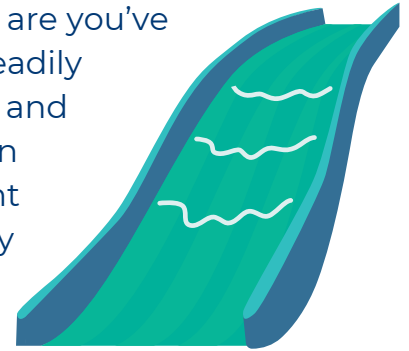


# Social Media & the Slippery Slope of Anti-Vaccine Information

Misinformation and the anti-vaccine world is a beast. Chances are you've encountered those influenced by this monstrous amount of readily available false information, or you've been influenced yourself, and that's okay - WE WERE TOO. You are not alone. It doesn't mean someone is stupid or gullible. In fact, we know people just want the best for their children. Parents suspect danger and they try to connect the dots just as we've been doing since humans began. It's how we ensure our children survive.



The overwhelming number of studies assures us that vaccines are the absolute safest and best choice. And yet, as former anti-vaxxers, we were misled to believe that this was not the case. How did this happen to us?! From our experience, here's what turns parents away from vaccination.

## Social Media Tribes

Social media has allowed people with similar interests to form groups that connect each other from all over the world. I (Lydia) personally have friends I have met all over Canada and the United States through these online groups. There was a group on attachment parenting, breastfeeding, and even cloth diapering. Heather too, found a tribe on Facebook. She became an anti-vax influencer and had thousands of followers. It's as if every aspect of parenting can be turned into a group or social movement. It was then that I found myself in my first anti-vaccine group called "I'm Not Vaccinating". This group made me feel like not vaccinating was the norm. In real life, most parents vaccinate their children. People who refuse vaccinations are few, but the internet makes it feel like they are a majority. They are a loud minority.



## Echo Chambers and How We End Up in Them

The term "echo chamber" is used a lot, but we often don't know how exactly we end up in one, or if we are in one at all. An echo chamber means that every piece of information you are surrounded with confirms what you want to believe. There is a phenomenon known as the triple filter bubble. There are three layers to the echo chamber to fight your way out of:

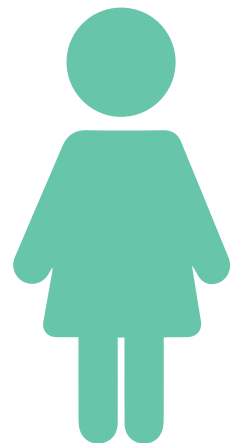
- First, there is your **individual filter**, which is made up of your life experiences.
- Second, there is the **social filter**, which is made up of the people you choose to have in your life and the people you trust to give you information.
- Third, there is the **technological filter**, which is your search engine and social media algorithm bringing you content it thinks you want to see. While it may be what you want to see, it's not always what you need to see.

## The Disinformation Dozen: When "Expert Opinion" Conflicts with the Science

There are millions of doctors and scientists who agree vaccines are the best choice we can make for our children. The number of them who are against vaccination is very few and far between. But they do exist. Looking back, we thought these doctors had some secret knowledge their colleagues were ignoring. The Center for Countering Digital Hate reports that just 12 anti-vax influencers are responsible for almost two-thirds of the anti-vax disinformation we see online today (Counterhate.com). Some of them are doctors. Some of them are natural health practitioners. Nearly all of them have financial incentives to spread disinformation and profit from selling an alternative to vaccination via supplements, appointments, books, and webinars.

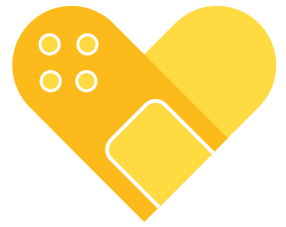
## Anti-vaccine Disinformation Targets Women and Mothers

According to Matoff-Stepp (2014), the most recent statistics show that women in the U.S. make about 80% of the family's health care spending decisions, from vaccines to diet, to choosing a pediatrician and booking appointments. So, it makes sense that the anti-vaccine industry hacks into the psychology and social expectation of motherhood to make the most profit.



## Public Health Influence is Underpowered on Social Media

The global wellness industry drives much of the anti-vax sentiment because it's good for their bottom line. That market is worth \$1.5 trillion dollars (McKinsey.com 2021). Companies can spend 5% of their profit or more on marketing each year. That's \$7.5 billion a year. You can see why social media companies do very little to curtail disinformation. It isn't profitable. Contrast that with the \$300 million per year the CDC spends to promote childhood vaccination. The governments just doesn't have the funding to compete. For every public health ad, a person is exposed to dozens of conflicting pieces of information. Public health is effectively drowned out.



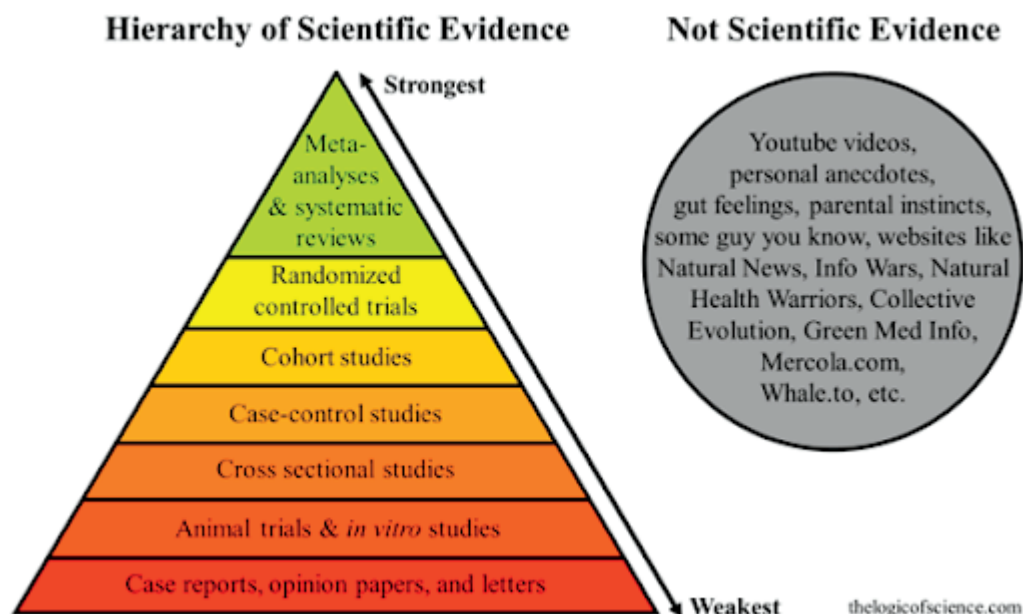
## The Moral Panic Created by The Wakefield Study and the MMR/Autism Folk Devil



In 1998, Dr. Andrew Wakefield published a paper linking vaccines to autism in 8 children. It was retracted due to unethical data collection, among other issues. However, the negative effects of his fraudulent study still persist today. Several measles outbreaks can be traced to low vaccination rates created by this inaccurate study. Despite this link being disproved with studies that included 650,000 children (Hviid et al. 2019), this myth has not been put to rest.

## How Do You Know if the Information is Accurate?

It takes practice to evaluate evidence and even we are still learning. To determine how much weight to give a piece of information, try holding it up against the hierarchy of evidence.



If I am still confused, I will ask someone who is an expert in the field. As newly vaccinating moms, nothing calmed us down like asking a blood-brain barrier expert to explain why vaccines do not cross the blood-brain barrier.

We interviewed Jonathan Jarry, science communicator and a skeptic, for tips on how to spot pseudoscientific grifters.

- ❶ Not a fan of the peer review system and of criticism. Many anti-vaxxers shun the hierarchy of evidence. That is a huge red flag.
- ❷ They will then cherry-pick the data they just shunned. This means they pick and choose which pieces of information to follow, while ignoring the rest of the information if they don't like it.
- ❸ Absence of progress. The anti-vax tropes don't change, and they just get recycled over and over.
- ❹ Evidence they don't like is quickly dismissed and explained away with conspiracies.
- ❺ Fake experts. Often the expert they choose isn't even an expert in the subject they are talking about.



Anti-vaccine beliefs are a deeply complicated hole we fell into and dug our way out of.

There is no shame in being taken in by these tactics and it takes a strong person to step out of this echo chamber and challenge their views. If you are in the midst of this journey, we commend you. You are doing something most people have a very difficult time doing, which is admitting that they could be wrong.

