Brian, et al. "Vaccines Are Not Associated with Autism: An Evidence-Based Meta-Analysis." *Vaccine*, vol. 32, no. 29, 2014, pp. 3623–3629.
18. Sears, Robert W. *The Vaccine Book: Making the Right Decision for Your Child*. Little, Brown and Company, 2007.
19. Feemster, Kristen A. *Vaccines: What Everyone Needs to Know*. Oxford University Press, 2017.
20. Shimabukuro, Tom T., et al. "Safety Monitoring in the Vaccine Adverse Event Reporting System (VAERS)." *Vaccine*, vol. 33, no. 36, 2015, pp. 4398–4405.
21. Varricchio, Frank, et al. "Understanding Vaccine Safety Information from the Vaccine Adverse Event Reporting System." *Pediatric Infectious Disease Journal*, vol. 23, no. 4, 2004, pp. 287–294.
22. Centers for Disease Control and Prevention. "Thimerosal and Vaccines." CDC, 15 Mar. 2023, <https://www.cdc.gov/vaccine-safety/about/thimerosal.html>
23. Institute of Medicine. *Immunization Safety Review: Vaccines and Autism*. National Academies Press, 2004.
24. Madsen, Kreesten Meldgaard, et al. "Thimerosal and the Occurrence of Autism: Negative Ecological Evidence from Danish Population-Based Data." *Pediatrics*, vol. 112, no. 3, 2003, pp. 604–606.
25. Madsen, Kreesten Meldgaard, et al. "A Population-Based Study of Measles, Mumps, and Rubella Vaccination and Autism." *New England Journal of Medicine*, vol. 347, no. 19, 2002, pp. 1477–1482.
26. Nyren, O., et al. "Risk of Autism and Other Neuropsychiatric Disorders After Infant Vaccination with Thimerosal-Containing Hepatitis B Vaccine: A Swedish Population-Based Study." *European Journal of Epidemiology*, vol. 19, no. 12, 2004, pp. 1031–1037.
27. Andrews, Nick, et al. "Thimerosal Exposure in Infants and Developmental Disorders: A Retrospective Cohort Study in the United Kingdom Does Not Support a Causal Association." *Pediatrics*, vol. 114, no. 3, 2004, pp. 584–591.
28. Verstraeten, Thomas, et al. "Safety of Thimerosal-Containing Vaccines: A Two-Phased Study of Computerized Health Maintenance Organization Databases." *Pediatrics*, vol. 112, no. 5, 2003, pp. 1039–1048.
29. DeStefano, Frank. "Vaccines and Autism: Evidence Does Not Support a Causal Association." *Clinical Pharmacology & Therapeutics*, vol. 82, no. 6, 2007, pp. 756–759.
30. Pichichero, Michael E., et al. "Mercury Levels in Newborns and Infants after Receipt of Thimerosal-Containing Vaccines." *The Lancet*, vol. 360, no. 9347, 2002, pp. 1737–1741.

31. Wakefield, Andrew, et al. "Ileal-Lymphoid-Nodular Hyperplasia, Non-Specific Colitis, and Pervasive Developmental Disorder in Children." *The Lancet*, vol. 351, no. 9103, 1998, pp. 637–641. [Retracted]
32. Godlee, Fiona, et al. "Wakefield's Article Linking MMR Vaccine and Autism Was Fraudulent." *BMJ*, vol. 342, 2011, c7452.
33. "The Editors of The Lancet." *The Lancet*, vol. 375, no. 9713, 2010, p. 445.
34. Clarkson, Thomas W., and Lillian Magos. "The Toxicology of Mercury and Its Chemical Compounds." *Critical Reviews in Toxicology*, vol. 36, no. 8, 2006, pp. 609–662.
35. Pichichero, Michael E., et al. "Comparison of Blood and Brain Mercury Levels in Infant Monkeys Exposed to Methylmercury or Vaccines Containing Thimerosal." *Environmental Health Perspectives*, vol. 117, no. 5, 2009, pp. 749–755.
36. Poland, Gregory A., and Inna G. Ovsyannikova. "Vaccinomics and Personalized Vaccinology: Is Science Leading Us Toward a New Path of Directed Vaccine Development and Discovery?" *PLoS Pathogens*, vol. 4, no. 6, 2008, e1000121.
37. Shoenfeld, Yehuda, and Nancy Agmon-Levin. "'ASIA'—Autoimmune/Inflammatory Syndrome Induced by Adjuvants." *Journal of Autoimmunity*, vol. 36, no. 1, 2011, pp. 4–8.
38. World Allergy Organization. "World Allergy Organization Statement on the Diagnosis of the Autoimmune/Inflammatory Syndrome Induced by Adjuvants (ASIA)." *WAO Journal*, vol. 14, no. 2, 2021, pp. 100512. ScienceDirect, doi:10.1016/j.waojou.2021.100512.
39. Jones, James H. *Bad Blood: The Tuskegee Syphilis Experiment*. Free Press, 1993.
40. Centers for Disease Control and Prevention. "U.S. Public Health Service Syphilis Study at Tuskegee." CDC, www.cdc.gov/tuskegee/index.html.
41. Lombardo, Paul A. *A Century of Eugenics in America: From the Indiana Experiment to the Human Genome Era*. Indiana University Press, 2011.
42. Broberg, Gunnar, and Nils Roll-Hansen. *Eugenics and the Welfare State: Sterilization Policy in Denmark, Sweden, Norway, and Finland*. Michigan State University Press, 2005.
43. Basu, Amrita. *Violent Conjunctures in Democratic India*. Cambridge University Press, 2015.
44. Hartmann, Betsy. *Reproductive Rights and Wrongs: The Global Politics of Population Control*. South End Press, 1995.
45. Sieff, Kevin. "The Tense Standoff Between Catholic Bishops and the Kenyan Government Over Tetanus Vaccines." *The Washington Post*, 14 Nov. 2014, www.washingtonpost.com/news/worldviews/wp/2014/11/14/the-tense-standoff-between-catholic-bishops-and-the-kenyan-government-over-tetanus-vaccines.

46. "WHO, UNICEF Deny Kenyan Bishops' Claim That They Supplied Sterility-Causing Tetanus Vaccines." National Catholic Reporter, 9 Mar. 2015, www.ncronline.org/news/world/who-unicef-deny-kenyan-bishops-claim-they-supplied-sterility-causing-tetanus-vaccines.
47. Gates, Bill. "Innovating to Zero!" TED2010, Feb. 2010, www.ted.com/talks/bill_gates_innovating_to_zero.
48. Bongaarts, John. "The Causes of Educational Differences in Fertility in Sub-Saharan Africa." Vienna Yearbook of Population Research, vol. 13, 2015, pp. 31–50.
49. Bongaarts, John, and Susan Cotts Watkins. "Social Interactions and Contemporary Fertility Transitions." Population and Development Review, vol. 22, no. 4, 1996, pp. 639–682.
50. U.S. Food and Drug Administration. "Development and Licensure of Vaccines to Prevent COVID-19: Guidance for Industry." FDA, 2020, www.fda.gov/media/139638/download.
51. World Health Organization. "Safety of COVID-19 Vaccines." WHO, 2021, www.who.int/news-room/feature-stories/detail/safety-of-covid-19-vaccines.
52. Centers for Disease Control and Prevention. "Myths and Facts About COVID-19 Vaccines." CDC, 2023, www.cdc.gov/coronavirus/2019-ncov/vaccines/facts.html.
53. United Nations Department of Economic and Social Affairs. World Fertility Patterns 2022. UN, 2022, www.un.org/development/desa/pd/data/world-fertility-patterns.
54. Children's Hospital of Philadelphia. "Vaccines and Autism." Vaccine Education Center, 2021, www.chop.edu/centers-programs/vaccine-education-center/vaccine-safety/vaccines-and-other-conditions/autism.
55. Wesselink, Amelia K., et al. "A Prospective Cohort Study of COVID-19 Vaccination, SARS-CoV-2 Infection, and Fertility." American Journal of Epidemiology, vol. 191, no. 8, 2022, pp. 1383–1393.
56. Male, Victoria. "Menstrual Changes after COVID-19 Vaccination." BMJ, vol. 374, 2021, n2211.
57. Harvard T.H. Chan School of Public Health. COVID-19 Vaccines and Menstrual Cycles: Apple Women's Health Study. Harvard University, 2022, <https://hsph.harvard.edu/research/apple-womens-health-study/study-updates/covid-19-vaccines-and-menstrual-cycles>.
58. Pathak, Arvind, et al. "Menstrual Changes Following COVID-19 Vaccination: A Global Survey." Frontiers in Drug Safety and Regulation, vol. 1, 2024, doi:10.3389/fdsfr.2024.1338466.
59. Alvergne, Alexandra, et al. "COVID-19 Vaccines and Menstrual Bleeding: A Meta-Analysis of Observational Studies." Vaccine: X, vol. 13, 2024, 100387, <https://www.sciencedirect.com/science/article/pii/S2590136224000743>.

60. Naleway, Allison L., et al. "HPV Vaccine and Risk of Primary Ovarian Insufficiency: A Population-Based Study." *Pediatrics*, vol. 142, no. 3, 2018, e20180943.
61. Plotkin, Stanley. "AIDS and Polio Vaccine Theory Refuted." *Science*, vol. 292, no. 5519, 2001, p. 615.
62. Worobey, Michael, et al. "Contaminated Polio Vaccine Theory Refuted by Viral Genetics." *Nature*, vol. 428, 2004, pp. 820.
63. Zhang, Linlin, et al. "mRNA Vaccines: Breakthroughs and Future Directions." *Cellular & Molecular Immunology*, vol. 19, no. 4, 2022, pp. 500–512.
64. DeStefano, Frank, and Tom T. Shimabukuro. "Vaccine Safety Monitoring Systems in the United States." *Vaccine*, vol. 37, no. 39, 2019, pp. 5074–5079. Elsevier, doi:10.1016/j.vaccine.2019.06.092.
65. World Health Organization. *Thiomersal and Vaccines: Questions and Answers*. WHO, Mar. 2012, <https://www.who.int/news-room/questions-and-answers/item/thiomersal-and-vaccines>.
66. Jackson, Lisa A., et al. "Randomized Placebo-Controlled Trials of Vaccines: Do They Still Have a Role?" *Vaccine*, vol. 31, no. 35, 2013, pp. 3723–3728. doi:10.1016/j.vaccine.2013.05.051.
67. Institute of Medicine (US). *Immunization Safety Review: Vaccines and Autism*. Edited by Kathleen Stratton et al., National Academies Press, 2004. doi:10.17226/10997.
68. Thompson, William. *Statement from Dr. William W. Thompson, CDC Whistleblower*. Autism Media Channel, 27 Aug. 2014. Archived at Wayback Machine, <https://web.archive.org/web/20140830182611/http://www.autismmediachannel.com/>.