# Applying Lessons Learned from COVID-19

Research and Development to Future Epidemics

**National Academies of Science** 

Kathleen Hall Jamieson

December 8, 2022

- Identify prevalent misconceptions about COVID-19 vaccination
- Verify that they are consequential
- Identify the evidence and lines of argument used to sustain them
- Pre-emptively undercut them

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## **Identify prevalent misconceptions**

8 fact checkers flagged 4,153 misconceptions from.

- Reuters
- Agence France Presse [AFP]
- Health Feedback
- 4,153 · Health Feedback
  · Associated Press [AP]

  misconception Post Fact Checker

  - Snopes
  - FactCheck.org









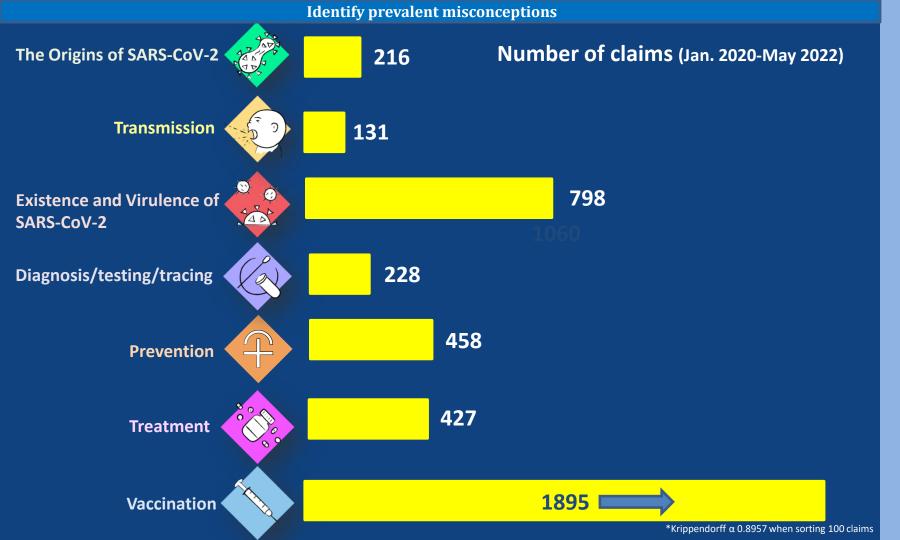








APPC researchers sorted each into one of the taxonomy's 7 categories (Krippendorff alpha above .8 in all categories — Team 1: 0.8287, Team 2: 0.8664, Team 3: 0.90, Team 4: 0.9827).

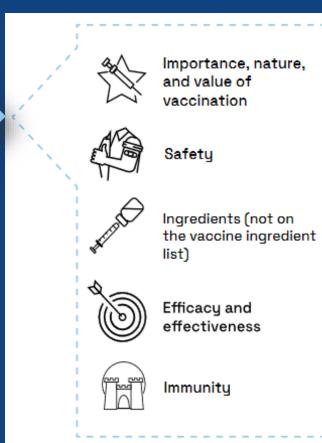


## Identify prevalent misconceptions about vaccination



**Vaccination** 

Claims fact-checked by one of 8 Fact Checking organizations January 1, 2020 – May 31, 2022



Number of claims (Jan. 2020-May 2022)

233

1060

169

216

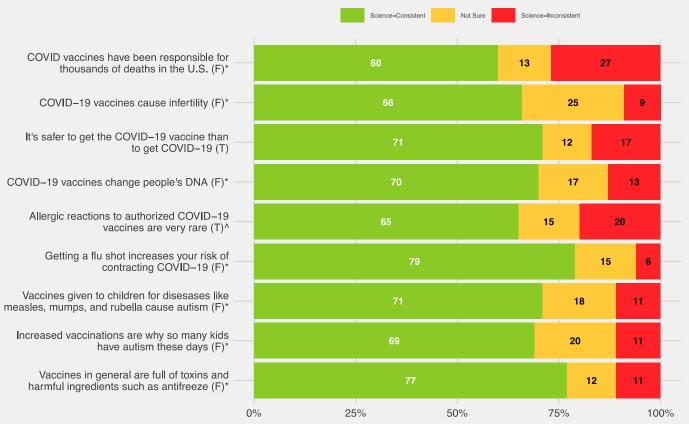
56

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#### Verify that they are consequential

#### **Knowledge Used to Predict Hesitance to Vaccinate Kids**

Romer, Winneg, Jamieson, et al. (2022)



Source: ASAPH Survey: April 2021 – Aug. 2022

\* Differences between White and Black respondents statistically significant (\*p<0.05,^p<0.054)

Sample Sizes [1580–1941], Margins of Error +/- [2.9–3.3] ©2022 Annenberg Public Policy Center

#### Verify that they are consequential

Consequential misconceptions matter because...



Contents lists available at ScienceDirect

#### Vaccine





Misinformation about vaccine safety and uptake of COVID-19 vaccines among adults and 5–11-year-olds in the United States



Daniel Romer 4\*, Kenneth M. Winneg 4, Patrick E. Jamieson 4, Colleen Brensinger 5, Kathleen H. Jamieson 6

"Annenberg Public Policy Center, University of Pennsylvania, United States

Acceptance of vaccine misconceptions predicts hesitance to vaccinate self and predicts reluctance to recommend vaccination of a 5 to 11-year-old child

or COVID-19 in the US, hesitancy continues to be a barrier to the ation. Hesitancy appears to be particularly pronounced among that children be vaccinated against COVID-19. In this research, mation about the safety of vaccination is associated with hesimend vaccination of a 5-11-year-old child for COVID-19. In a il 2021, we assessed belief in both general vaccination misinford-19 vaccines, in particular. As hypothesized, belief in general the uptake in reported vaccination among adults through numend COVID-19 vaccination of children aged 5-11 in January I that vaccine. In addition, misinformation about COVID-19 vachly with more general vaccination misinformation. For both outpredicted vaccination hesitancy beyond concerns about the one's family and children ages 5-11. The findings indicate that beliefs about the safety of authorized and approved vaccines of

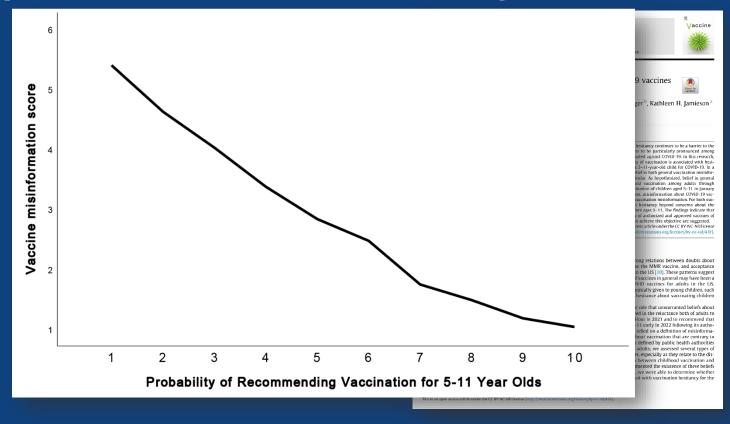
many types and not just those for COVID-19. Some strategies to achieve this objective are suggested.

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Daniel Romer, Kenneth M. Winneg, Patrick E. Jamieson, Colleen Brensinger, Kathleen H. Jamieson, Misinformation about vaccine safety and uptake of COVID-19 vaccines among adults and 5-11-year-olds in the United States, *Vaccine*, September 22, 2022

b Center for Clinical Epidemiology and Biostatistics, Perelman School of Medicine, University of Pennsylvania, United States

## As acceptance of misinformation increases, recommending vaccination decreases



Daniel Romer, Kenneth M. Winneg, Patrick E. Jamieson, Colleen Brensinger, Kathleen H. Jamieson, Misinformation about vaccine safety and uptake of COVID-19 vaccines among adults and 5-11-year-olds in the United States, *Vaccine*, September 22, 2022

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## Paul Prosise @PaulProsise

So formula was pulled ignore early treatment?

Good. Let's make sur DRUG ADVERSE FDA AND COMPAND TO A PORTION OF THE PROPERTY OF THE PROPERTY

25k deaths & 1.2 milli the shots haven't bee

In fact, they're still pueven for children.



## Senator Ron Johnson 🕏

@SenRonJohnson

Sadly, we passed two milestones in VAERS. Over 1 million adverse events and over 21,000 deaths. 30% of those deaths occurred on day 0, 1, or 2 following vaccination. When will federal agencies start being transparent with Americans? Why do they continue to ignore early treatment?

## DRUG ADVERSE EVENT COMPARISON

FDA AND CDC DATA: WORLDWIDE

	Adverse events	Deaths	Deaths/year
1/1/1996 - 9/30/2021:			
Ivermectin	3,756	393	15
HCQ	23,355	1,770	69
Flu vaccines	197,816	2,001	77
Dexamethasone	83,599	15,910	618
Tylenol	112,244	26,356	1,024
Since 2020: Remdesivir	6,504	1,612	921
In 12 months:			

Covid vaccines 1,000,229 21,002 21,002

RON JOHNSON,

**Shares** 



Dec. 6. 2021: RFK, Jr. testifies at the Louisiana statehouse against Gov. Edwards' proposal to add Pfizer's COVID vaccine to Louisiana's childhood vaccine schedule.

"In general, the complaint is a very small percentage of adverse effects actually get reported, and so you have to take this with a grain of salt, but according to the VAERS system, we are over 3,000 deaths of, after, within 30 days of taking the vaccine. About 40 percent of those occur on Day Zero, One or Two."



May 6. 2021: Senator Ron Johnson appearance on "The Vicki McKenna Show."



"Tucker Carlson misrepresents government data on Covid-19 vaccines" AFP FactCheck, May 7, 2021

"[T]he apparent death rate from the coronavirus vaccines" showing that 3,362 people died after receiving Covid-19 shots in the United States between December 2020 and April 23, 2021 as reported to the Vaccine Adverse Event Reporting System (VAERS)

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## **Recommendations:**

Change the name of VAERS

In the interim, communicate that VAERS reports are unverified

- Instead of Vaccines are safe:
  - The benefits of vaccination outweigh the risks
  - Vaccination is safer than getting the disease

## **Change the name of VAERS**

#### **Alternatives:**

- "Vaccination Safety Monitor" (VSM)
- "Vaccination Safety Watch" (VSW)
- "Vaccination Safety Sentinel" (VSS)

### **Advantages:**

- Prime the positive:
  - "safety," not "adverse event"
- Disassociate "vaccine" from presumed, confirmed "adverse event"

## **VAERS**

Vaccine Adverse Event Reporting System

A National Program for Monitoring Vaccine Safety

#### Vaccine Adverse Event Reporting System (VAERS)

The Vaccine Adverse Event Reporting System (VAERS), is a national program managed by the U.S. Centers for Disease Control and Prevention (CDC) and the U.S. Food and Drug Administration (FDA) to monitor the safety of all vaccines licensed in the United States. VAERS collects and reviews reports of adverse events that occur after vaccination. An "adverse event" is any health problem or "side effect" that happens after a vaccination. VAERS cannot determine if a vaccine caused an adverse event, but can determine if further investigation is needed.

#### VAERS provides valuable information

VAERS is an early-warning system that detects problems possibly related to vaccines. The system relies on reports from healthcare providers, vaccine manufacturers, and the general public. Reporting gives CDC and FDA important information to identify health concerns and ensure vaccines are safe in order to protect the public's health.

#### VAERS staff evaluate reports of adverse events

VAERS defines a "serious adverse event" as life-threatening illness, hospitalization, prolongation of an existing hospitalization, permanent disability or death. Once adverse events are identified using VAERS, they may be monitored in other immunization safety systems to confirm if a particular adverse event is related to a vaccination and identify any specific risk factors.

#### Anyone can report to VAERS

Anyone can submit a report to VAERS, including patients, family members, healthcare providers, vaccine manufacturers and the general public. CDC and FDA encourage anyone who experiences an adverse event after receiving a vaccine to report to VAERS.

#### How to report to VAERS

You can report to VAERS online at https://vaers.hhs.gov/index.

For further assistance reporting to VAERS, visit <a href="https://vaers.hhs.gov/index">https://vaers.hhs.gov/index</a> or contact VAERS directly at <a href="info@VAERS.org">info@VAERS.org</a> or 1-800-822-7967.

#### VAERS data are available to the public

VAERS data can be downloaded at <a href="https://yaers.hhs.gov/data/index">https://yaers.hhs.gov/data/index</a> or searched at <a href="http://wonder.cdc.gov/yaers.html">http://wonder.cdc.gov/yaers.html</a>. Privacy is protected and personal identifying information (such as name, date of birth and address) is removed from the public data.

For more information about VAERS:

E-mail: info@vaers.org

Phone: 1-800-822-7967

Web site: www.vaers.hhs.gov







"Healthcare providers are encouraged to report all clinically significant odverse events after voccination to VAERS even if it is uncertain whether the voccine coused the event. They are also required to report VAERS obv

## In the interim, attach:

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This qualifier to any statement about reports filed in VAERS:

"unverified"

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## **Summary:**

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## **Funding:**

SciCheck's COVID-19/Vaccination Project is made possible by a grant from the Robert Wood Johnson Foundation.

The views expressed here do not necessarily reflect the views of the Foundation. The goal is to increase exposure to accurate information about COVID-19 and vaccines, while decreasing the impact of misinformation.

## Thank you to current and former APPC staffers!

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## As well as to our team of undergraduate coders!

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