



# Combatting Anti-Science: How to be an Effective COVID Myth-buster

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# ***Combatting Anti-Science: How to be an Effective COVID Myth-buster***

Friday, October 14<sup>th</sup>, 2022

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# Disclosures

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Dr. Rosenfeld does not have any disclosures.

This program is made possible and supported by the Office of Minority Health (OMH) of the U.S. Department of Health and Human Services (HHS) with 100% funded by OMH/OASH/HHS, or the U.S. Government.

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# Outline

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- Objectives
- Definitions
- Online Health Literacy
- Misinformation Inoculation
- Common Myths
- Active Listening & Respectful Bridging

# Objectives

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- Learn how to help patients discern whether they are getting legitimate information online about COVID-19.
- Describe 2 or 3 common myths about COVID-19 or the COVID-19 vaccines that circulate on social media.
- Employ the skills of active listening and respectful bridging to practice speaking about COVID myths in a role play with a partner.

# Terms

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- Information
- Rumor
- Myth
- Misinformation
- Disinformation

# Definitions

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**Information:** facts that are meaningful, actionable and trusted

**Rumor:** story or report of uncertain or doubtful truth that can spread rapidly through a community (can be true or false)

**Misinformation:** accidental untruths or wrong/misleading information that can distort or distract from facts

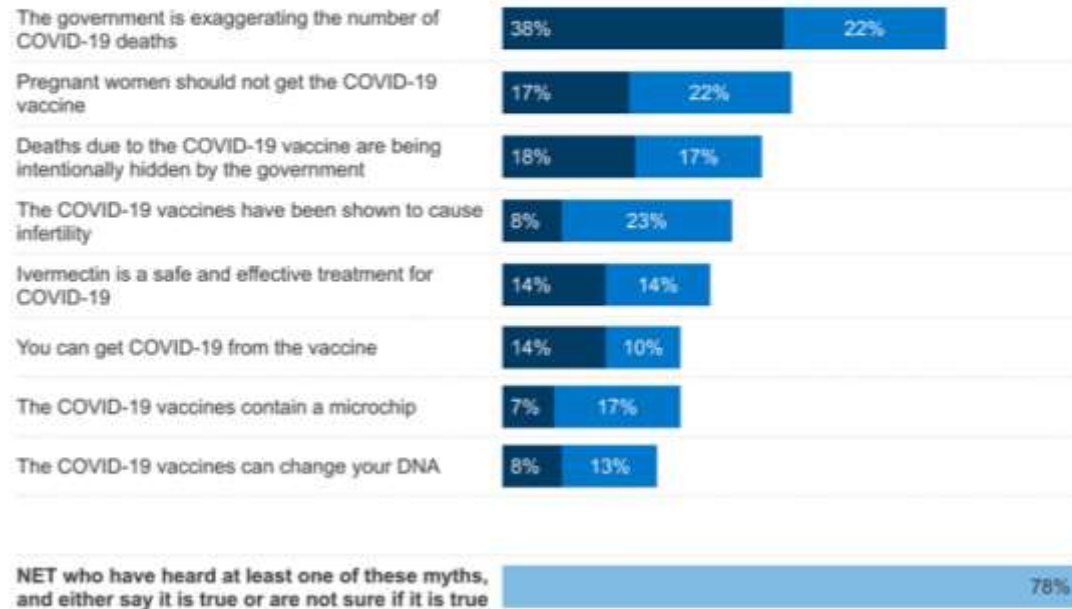
**Disinformation:** untruths told on purpose, usually to push a political, economic or personal agenda

## COVID-19 Myths & Misinformation are Widely Believed

### Nearly Eight In Ten Believe Or Are Unsure About At Least One Common Falsehood About COVID-19 Or The Vaccine

Have you heard anyone say or have you read anywhere that...? IF YES: To the best of your knowledge is that true or false, or do you not know whether it is true or false?

■ Have heard, believe to be true ■ Have heard, don't know if true ■ NET



NOTE: See topline for full question wording.  
SOURCE: KFF COVID-19 Vaccine Monitor (October 14-24, 2021)

KFF COVID-19  
Vaccine Monitor



# Key Considerations for Communicating Science

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Antivaccine aggression kills: 200, 000 unvaccinated Americans needlessly lost their lives to COVID-19 during the second half of 2021

Many refusing COVID-19 vaccinations are victims to disinformation

While social media is widely touted as the culprit, Facebook and other platforms are not generating the disinformation content

Disinformation arises from three major sources:

- The 'disinformation dozen' nongovernmental organizations identified by Center for Countering Digital Hate (CCDH) - <https://www.counterhate.com/disinformationdozen>
- State actors including the Russian Government
- Political extremism in the US

Hotez, P. (2022). Communication science and protecting scientists in a time of political instability. Trends in Molecular Medicine, 28(3), 173-175.



# Online Health Literacy

How to identify trustworthy sources?



# Is your WebLitLegit?

Finding good health information on the internet



- L** Last review?  
Is it up-to-date?
- E** Exist, why does it exist?  
Selling something?
- G** Good, is it a credible source?  
Can you trust?
- I** Information source?  
Research-based vs. opinion?
- T** True, too good to be true?  
What does it promise or offer?

Use these **5 steps** to evaluate your online health information:

- 1** Find out who runs or created the site
- 2** Consider reasons you can trust or not trust the site
- 3** Find out when the site was written or last revised
- 4** Find out where information comes from, and see if it lists scientific research
- 5** Find out why the site exists and if the site is selling something

Source: <https://www.safertarexas.org/resources/webillit/>

# Websites that are LEGIT!!!

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**Look for these at the end of your website links:**

.org

<https://www.healthinaging.org>

.gov

<https://eldercare.acl.gov>

.edu

<https://www.unthsc.edu/center-for-geriatrics/>

<https://www.alz.org/>

<https://www.cdc.gov/DiseasesConditions/>



### POLARIZATION

By finding existing grievances and blowing them up, you can drive people apart and make them think a story is much more important than it really is.



### TROLLING

Trolling is trying to evoke an emotional response such as anger, irritation or sadness. Don't hold back: your opponent's tears are your followers' mead!



### DISCREDIT

Is someone attacking your credibility? Strike back. Don't apologize, don't play nice, and above all: don't retreat!



### EMOTION

Playing to people's emotions (fear, anger or compassion) is a great tool for spreading your message.



### CONSPIRACY

You can use people's desire for the 'truth' to lure them into your band of followers.



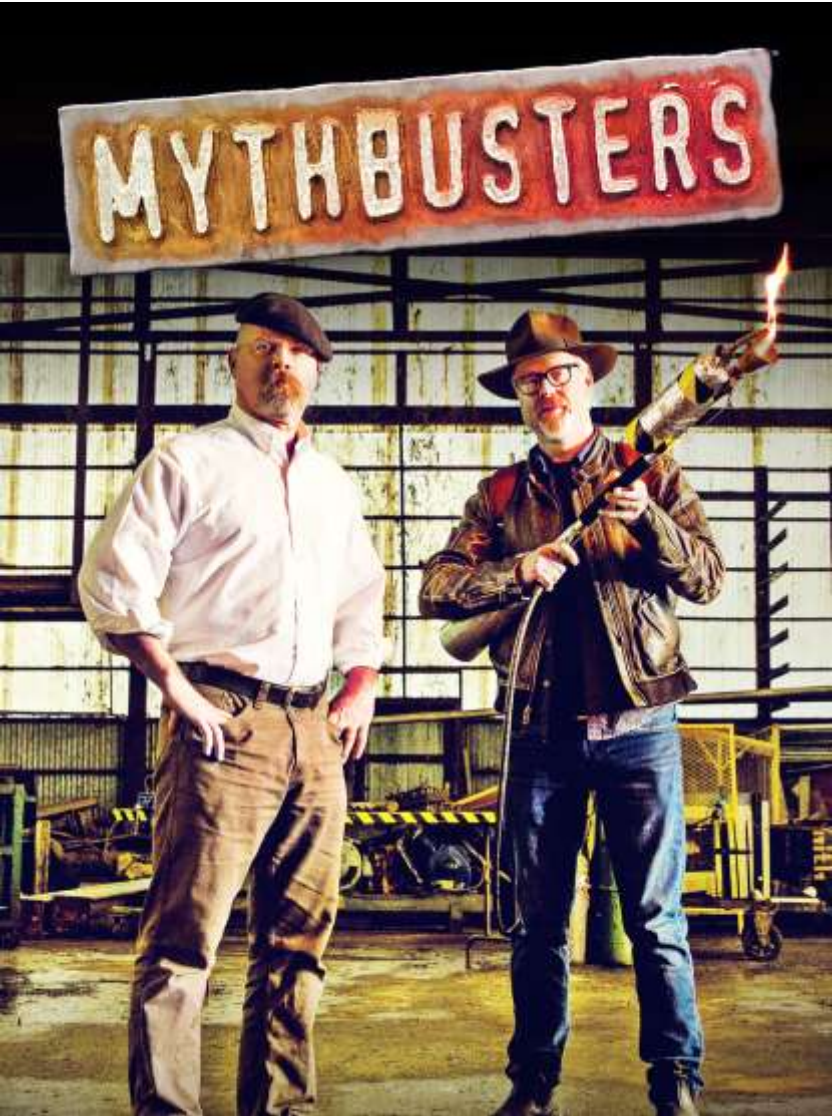
### IMPERSONATION

Impersonating someone else and disguising yourself as a credible news source can be highly effective.

# Social Media

## Get Bad News Game

<https://www.getbadnews.com/#play>



# COVID-19 Mythbusting Trials

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Two studies (UK and Australia)

Testing Mythbusting formats using infographics and text-based messages

- UK (n=2,215)
  - Question-Answer
  - Fact-Only
  - Fact-Myth
- Australia (n=788)
  - Posing Questions
  - Repeating Myths
  - Making Factual Statements

Question & Answer and Posing Questions were most effective

No backfire or negative effects of repeating myths

Challenger, A., Sumner, P. & Bott, L. COVID-19 myth-busting: an experimental study. BMC Public Health 22, 131 (2022). <https://doi.org/10.1186/s12889-021-12464-3>.



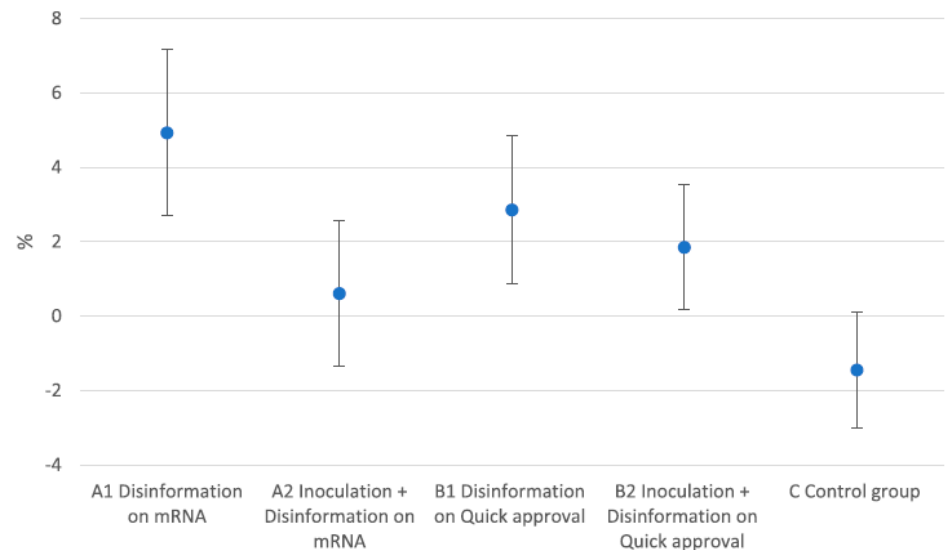
# Pre-Bunking or Message Inoculation

Online experiment with pre-post design

2,500 randomized English & French-speaking participants in Canada

- Misinformation
- Pre-Bunking + Misinformation
- Controls

Primary outcome: intention to vaccinate



Difference in % pre-post vaccination intention based on message type.

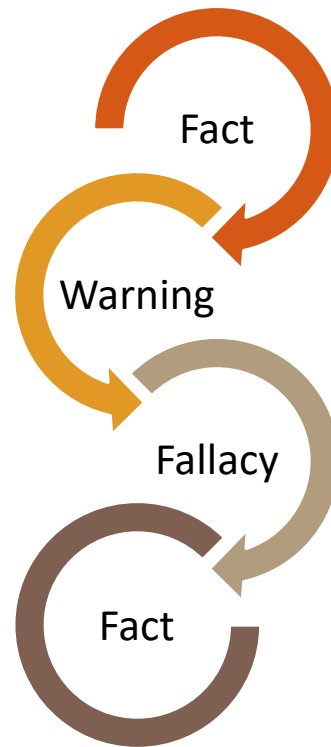
Vivion, M., Anassour Laouan Sidi, E., Betsch, C., Dionne, M., Dubé, E., Driedger, S. M., ... & Canadian Immunization Research Network (CIRN). (2022). Prebunking messaging to inoculate against COVID-19 vaccine misinformation: An effective strategy for public health. *Journal of Communication in Healthcare*, 1-11.





# Misinformation Inoculation

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Source: UNICEF Field Guide on Addressing Misinformation

# Misinformation Inoculation

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Fact: COVID-19 vaccines do not themselves cause COVID-19

Warning: you will hear many people say that getting a COVID-19 vaccine will give you COVID-19. Thus, there is no need to get vaccinated.

Fallacy: this is a misrepresentation of the way the COVID-19 vaccines work. This piece of misinformation is targeting people's fears about a new vaccine.

Fact: the vaccines CANNOT make you sick with COVID-19. The mRNA vaccines provide the body with instructions on how to build the SARS-CoV-2 spike protein, not the virus itself. Our body uses these instructions to create an immune response to the spike proteins.



# Active Listening

Shows the person that you are engaged

Encourages respect and understanding

Active listening includes:

- Asking questions to get context
- Giving undivided attention
- Not seeking to 'win' the conversation
- Using positive body language
- Summarizing, reflecting and clarifying
- No judgement

Don't underestimate the power of listening!

# Respectful Bridging

Statements that allow you to move a conversation from mis- or dis-information to facts

Using active listening, listen for connections in what someone is saying to the facts

Don't just tell someone what they said is untrue- provide the most relatable fact

Statements can include:

- I don't know the answer to that question, but what I do know is...
- I'm not an expert in that but what I can tell you is...
- No, let me explain (or clarify)...
- And the most important thing to remember is...
- What many people don't realize is...
- Let's put this in perspective by...

# Five key messages about COVID-19 vaccines

You can help stop the pandemic by getting the COVID-19 vaccine & boosters

COVID-19 vaccines are safe and effective

COVID-19 vaccines are free

COVID-19 vaccines may have some side effects and these are normal signs that your body is building protection

You should consider wearing a mask in crowded spaces even after getting vaccinated

Offer to be an information resource



# Common Myths/Misinformation

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- COVID-19 vaccines will cause infertility
- COVID-19 deaths are miscounted and overinflated
- COVID-19 vaccines are being used for population control/a global genocidal effort
- COVID-19 vaccines contain a micro-chip to track people
- COVID-19 vaccines will make you sick with COVID-19
- COVID-19 boosters lead to more variants

*Questions?*

