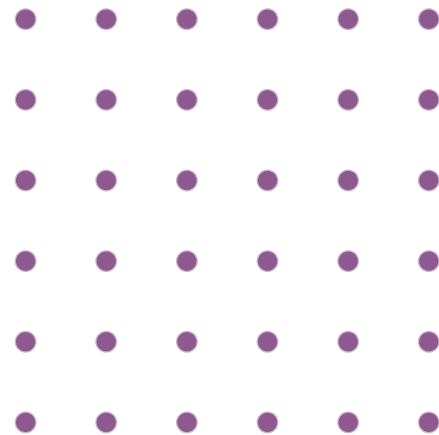


Misconceptions and how to address them



Elisabeth Marnik, PhD | Executive Director, The Evidence Collective



THE EVIDENCE COLLECTIVE



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Science & Medicine Creators Uniting for Public Health.

30+ Subject Matter Specialists · 11B+ Reach over last year · 10M+ Combined Social Followers

Increase Speed

Rapid-response collaboration on emerging public health topics to equip trusted messengers to **prebunk** and address concerns.

Improve Coordination

Experts and creators working in silos produce fragmented, confusing messages. We coordinate across disciplines to speak with one clear voice.

Break Echo Chambers

The communities most impacted by false information don't always engage with institutions. We convene other trusted voices to reach them.

Close the skill gap

We train experts to turn solid evidence into clear, compelling messages that drive real engagement.

Supporters:



The Evidence Collective equips, upskills, and helps to sustain health communicators so they can bridge the gap between science and the public

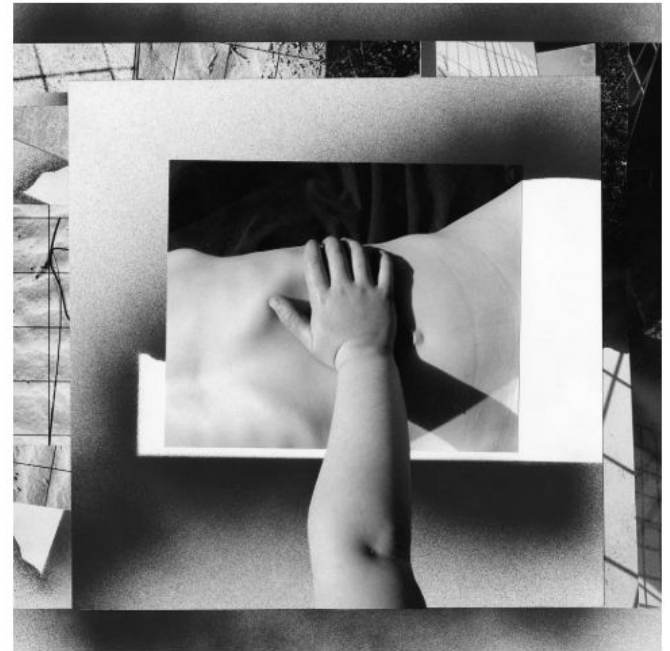
I changed my mind because of:

- People that met me with kindness, patience, curiosity and empathy.
- Building relationships.
- Information delivered without judgment.

OPINION
GUEST ESSAY

I Grew Up Unvaccinated. Now I'm an Immunologist.

Feb. 27, 2026



Vanessa Woods

Source: The NYT

Information alone isn't enough

WHAT WE OFTEN DO

Launch with evidence, statistics, corrections

WHAT THE BRAIN HEARS

You are wrong. I am the authority.

WHAT ACTUALLY HELPS

Stories. Empathy. Curiosity. Relationships. Information.

Current false claims or confusions

MEASLES

- People have died with not from measles.
- Splitting MMR into separate shots is safer
- Measles is “good for you”

COVID-19

- COVID vaccines cause an 82% miscarriage rate
- mRNA vaccines change your DNA
- They do more harm than good

FLU

- All flu shots are switching to mRNA
- The flu shot ‘sheds’ or gives you flu
- The flu shot doesn’t “work”

RSV

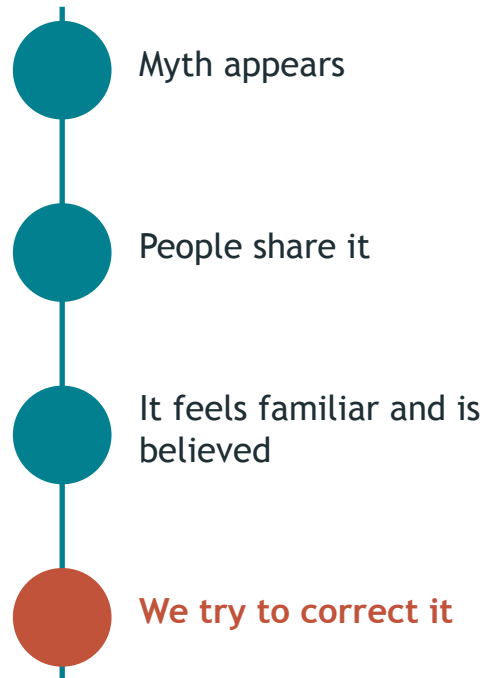
- Infant RSV antibodies killed babies in trials
- Maternal RSV vaccine causes miscarriage

Why Debunking Is an Uphill Battle

Repeating a myth can reinforce it.

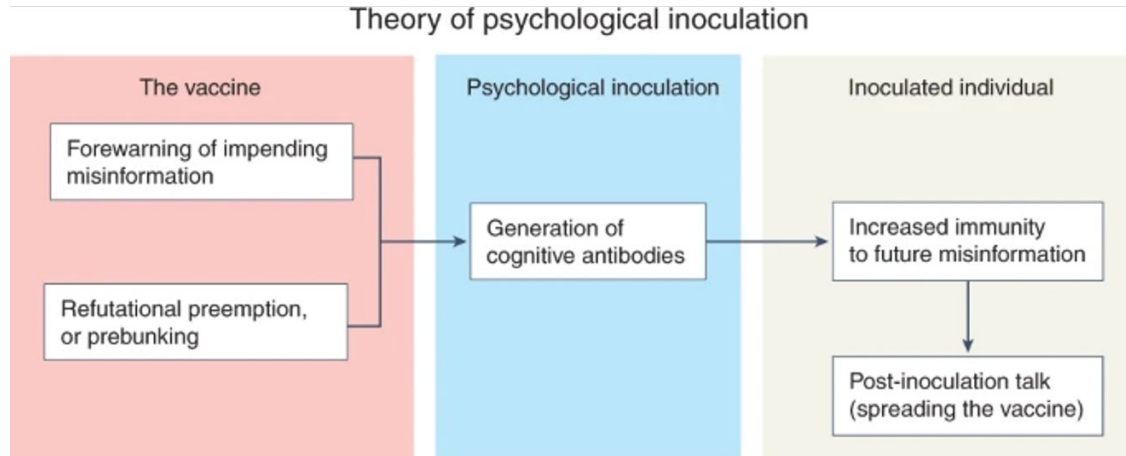
The brain processes familiar information as true. The more we hear something, the more we are likely to believe it.

By the time we're correcting false information, many people have already seen it and may believe it.



Immunizing against misinformation

- Inoculation theory/ “pre-bunking”
- Helps people become less susceptible to misinformation over time.
- This requires advance preparation
 - *E.g. Getting articles and other communications into the hands of people in that window of persuasion early in pregnancy.*



Debunking vs prebunking

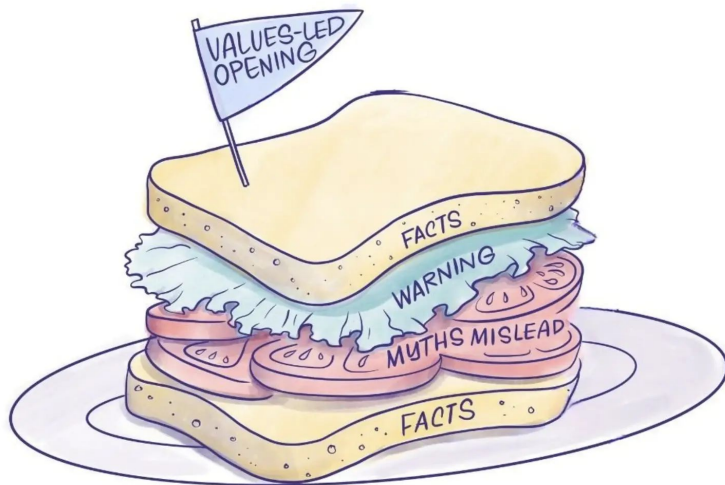
DEBUNKING

- Reactive — after exposure
- Fights familiarity
- Can reinforce the myth
- Corrects the claim

PREBUNKING

- Proactive — before exposure
- Helps get ahead of myths
- Builds cognitive resistance
- Names the tactic, not just the claim

Use the truth sandwich



TRUTH SANDWICH

* An adaptation by The Workshop of George Lakoff's Truth Sandwich.

Facts

Lead with the facts (make them simple and sticky using expert sources)



Warn about the myth

Warn your audience about the myth (just once)



Expose the manipulation technique

Explain how and why the myth is misleading (such as a conspiracy theory)



Facts

End by reinforcing the facts and provide a credible alternative explanation

Source: PMID: 35273402

Prebunk Strategies

Timing of information =
BEFORE false info



Warning of common misleading tactics

Fallacy	What it sounds like	Why it's misleading and how to prebunk
Correlation vs. Causation	"Autism rates increased with increased use of vaccines containing thimerosal."	Two things happening simultaneously don't mean one caused the other. Autism diagnoses continued rising even after thimerosal was removed from childhood vaccines.
Cherry-Picking Evidence	Citing one flawed study while ignoring dozens of high-quality studies showing the opposite.	Science relies on the weight of evidence, not individual studies, especially unvetted preprints.
Moving the Goalposts	When one safety concern is debunked, immediately shifting to a new concern without acknowledging the previous claim was wrong	This prevents productive discussion and suggests the conclusion (vaccines are dangerous) was predetermined.
False Balance	There are concerns on both "sides" when presenting one flawed study against the overwhelming scientific consensus.	Not all viewpoints deserve equal weight - evidence quality and consensus matter.
Appeal to Fear	Dramatically overstating small, well-understood risks while ignoring much larger disease risks	Fear-based messaging prevents rational risk assessment. Contextualize the information presented more globally, e.g., rather than allowing a discussion to focus on a singular risk of the vaccine, compare it to the diseases it prevents.

Three prebunking tips

01

Name the technique

*"You might hear claims that **use fear** about side effects to discourage vaccines. Here's what that looks like and why it's misleading."*

02

Get ahead of the next viral claim

"The flu vaccine helps reduce the complications from a flu infection. As fall shots roll out you may hear people say the flu vaccine gives you the flu, but this isn't true because..."

03

Lead with the truth and quote local voices when possible

Put the fact, not the myth, in headlines and social cards. Quote pediatricians, pharmacists and community leaders in the area where you're publishing and that your audience already trusts when possible.

Words that can be misunderstood & alternatives

Word / Phrase	What people hear	What should be used instead
Works	"This will fully stop the bad thing from happening."	"Reduces risk," "lowers the chance," "makes severe outcomes much less likely."
Effective	Guaranteed protection. I won't get sick.	"Highly protective," "provides strong protection against severe disease." "works by reducing risk of complications"
Immunity	"A force field that prevents infection."	"Immune protection," "immune response," "trained immune system."
Prevents	"This will never happen."	"Reduces the likelihood," "helps prevent," "lowers transmission risk."
Safe	"Zero risk, nothing can go wrong."	"Very low risk," "benefits greatly outweigh risks," "well-studied safety profile." "safer than diseases they prevent"
Protection	"I can't get sick at all."	"Protection against severe illness," "protection against hospitalization and death."
Misinformation	"You're saying I'm stupid or lying." Censorship	"Incorrect information," "inaccurate claim," "not supported by evidence." "false" "lies" "rumors"

Credit: Kristen Panthagani, MD, PhD. You Can Know Things.



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How we help:

- Access to our network of experts and communicators
- Partnerships on shared topic interests
- Topic and event briefs
- Webinar and trainings

Supporters:



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