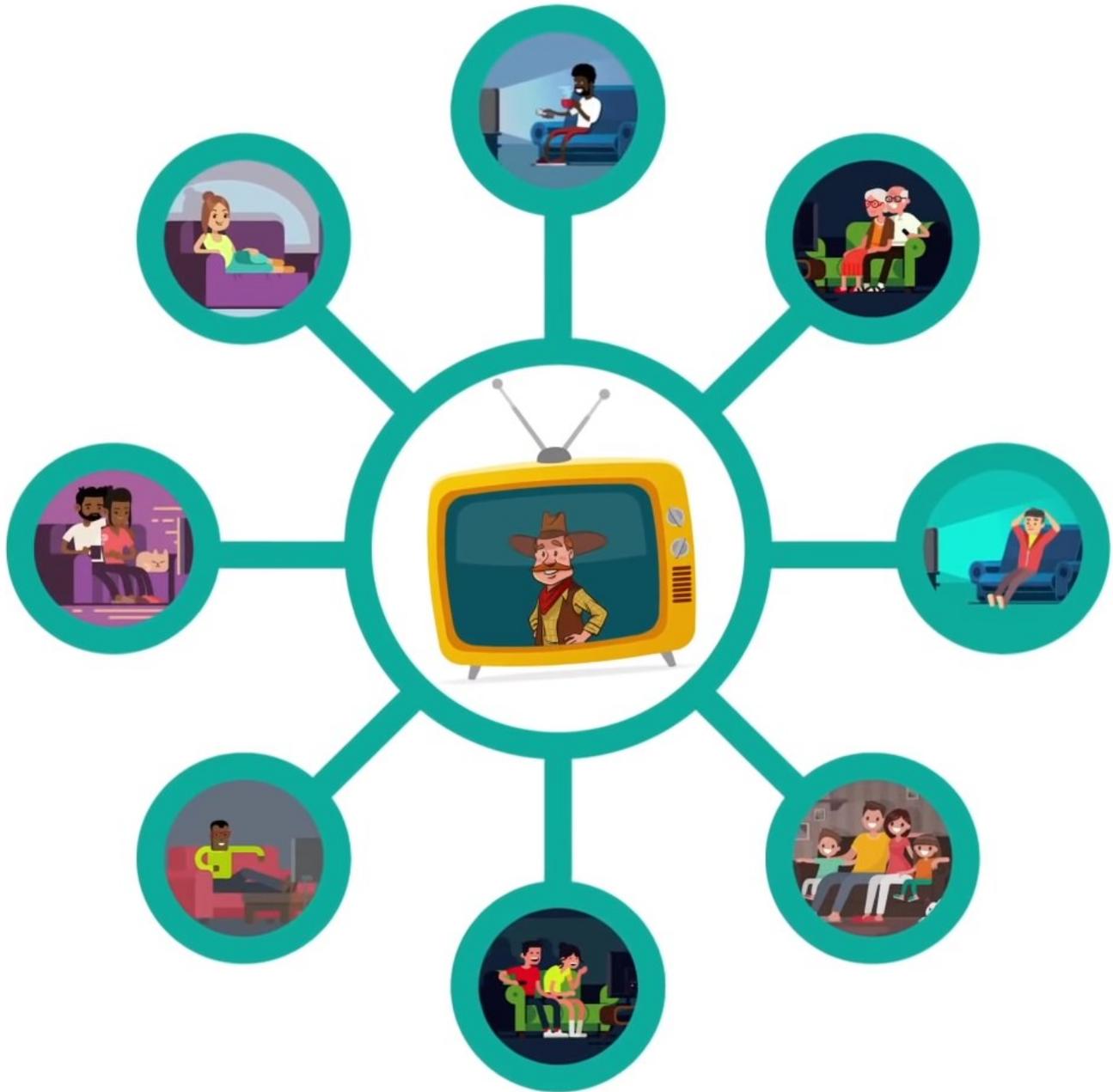


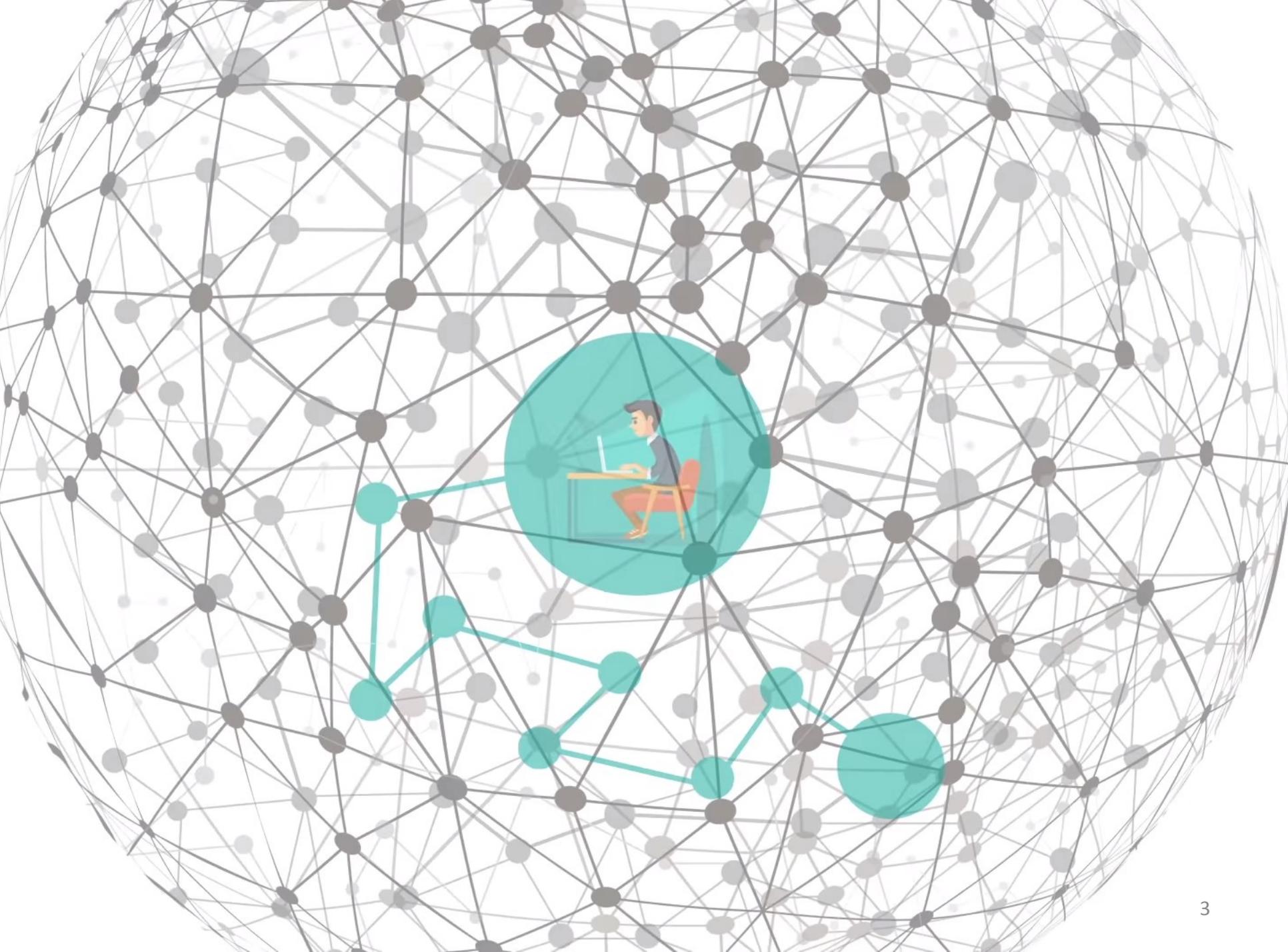
Responding to Health Misinformation Online



Part 1: The Misinformation Landscape







Gatekeepers	→	Networks
High cost	→	Low cost
Consumers	→	Broadcasters
Scarcity	→	Overload
Discrete	→	Atomized
Provenance	→	Pseudonymity
Authority	→	Authenticity
Trust	→	Doubt

Types of medical misinformation

Denialism

Snake oil

Denialism techniques:

Cherry-picking

Double standards

Compromised experts

Conspiracy theory

Snake oil techniques

Cure-alls and miracle cures

Personal testimonials

“Natural”

Freemium model

How misinformation spreads

Mainstream news

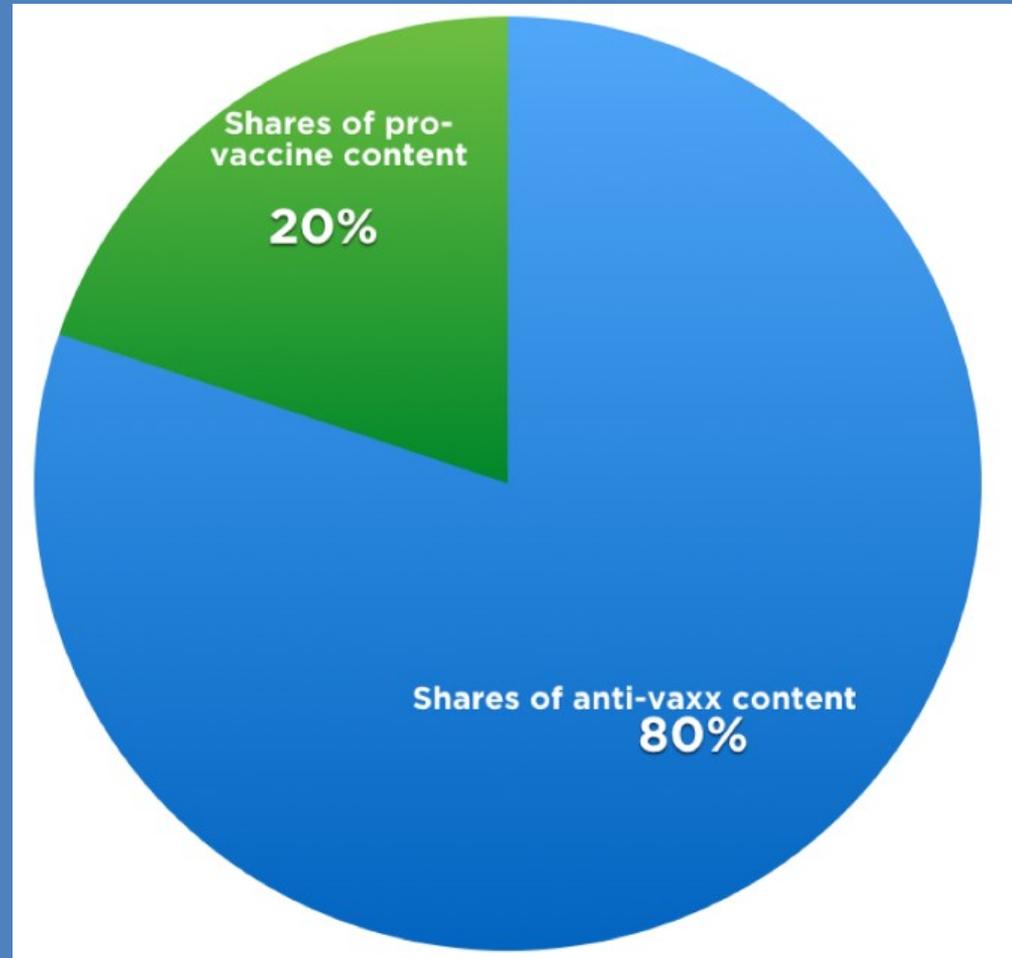
Search

Social media

Community values

“Anti-vaxxers look for ‘momversation’ groups. Because they know that new parents are usually novices who haven’t thought a lot about vaccines and are very susceptible to scientific jargon because they don’t have the information literacy to sort through the rest of the internet.”

Joan Donovan, Director of the Technology and Social Change Research Project, Harvard



The proportion of social-media shares of the most popular vaccine-related content in the 24 months between April 24, 2017, and April 24, 2019.

Half of all parents with small children have been exposed to misinformation about vaccines on social media

Moving the Needle: Promoting vaccination uptake across the life course

Royal Society of Public Health

“You can easily dominate search results for a term when you've created the term and only in-groups use it.”

Renee DiRiesta, misinformation expert

Reasons people share misinformation

Sincere belief

Money

Polarization

Flypaper

Reasons people share misinformation

“Many “anti-vax” parents see themselves as experts on their own children, as best able to decide what their children need and whether their child needs a particular vaccine, and better qualified than health experts or public health agencies to decide what is best for their family.”

Jennifer Reich, University of Colorado, Denver

“You have your hardliner true believers pushing anti-vaccine information out of a real anti-scientific belief system, but then you have a whole group of other people who are monetizing it and are selling products with a marketing scheme to ‘take down big pharma.’”

Joan Donovan, Director of the Technology and Social Change Research Project, Harvard

Why is medical misinformation effective?

Data voids and first-mover advantage

Rabbit holes and filter bubbles

Majority illusion

Narrative and emotional appeal

Why is medical misinformation effective?

“Across all platforms, the dominant form of vaccine-related content is anti-vaxx... There’s an asymmetry of passion around this topic. Most people aren’t producing pro-vaccine counternarratives...They just get their kids vaccinated and go on with their day.”

Renee DiRiesta, misinformation expert

“When we would put things on YouTube, it was followed by an anti-vaccination video.” *Amy Pisani, executive director of Vaccinate Your Family*

Who is vulnerable to misinformation?

Everyone!

Education level has little impact

but people who think they know more than average

are more vulnerable

Medical misinformation spans the political spectrum

but some values make some people more at risk

Why is medical misinformation effective?

CONSPIRACY THEORIES

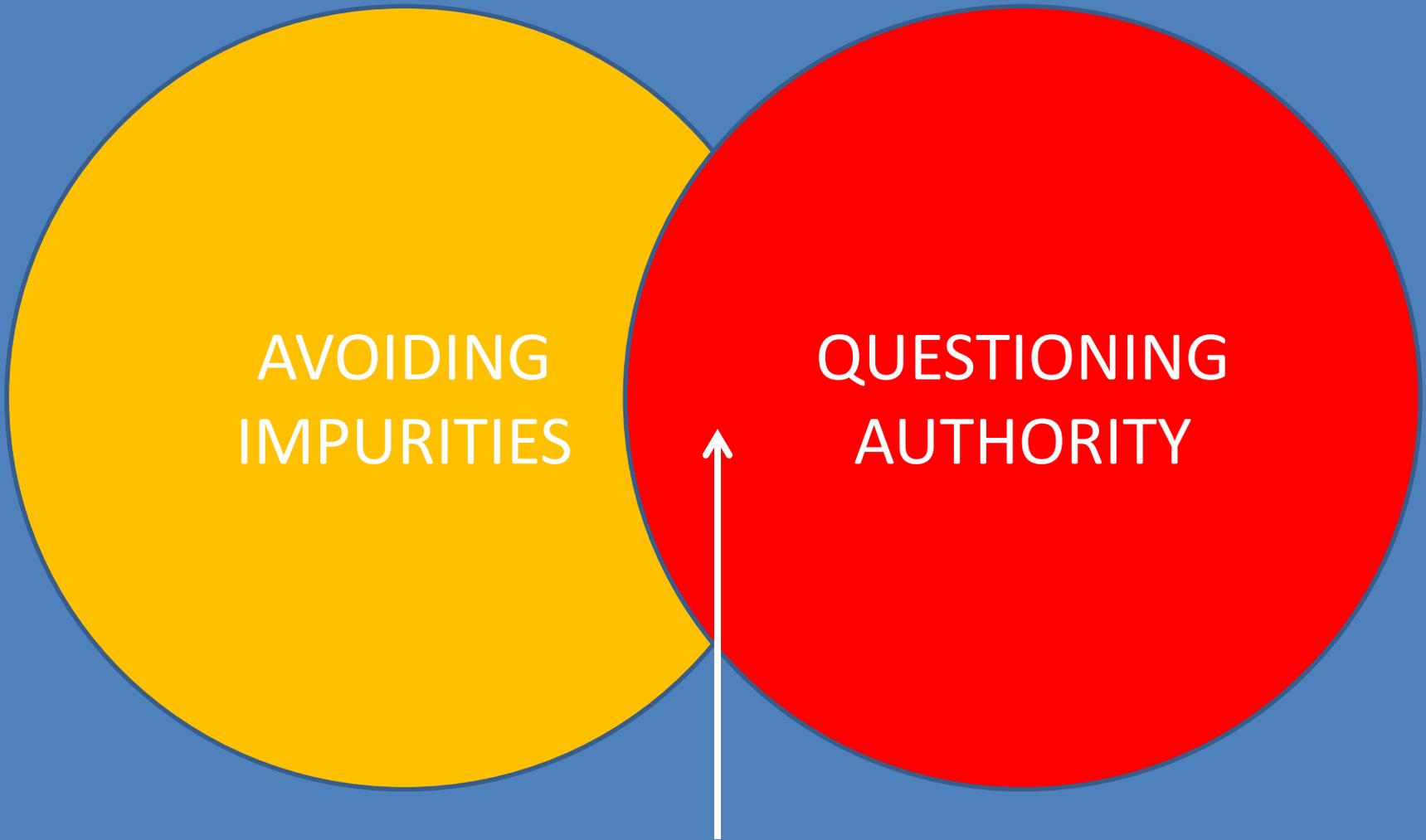
QUESTIONING
AUTHORITY

FALSE FLAGS

“They say, ‘No, I’ve researched it on Google, I’ve seen it on YouTube.’” *Dr. Auriene Oliviera, Infectious disease specialist, Brazil*

Why is medical misinformation effective?





MEDICAL MISINFORMATION

Why is medical misinformation effective?

SATANIC PANIC

PROTECTING
CHILDREN

PIZZAGATE/Q

Why is medical misinformation effective?

AVOIDING
IMPURITIES

QUESTIONING
AUTHORITY

PROTECTING
CHILDREN

VACCINES



How does medical misinformation affect us?

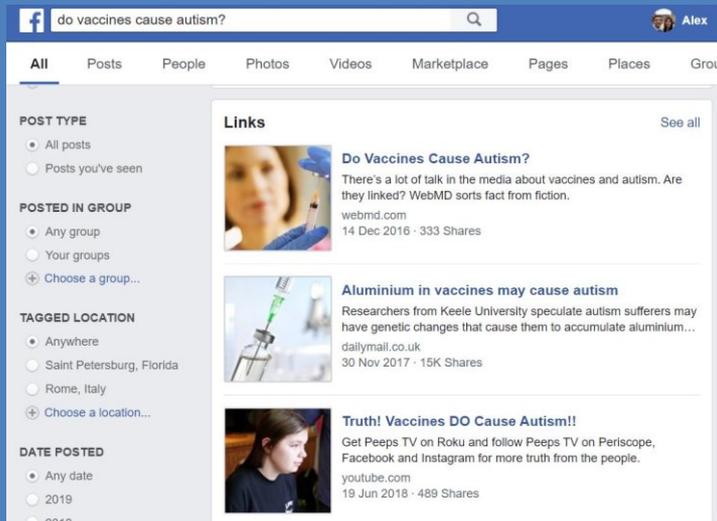
Small number (2-5% of total population) of active opponents

Larger number (20-30%) of doubters

This is not a problem that's going away...

Technology

Drug dealers are peddling steroids on Facebook and YouTube



Facebook giving massive distribution to dangerous misinformation about diabetes

Sep 9 · Public post · 21 likes · 3 comments · Share

YouTube advertises big brands alongside fake cancer cure videos

Part 2: Strategies



Media and Digital Literacy

Key Concepts

Media are constructions

Media have commercial implications

Audiences negotiate meaning

Media have social and political implications

Each medium has a unique aesthetic form

Media and Digital Literacy

Key Concepts

Digital media are networked

Digital media have unexpected audiences

Digital media are shareable and persistent

Interactions through digital media can have real impact

Digital media experiences are shaped by the tools we use



Use Fact-Checking Tools



Find the Original Source



Verify the Source



Check Other Sources

Verify the Source: Expertise and authority



TDW
THE DR. WOLFSON

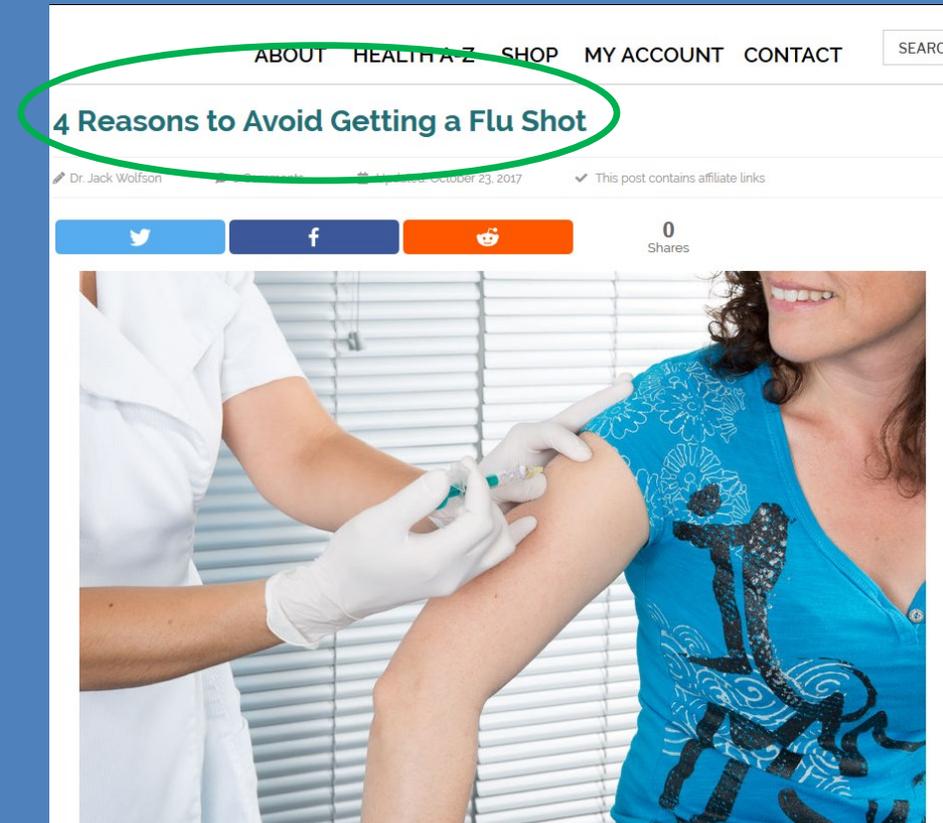
ABOUT HEALTH A-Z SHOP MY ACCOUNT CONTACT SEARCH

ABOUT DR. JACK WOLFSON



Hi, I'm Dr. Jack

I am a cardiologist who grew tired and frustrated with the dangerous pills and useless surgeries in mainstream medicine. After meeting my wife, Dr. Heather, my eyes were opened to what real health means. Now I teach that a healthy lifestyle and organic foods are the path to wellness and a disease-free life.



ABOUT HEALTH A-Z SHOP MY ACCOUNT CONTACT SEARCH

4 Reasons to Avoid Getting a Flu Shot

Dr. Jack Wolfson October 23, 2017 This post contains affiliate links

0 Shares



Check Other Sources: Consensus

When told that *'90 percent of medical scientists agree that vaccines are safe and that all parents should be required to vaccinate their children,'* participants were less likely to have concerns about vaccine safety

van der Linden, Clare & Maibach, *Highlighting consensus among medical scientists increases public support for vaccines: evidence from a randomized experiment*

Digital literacy sources

MediaSmarts:

- <https://mediasmarts.ca/digital-media-literacy/digital-issues/authenticating-information>
- <https://www.breakthefake.ca>

Health information sources:

CDC:

- https://www.cdc.gov/des/consumers/research/understanding_deciding.html

Canadian Paediatric Society:

- https://www.caringforkids.cps.ca/handouts/health_information_on_the_internet

University of California (San Francisco):

- https://www.ucsfhealth.org/education/evaluating_health_information/

Immunize Canada:

- https://www.immunize.ca/sites/default/files/resources/imm_info_internet_2017_e.pdf

Immunization Action Coalition:

- <http://www.vaccineinformation.org/internet-immunization-info/>

Front-Line Workers

Proactive

Inoculate against misinformation

Counter the majority illusion

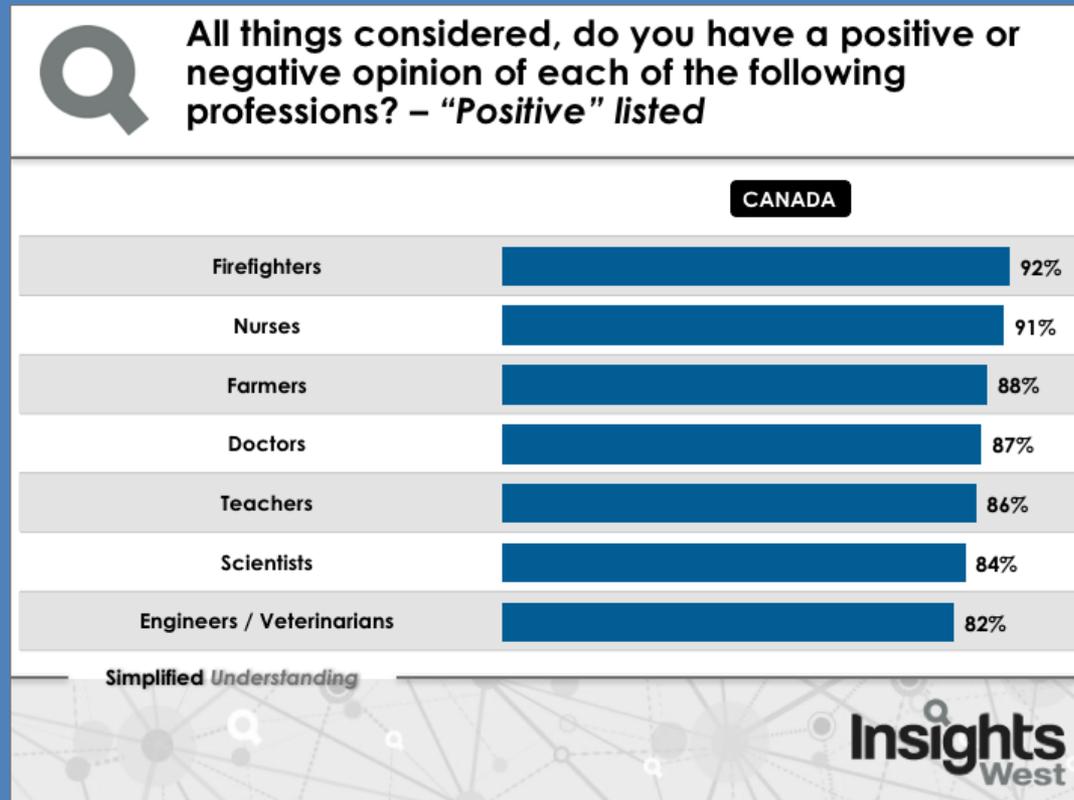
Personalize your approach

Front-Line Workers Proactive

Inoculate against misinformation by talking to patients before something becomes an issue

Front-Line Workers Proactive

Personalize your approach



Almost nine in ten Canadians trust their doctors.

Front-Line Workers Proactive

Personalize your approach

“Narratives are the ways in which we have communicated about risk from the very beginning, and stories are the way in which we make sense of the world.

We need to find a balance between stories and the evidence.”

Joshua Greenberg, director of the School of Journalism and Communication, Carleton University

Front-Line Workers Proactive

Counter the majority illusion, e.g.:

“Most of the parents I see vaccinate their kids.”

“I’ve never had a patient have a really bad reaction to a vaccine.”

Front-Line Workers

Reactive

Take a non-confrontational approach

Acknowledge their concerns

Use a “myth sandwich” when you counter misinformation

Front-Line Workers Reactive

Take a non-confrontational approach

How did you start questioning vaccines?

What makes you uncomfortable about them?

Have you had something bad happen to you that you believe was the result of a vaccination?

Eve Dubé, Quebec National Institute of Public Health

Front-Line Workers Reactive

Acknowledge their concerns

**Focus on the points where you agree, e.g. wanting to
protect their children**

Front-Line Workers

Reactive

Use a “myth sandwich” when you counter misinformation

Only address points the patient raises themselves

Provide new information to give them perspective

Public Health Authorities

Proactive:

Raise awareness of misinformation techniques

Focus on risks of *not* immunizing

Find trusted spokespeople in affected communities

Public Health Authorities

Proactive:

**Raise awareness of misinformation
techniques**

Public Health Authorities

Proactive:

Focus on risks of *not* immunizing

“I think we need to do a better job of talking about situations where people with a vaccine-preventable disease die”

Dr. Shelley Deeks, chief of communicable diseases, emergency preparedness and response, Public Health Ontario

Public Health Authorities

Reactive:

Respond to misinformation and false balance

Respond to deeper concerns, not specific points

Public Health Authorities

Reactive:

Respond to misinformation and false balance

“Being exposed to false balance in the media, a falsely balanced portrayal of the science, can have an impact on vaccination hesitancy.”

Tim Caulfield

Public Health Authorities

Reactive:

Respond to deeper concerns, not specific points

“If you want to combat false belief, you have to ask, ‘What work is this belief doing for the person who holds it?’”

Robert MacDougall, University of Western Ontario

The media effect paradox...

**It's easier to change a
whole culture's values
than it is to change a
single person's mind**