

# Weathering the Storm: All hands-on deck response to the infodemic

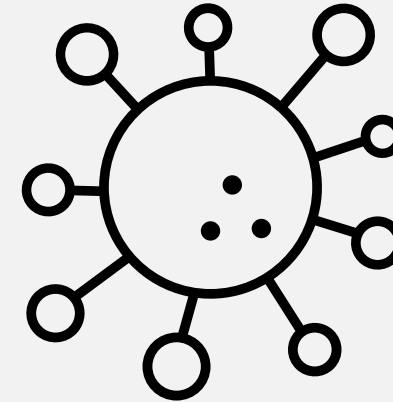
KATELYN JETELINA, MPH PHD | March 2023



Who am **I**?

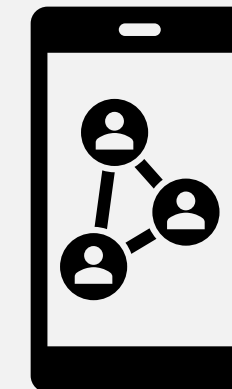
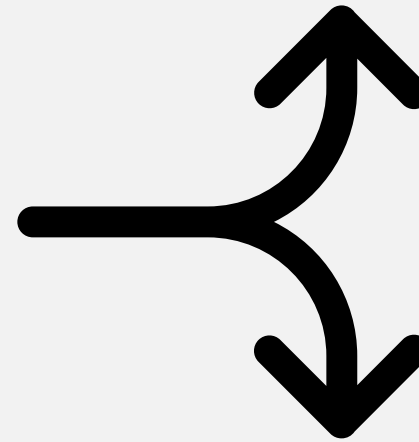


March 2020



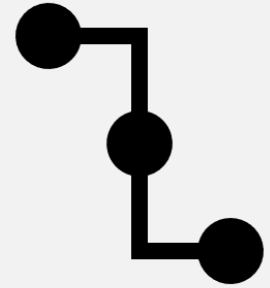
Disease due to  
SARS-CoV-2

Emergence of two,  
concurrent  
pandemics



Misinformation due to  
lack of communication

March 2020



Scrambling for data



Making sense of the patterns to  
inform policy



Displaying the data



Communicating to public

File

Message

Help

Acrobat

Tell me what you want to do

Ignore

Junk

Delete

Archive

Reply

Reply All

Forward

Meeting

More

Keep

Team Email

Reply & Delete

To Manager

Done

Create New

Move

Rules

Actions

Mark Unread

Categorize

Follow Up

Translate

Find

Related

Select

Read Aloud

Zoom

Report Phishing

Delete

Respond

Quick Steps

Move

Tags

Editing

Speech

Zoom

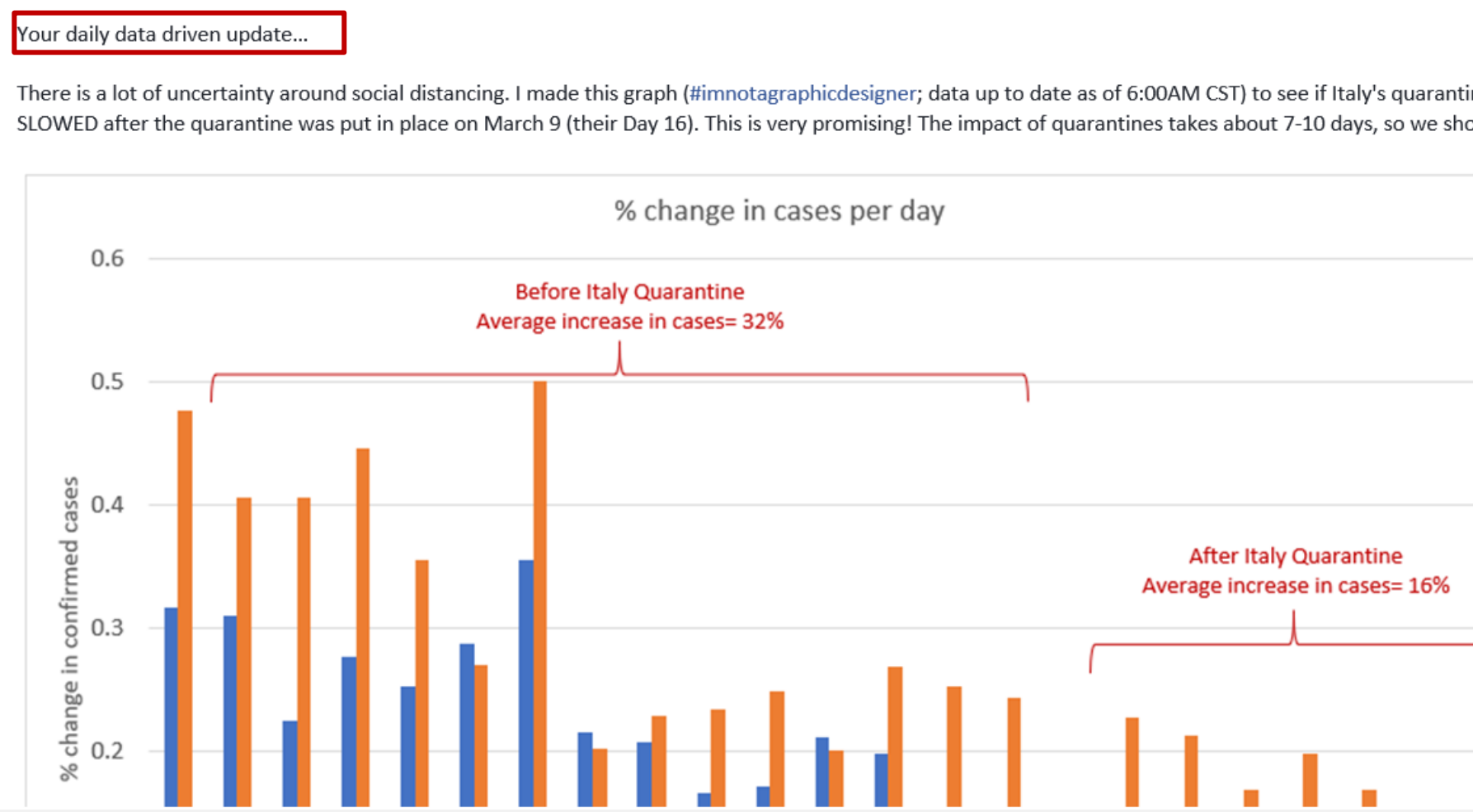
Wed 3/18/2020 9:38 AM

Jetelina, Katelina K

RE: Resources and help for a new way of working

Bala, Bijal A; George, Vincy S; Barnes, James S; Barnett, Elishia M; Beauchamp, Alaina M; Berry, Diane; Booker, Quiera S; Craker, Kelsey; Goulet, Grace K; Keeton, Juang M; Law, Sarah K; Lee, Thakur, Barsha; Turner-Little, Montgomery S; Ward, Rikki; Weerakoon, Sitara M; Wiegand, Jared G; Xie, Luyu; Yap, Chiu Feng; Yoon, Teresa; Allicock, Marlyn A; Atem, Folefac D; Cannell, Michael; Jackson, Sherry D; Long, Dorsey K; Nunez, Juan C; Patterson, Molly B; Morales Marroquin, Flor Elisa

You replied to this message on 3/19/2020 9:27 AM.

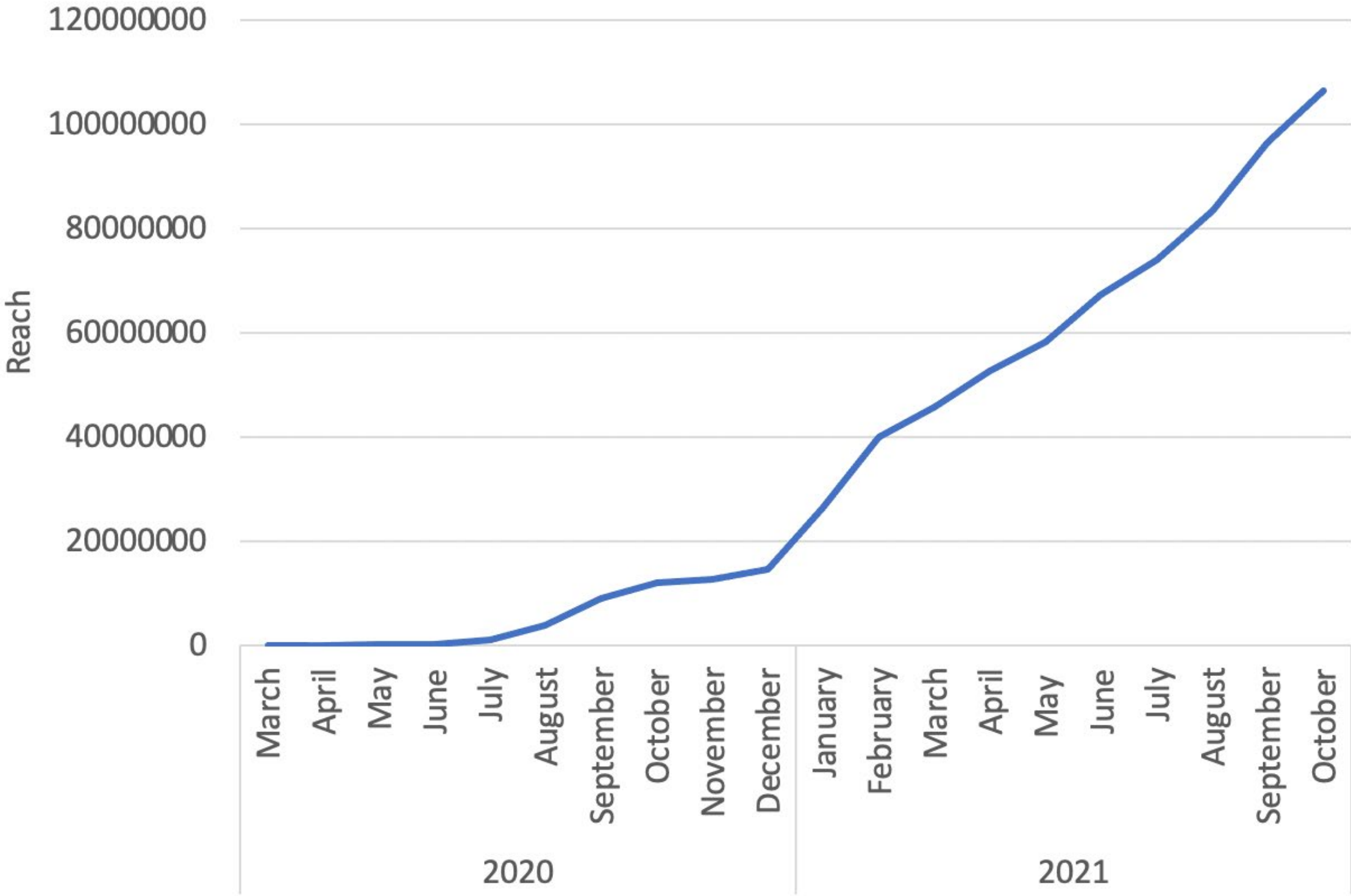


YOUR LOCAL  
EPIDEMIOLOGIST

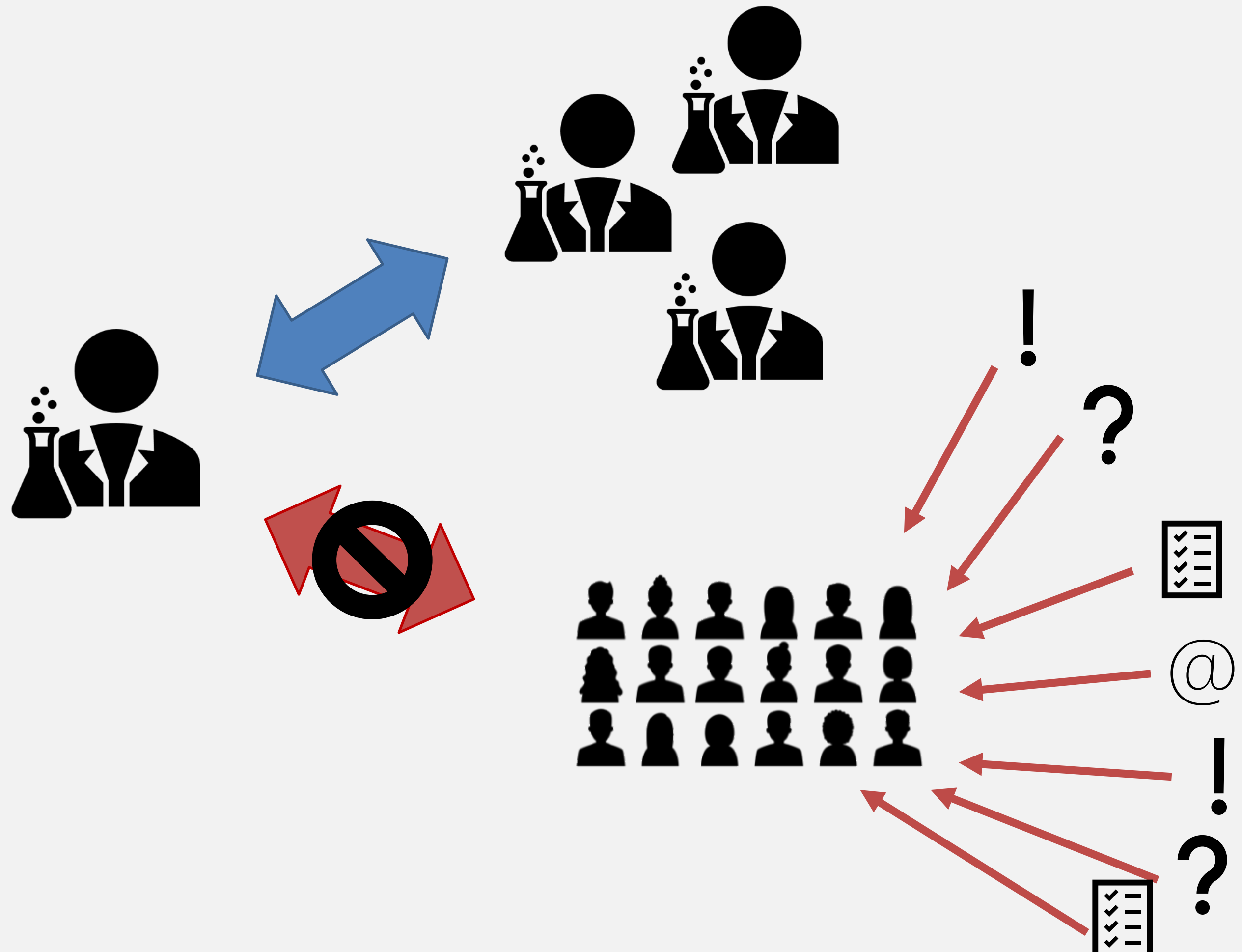
Closing the loop: Translating public health science for every day use

By: Dr. Katelina Jetelina, MPH PhD

YLE Reach



# Scientific communication



Reactive Communication=  
Combating mis/dis-information





“We’re not just fighting an epidemic; we’re fighting an **infodemic**. Fake news spreads faster and more easily than this virus, and is just as dangerous.”

-Dr. Tedros Adhanom Ghebreyesus  
Feb 15, 2020

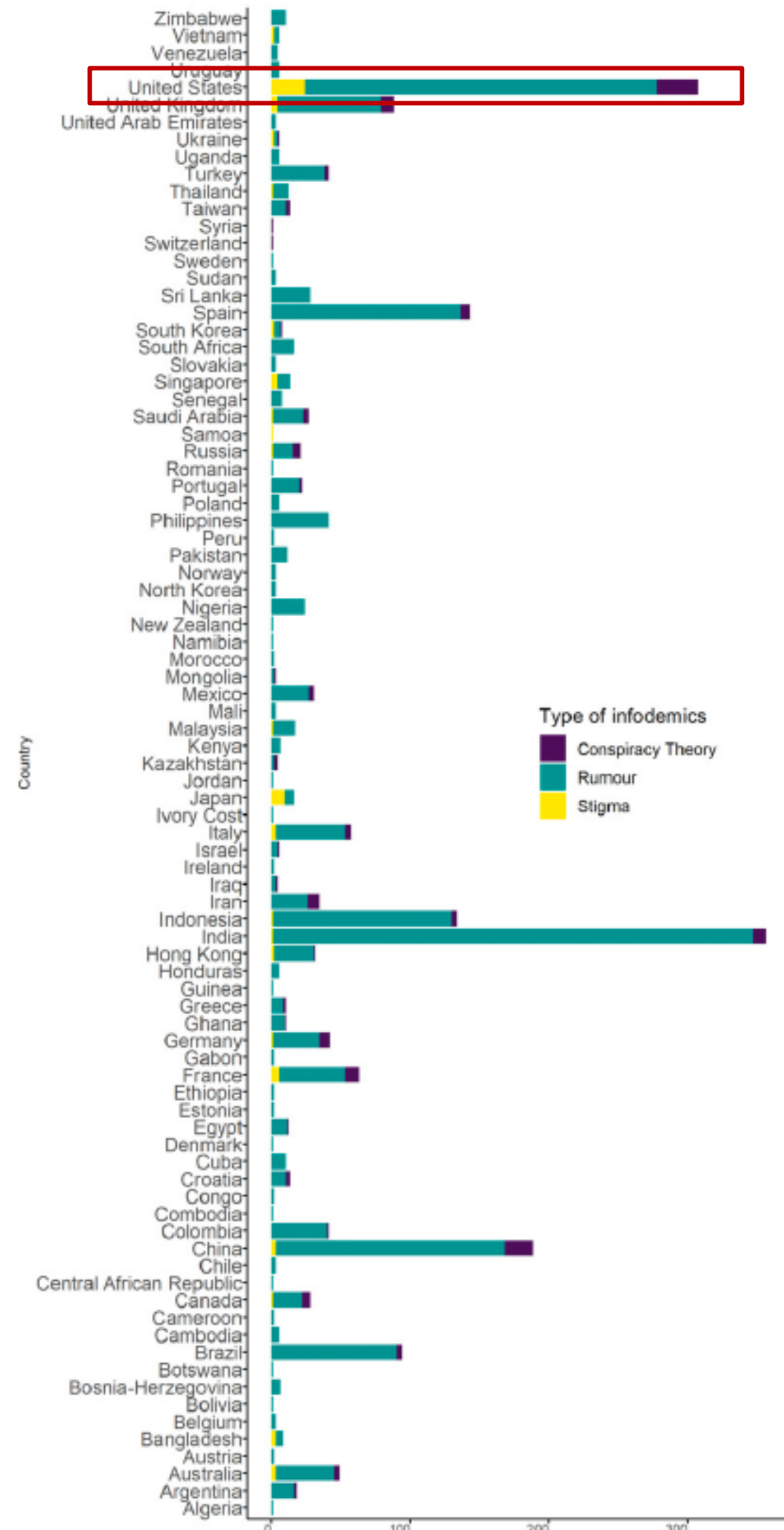
## COVID-19–Related Infodemic and Its Impact on Public Health: A Global Social Media Analysis

Md Saiful Islam,<sup>1,2\*</sup> Tonmoy Sarkar,<sup>1</sup> Sazzad Hossain Khan,<sup>1</sup> Abu-Hena Mostofa Kamal,<sup>3</sup> S. M. Murshid Hasan,<sup>4</sup> Alamgir Kabir,<sup>2,5</sup>  
Dalia Yeasmin,<sup>1</sup> Mohammad Ariful Islam,<sup>1</sup> Kamal Ibne Amin Chowdhury,<sup>1</sup> Kazi Selim Anwar,<sup>6</sup> Abrar Ahmad Chughtai,<sup>2</sup> and  
Holly Seale<sup>2</sup>

Infodemic



Misinformation





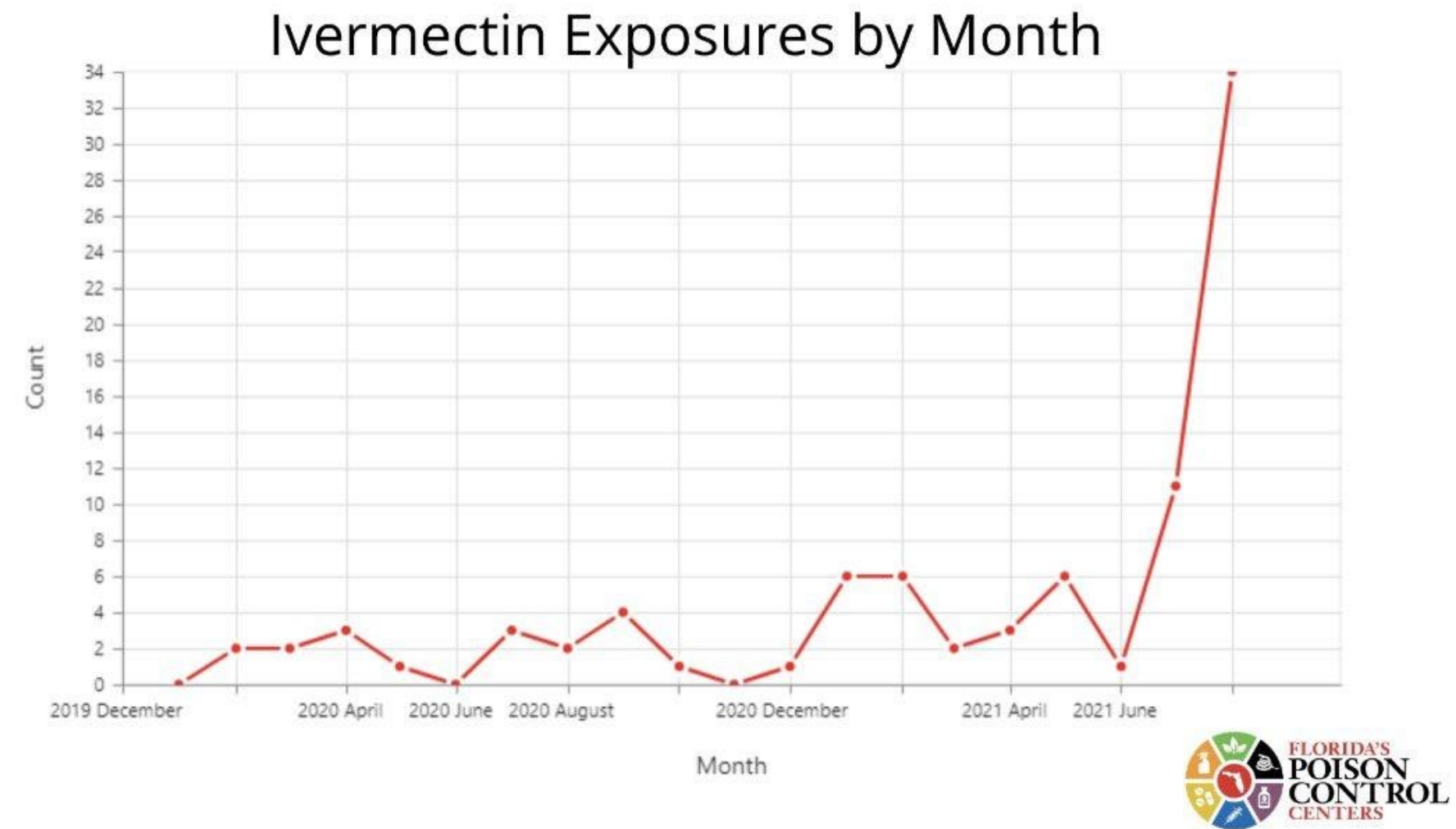
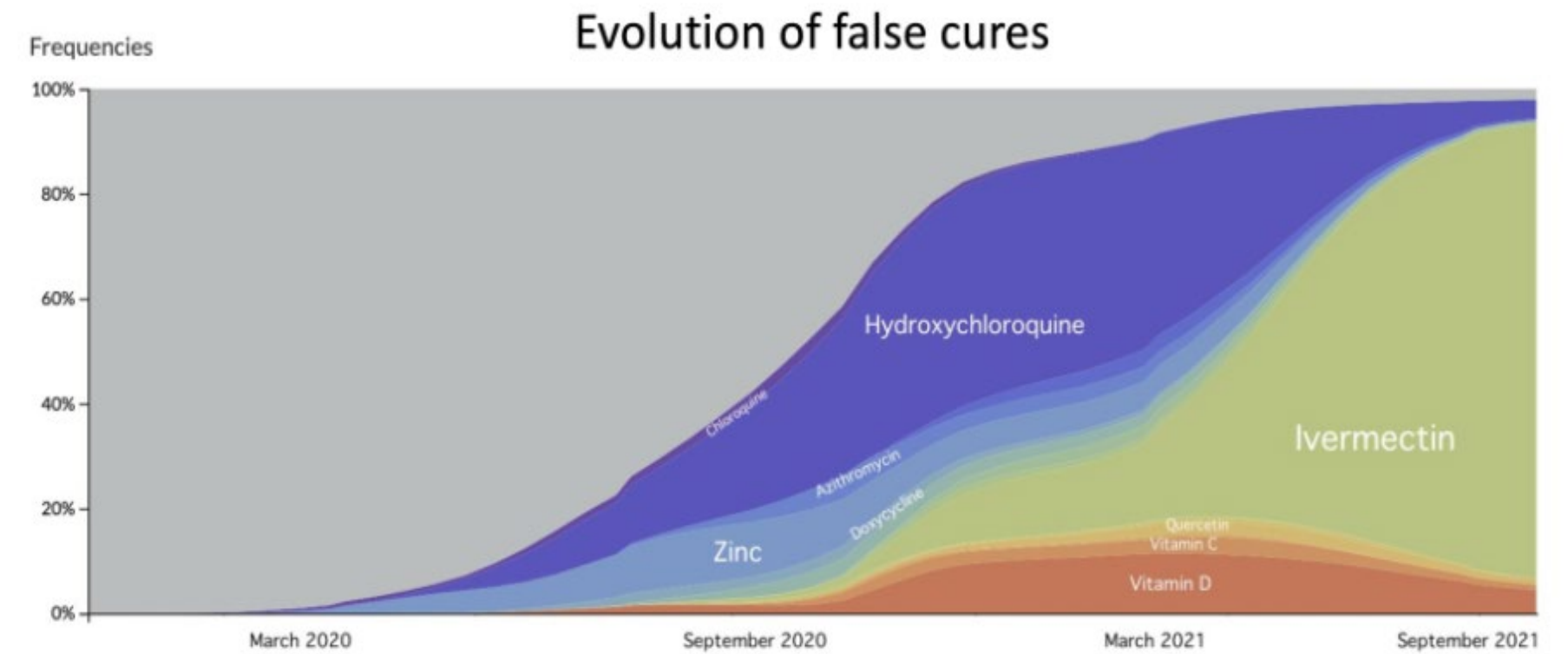
Infodemic



Misinformation



Suboptimal control of  
the pandemic



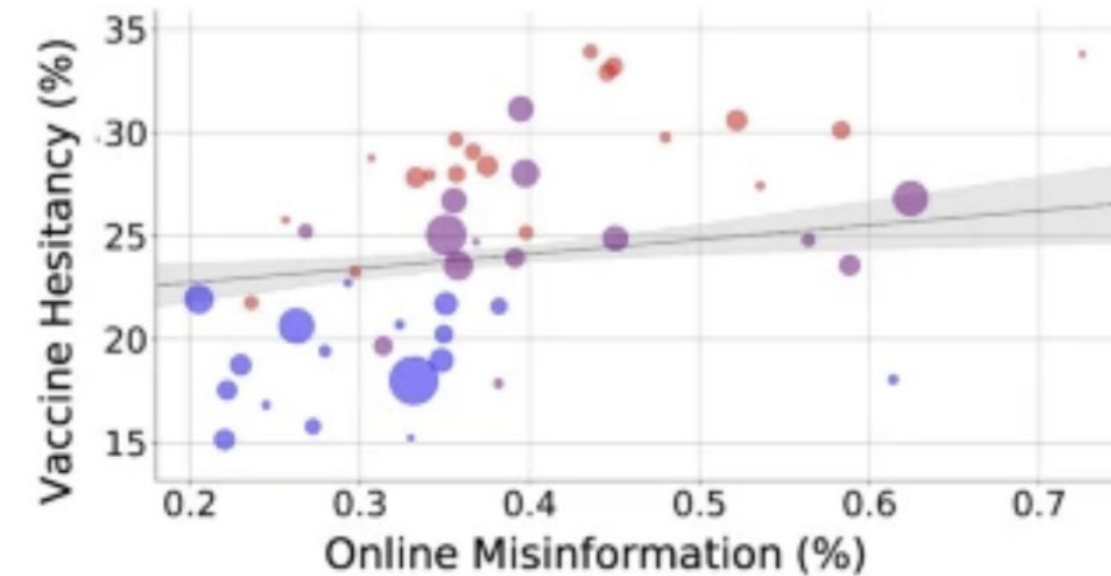
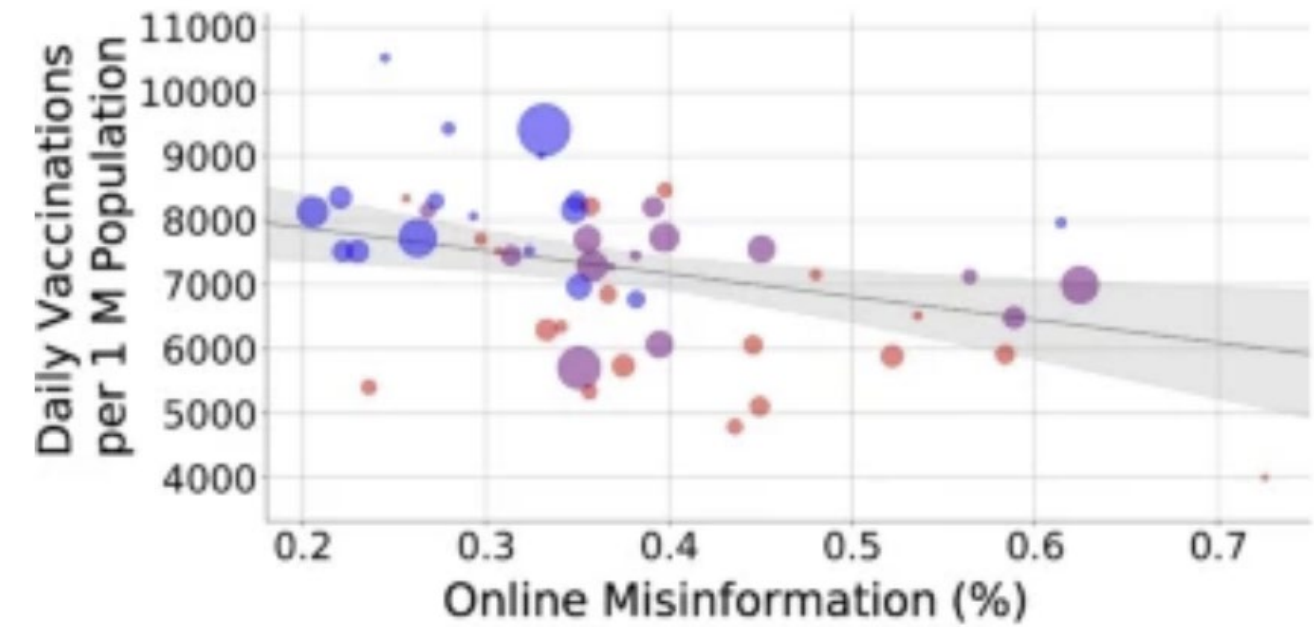
Infodemic



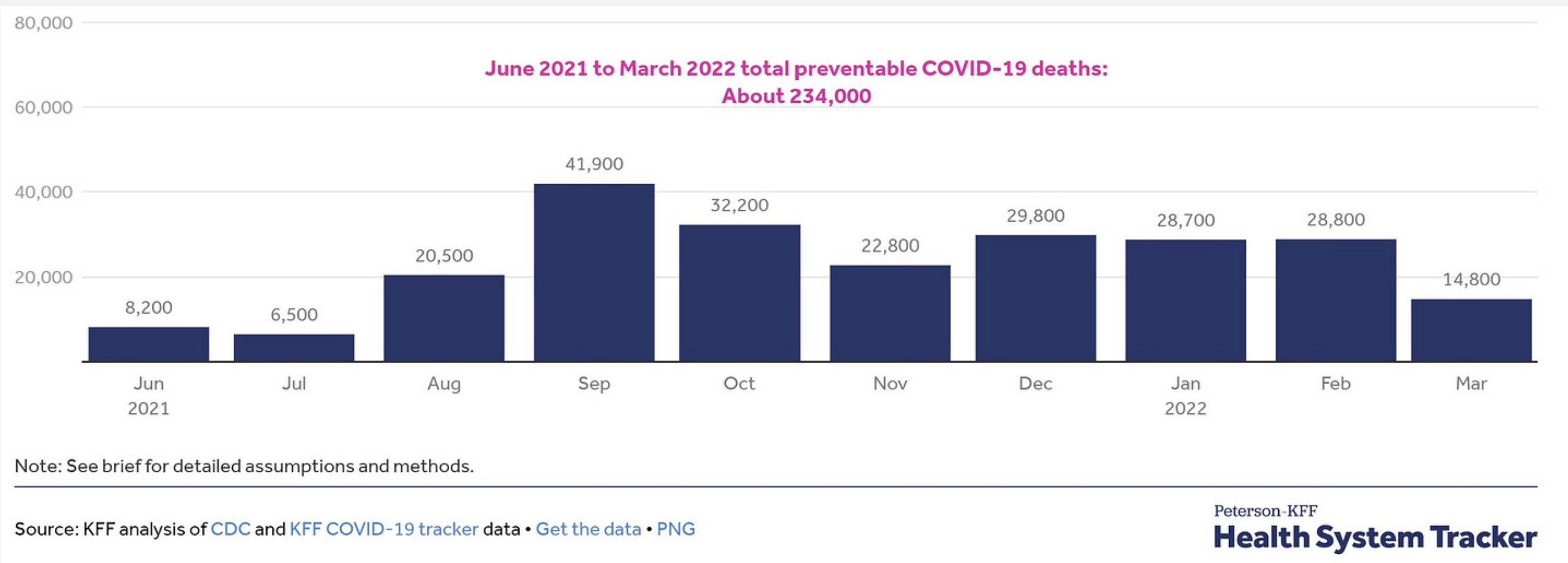
Misinformation



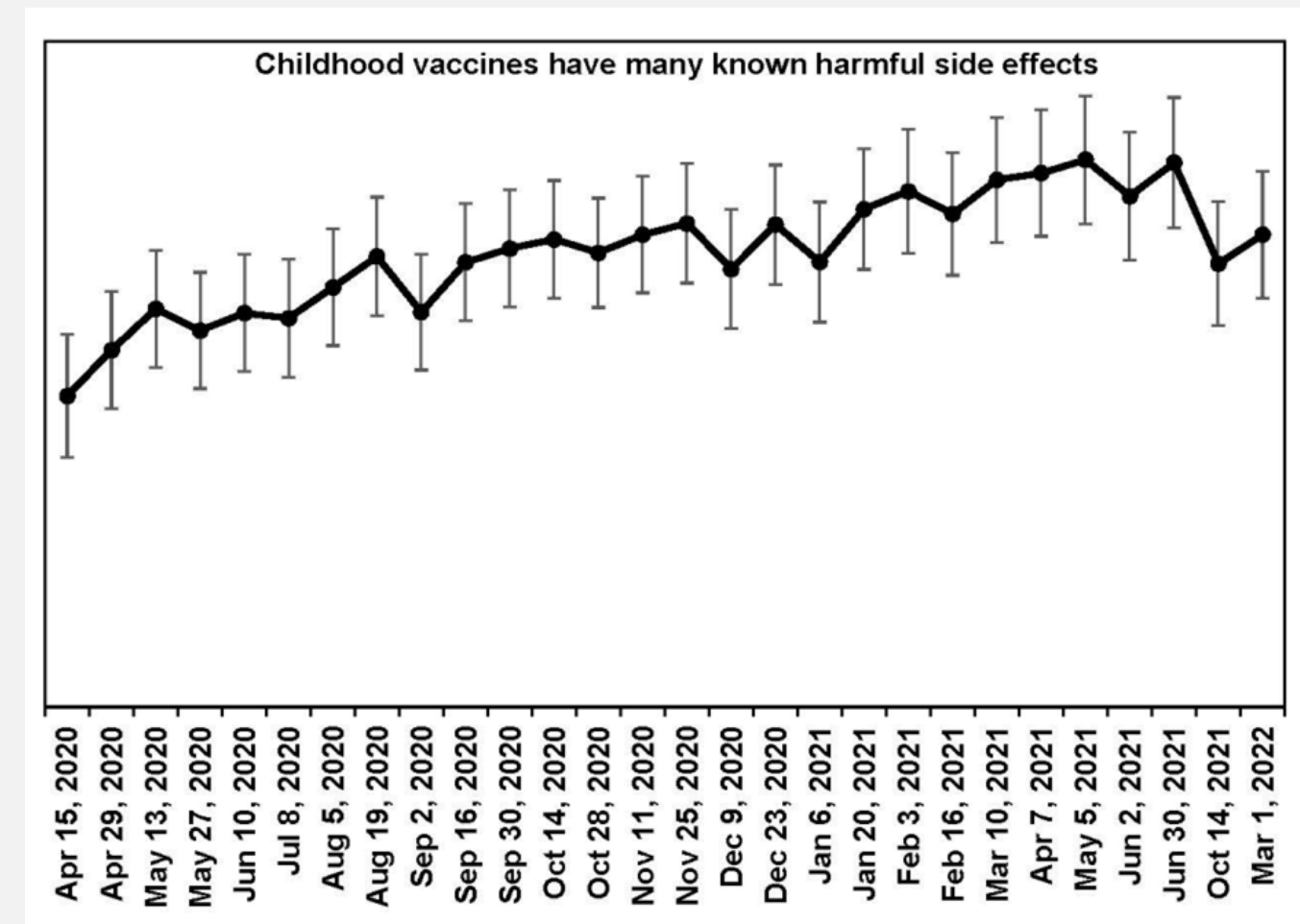
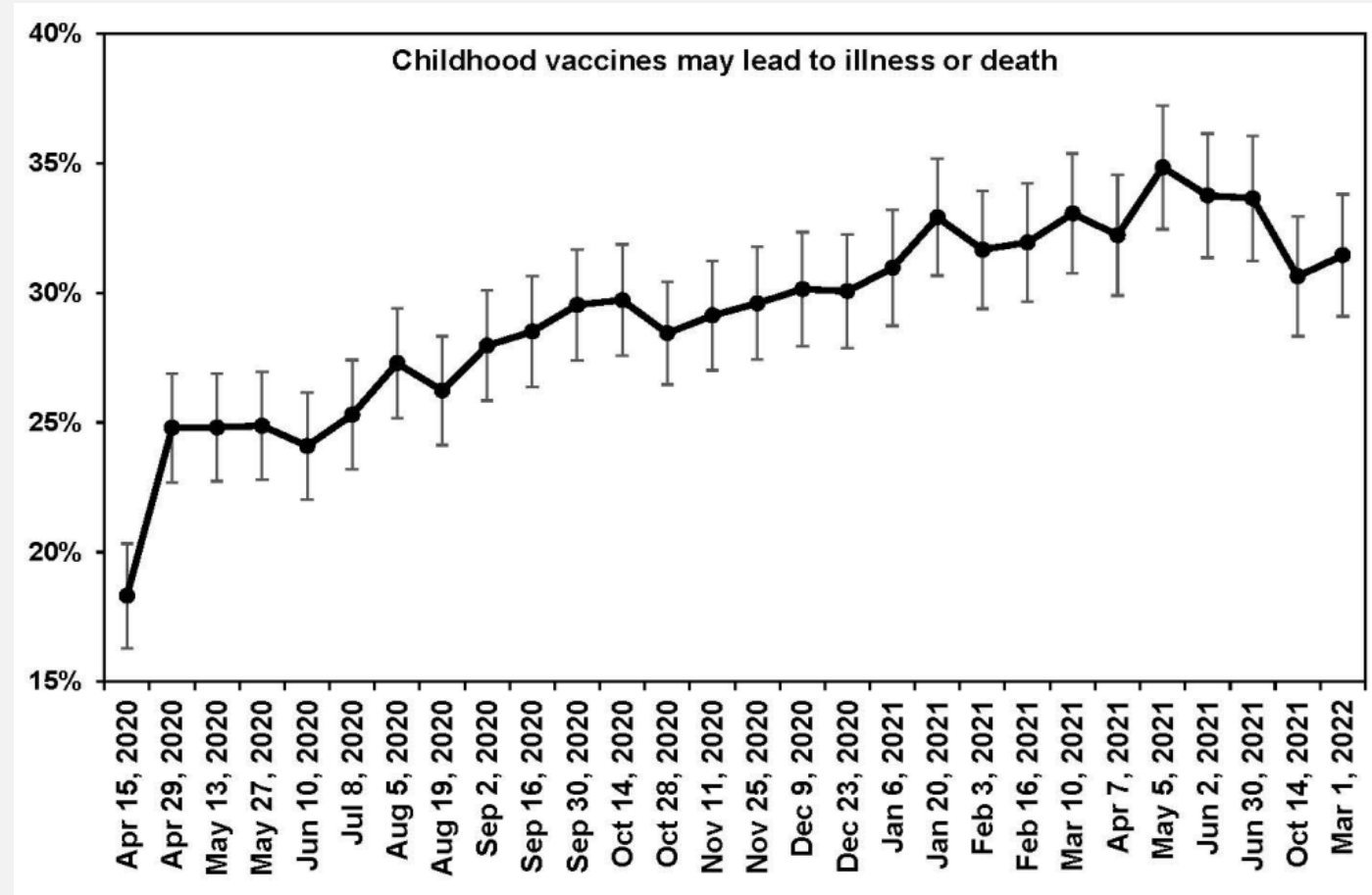
Suboptimal control of  
the pandemic



# Problem

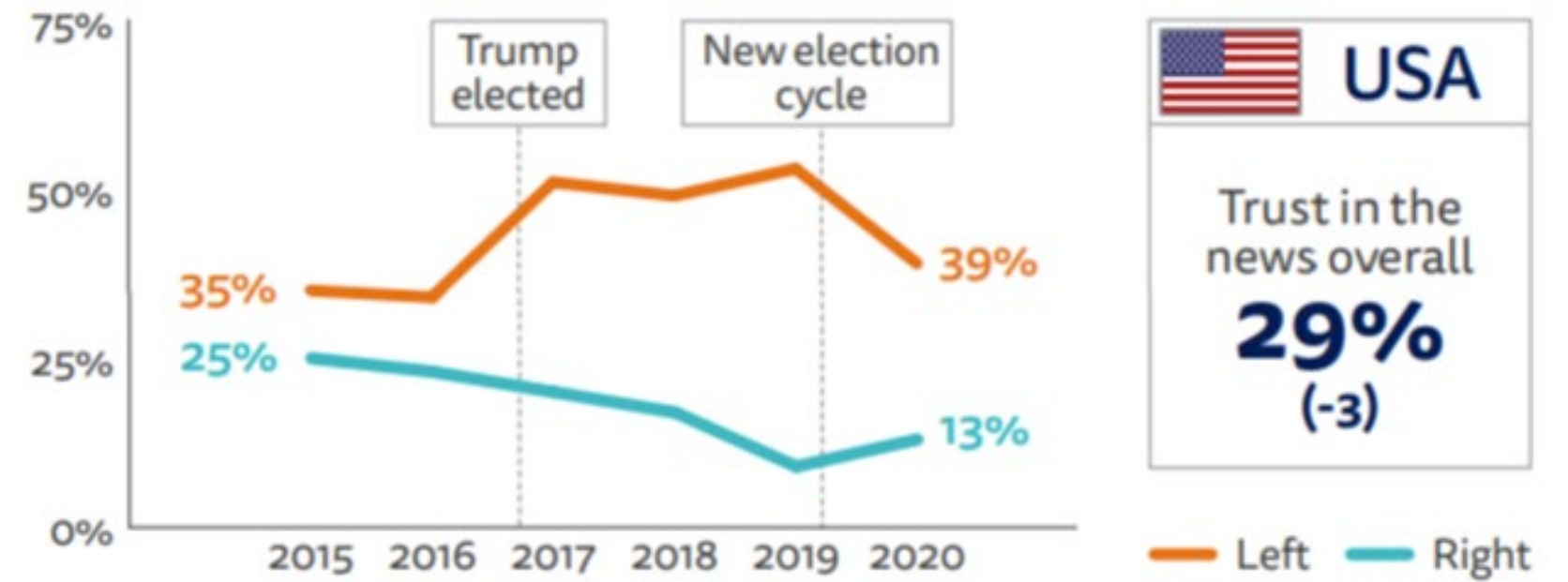


# Growing vaccine hesitancy





Information ecosystem  
is **changing**



PROPORTION THAT USED EACH AS A SOURCE OF NEWS  
IN THE LAST WEEK (APRIL 2020) – SELECTED COUNTRIES

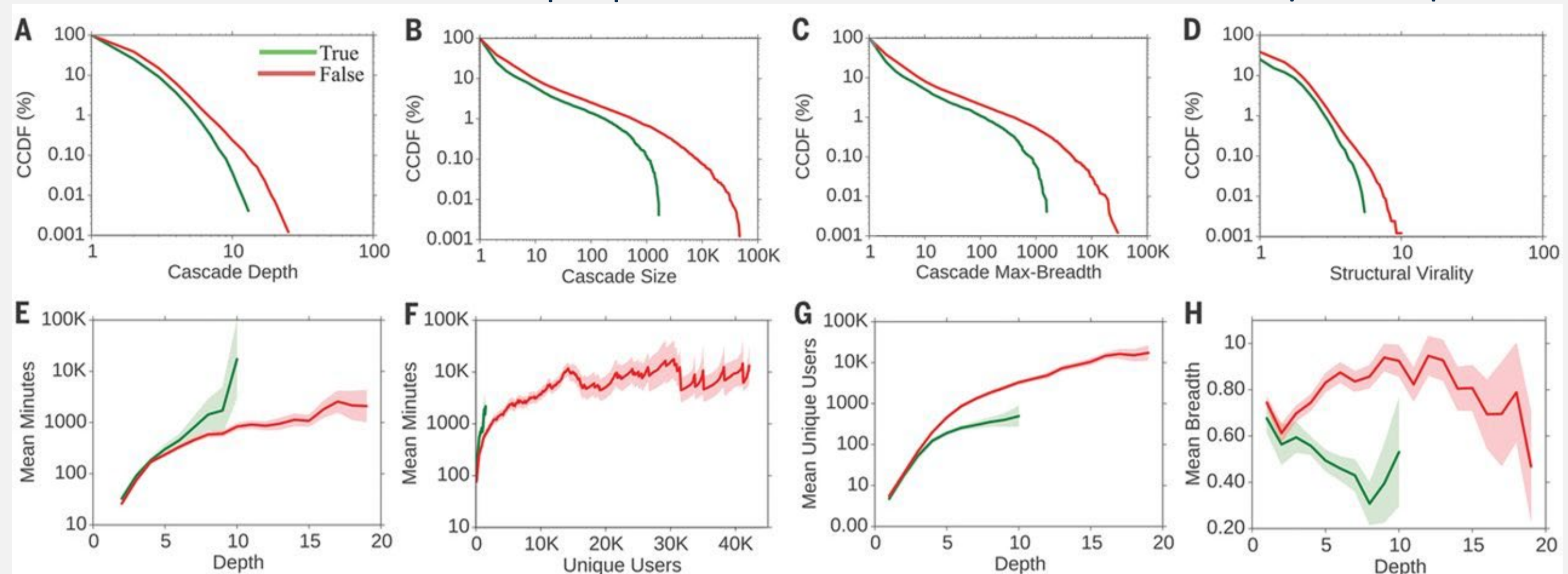
	Online (incl. social media)	TV	Social media	Radio	Print (incl. mags)
UK	79%	71%	47%	35%	18%
USA	73%	60%	47%	21%	16%
Germany	69%	72%	39%	41%	26%
Spain	83%	71%	63%	24%	28%
South Korea	85%	65%	51%	14%	19%
Argentina	90%	77%	78%	24%	30%
Average change from January	+2	+5	+5	+2	-2

# Misinformation goes farther, faster, deeper, and more broadly than the truth

reached far more people

more people retweeted

spread through peer-to-peer



six times faster at spreading

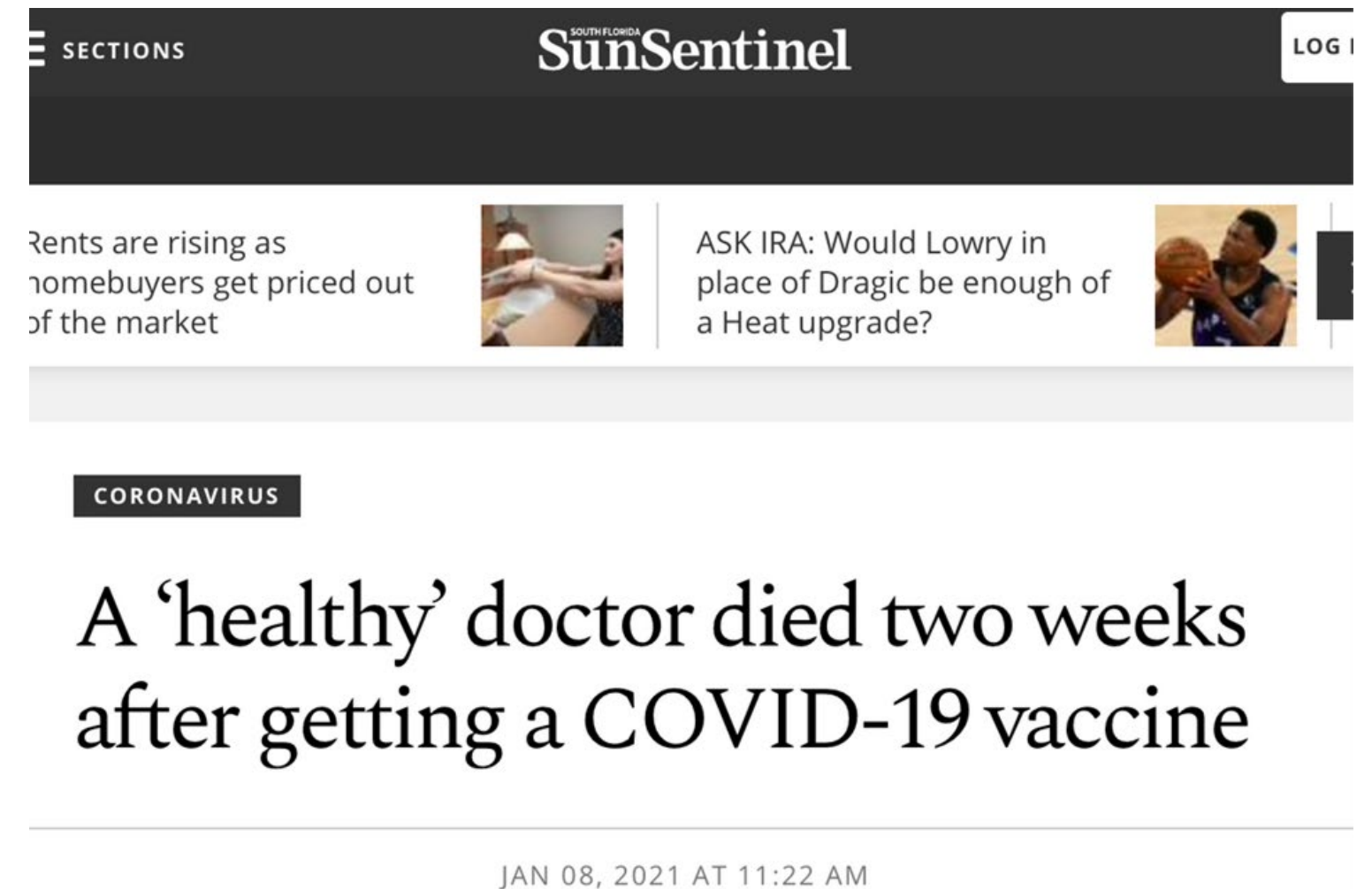
retweeted by more unique users

diffused more broadly



# Information ecosystem is **changing**

- Our relationship to information is emotional
- Language that plays on fear gets high engagement.

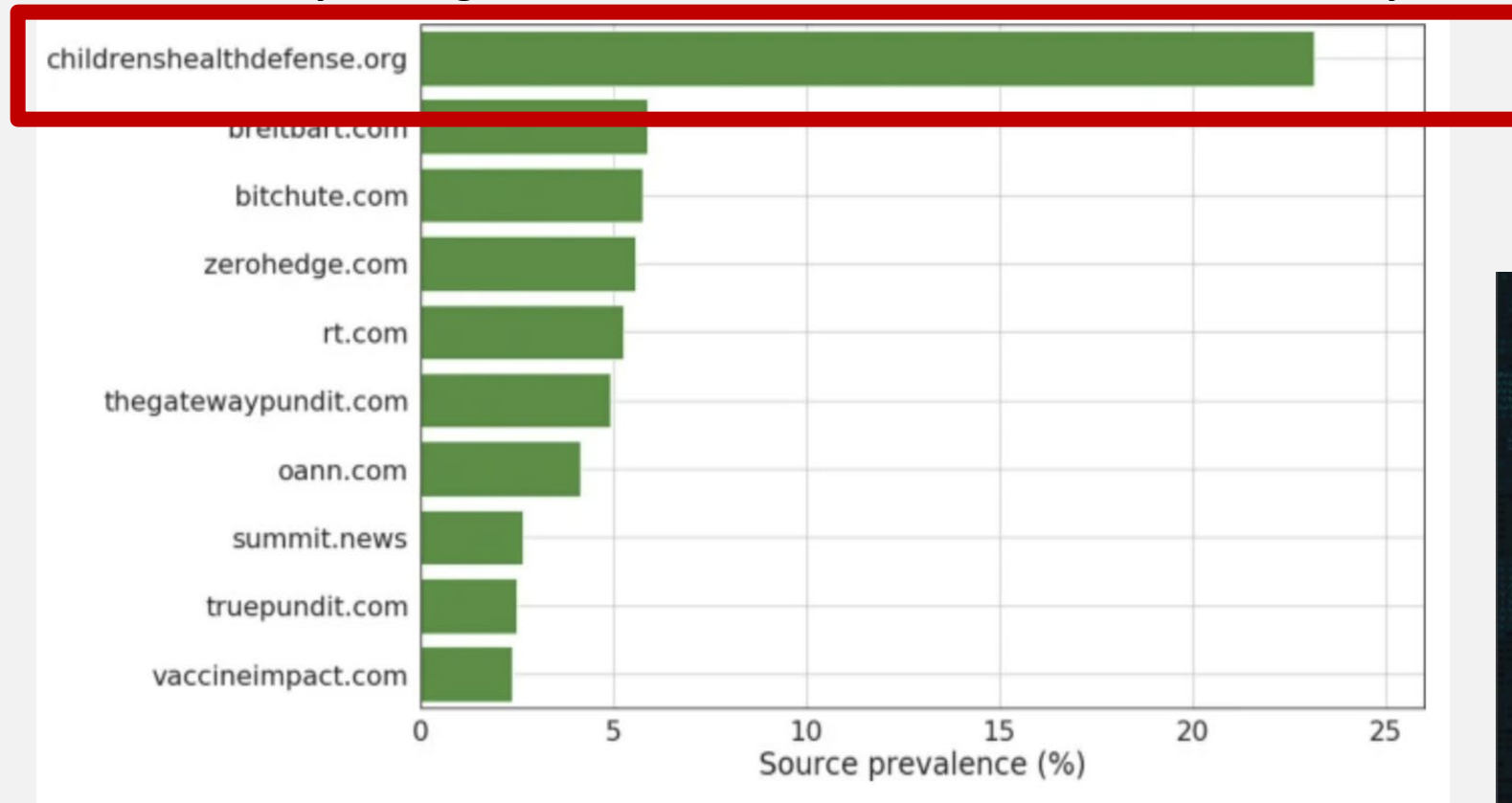


Christian Elliot 👑 · Apr 5 · 17 min read

# 18 Reasons I Won't Be Getting a Covid Vaccine

Updated: Apr 19

Tweets shared by users geolocated in the U.S. that link to a low-credibility source



The Washington Post  
Democracy Dies in Darkness

Investigations

## A major funder of the anti-vaccine movement has made millions selling natural health products



“Misinformation is not like a plumbing problem you fix. It is a **social condition**, like crime, that you must constantly monitor and adjust to.”

-TOM ROSENSTIEL



## Murphy, Luján Reintroduce Legislation To Combat Public Health Misinformation

February 15, 2023

## *How Finland Is Teaching a Generation to Spot Misinformation*

The Nordic country is testing new ways to teach students about propaganda. Here's what other countries can learn from its success.

HEALTH TECH

STAT+

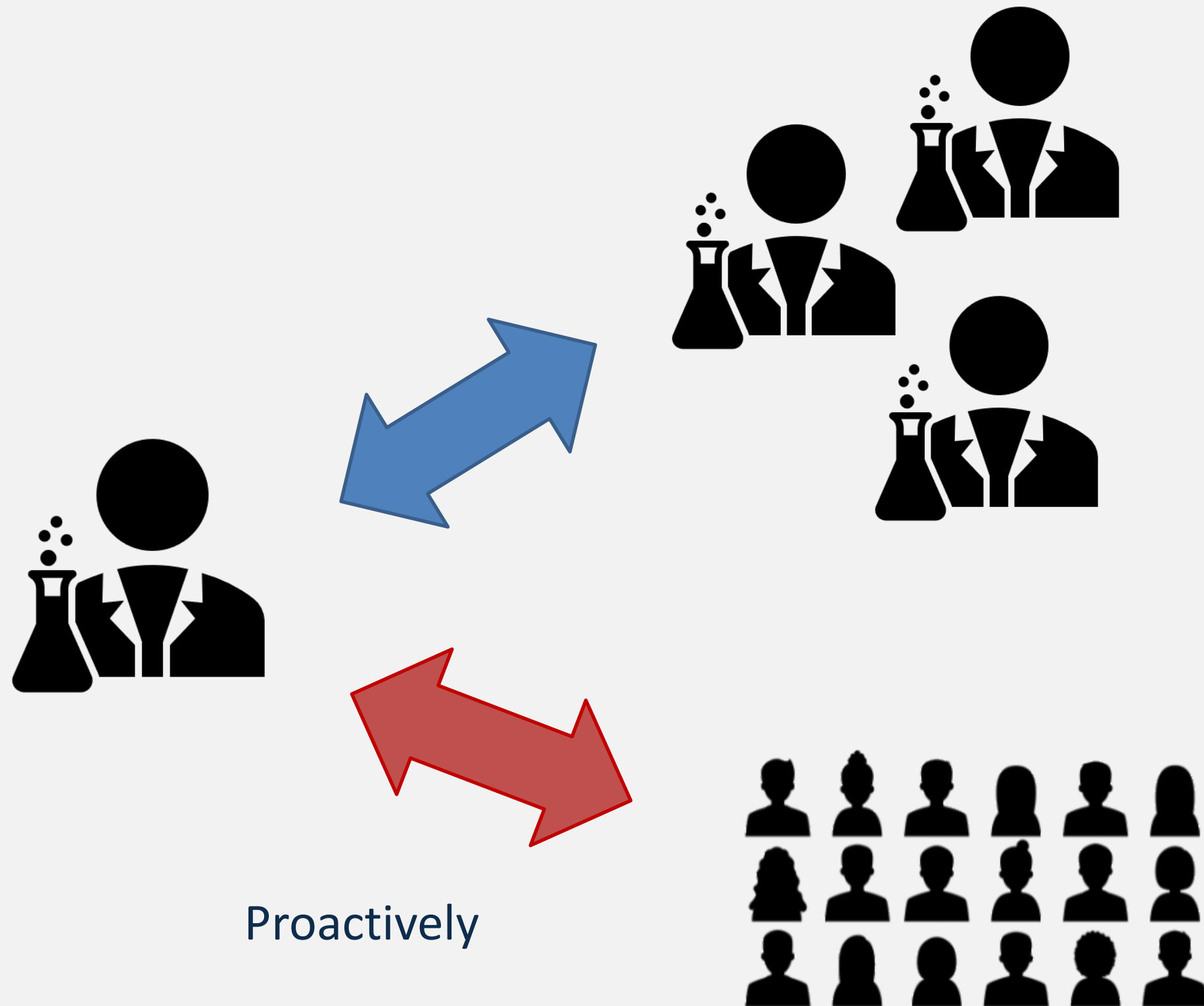
## 'Truth is losing the battle': FDA commissioner on grappling with a wave of health misinformation

By Ben Brody March 9, 2023

[Reprints](#)

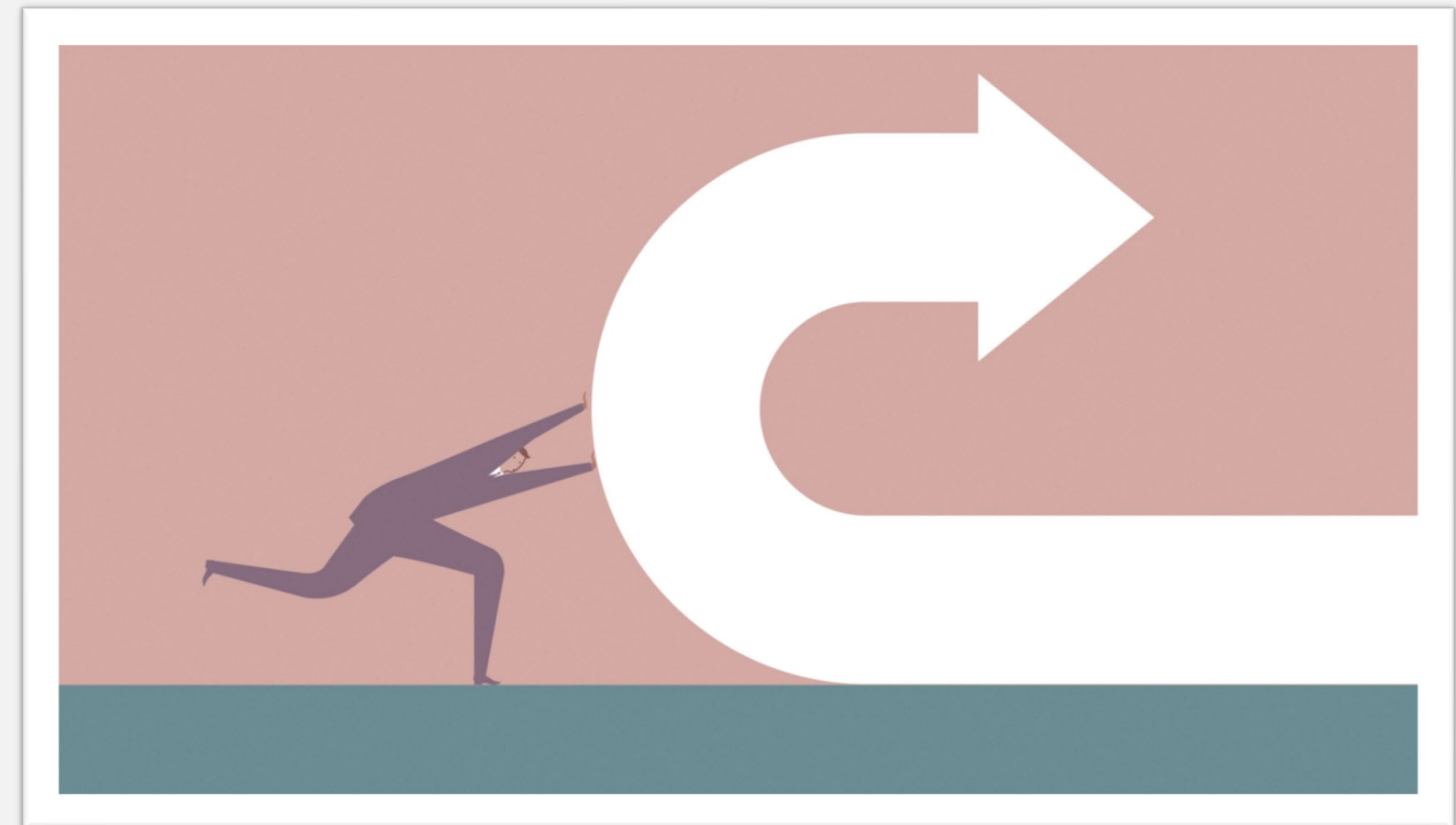
## Libraries Primed to Play Integral Role in Preventing the Spread of Health Misinformation

Six local libraries work collaboratively to create a toolkit that addresses the public health crises caused during the pandemic – and in general – by health misinformation

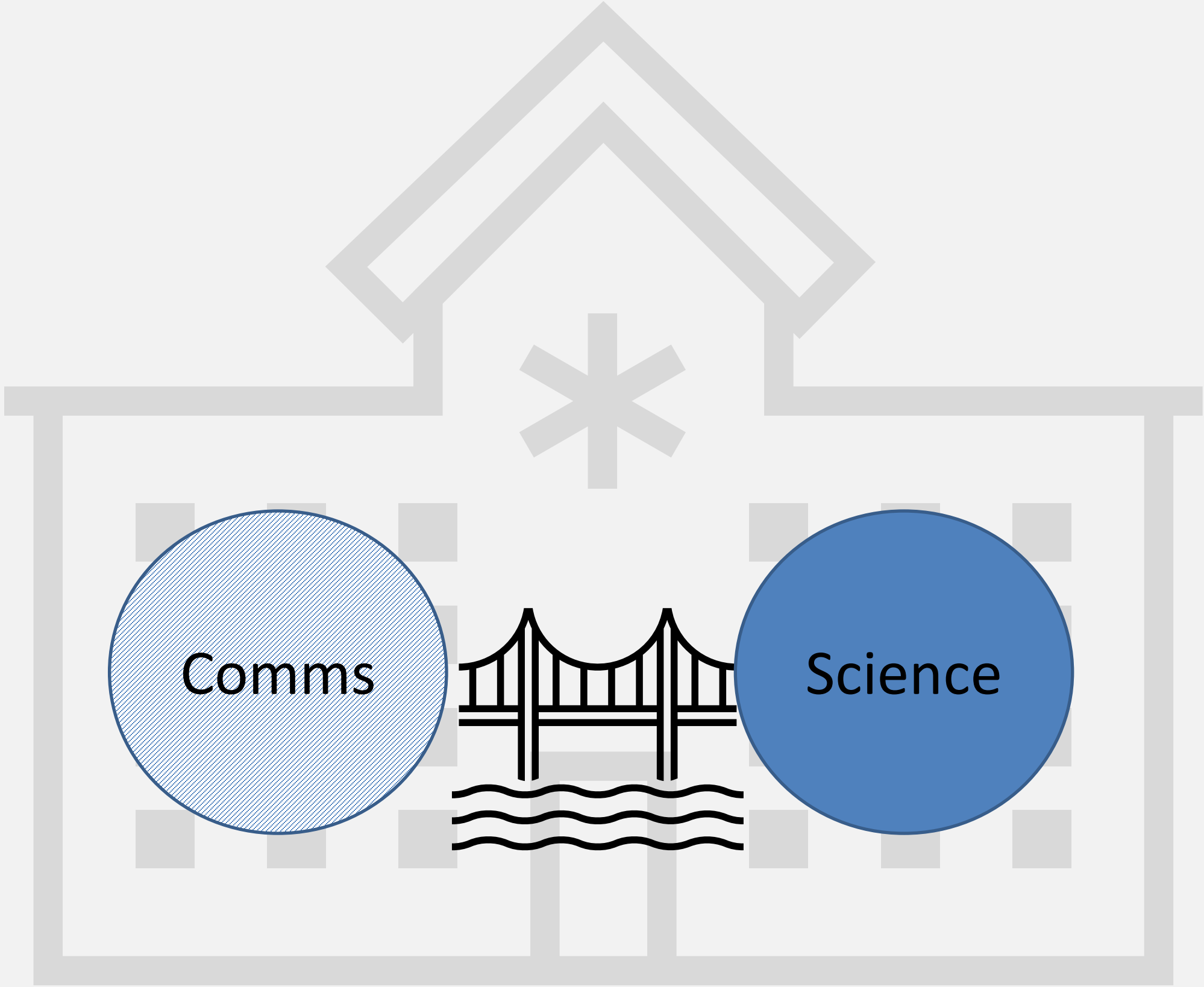


Scientific  
discovery ride

- ☑ What do we know?  
Vaccines work = No masks
- ☑ What do we **not** know?  
How the virus is going to change.
- ☑ How are we finding answers?  
Household attack studies.  
Superspreader events.

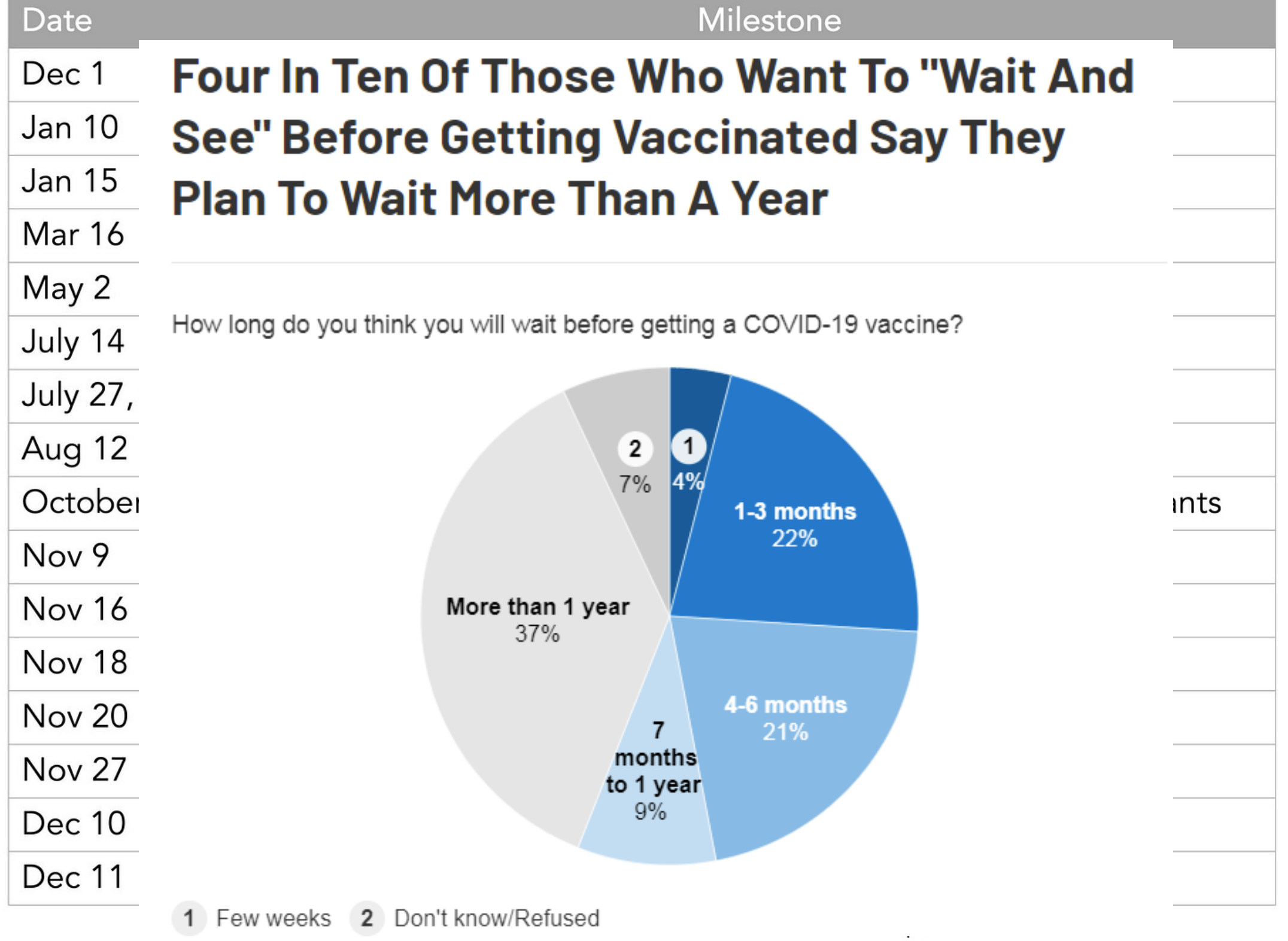


Be first



Anticipate concerns

9 months of preparation





Reactive Communication

Proactive Communication

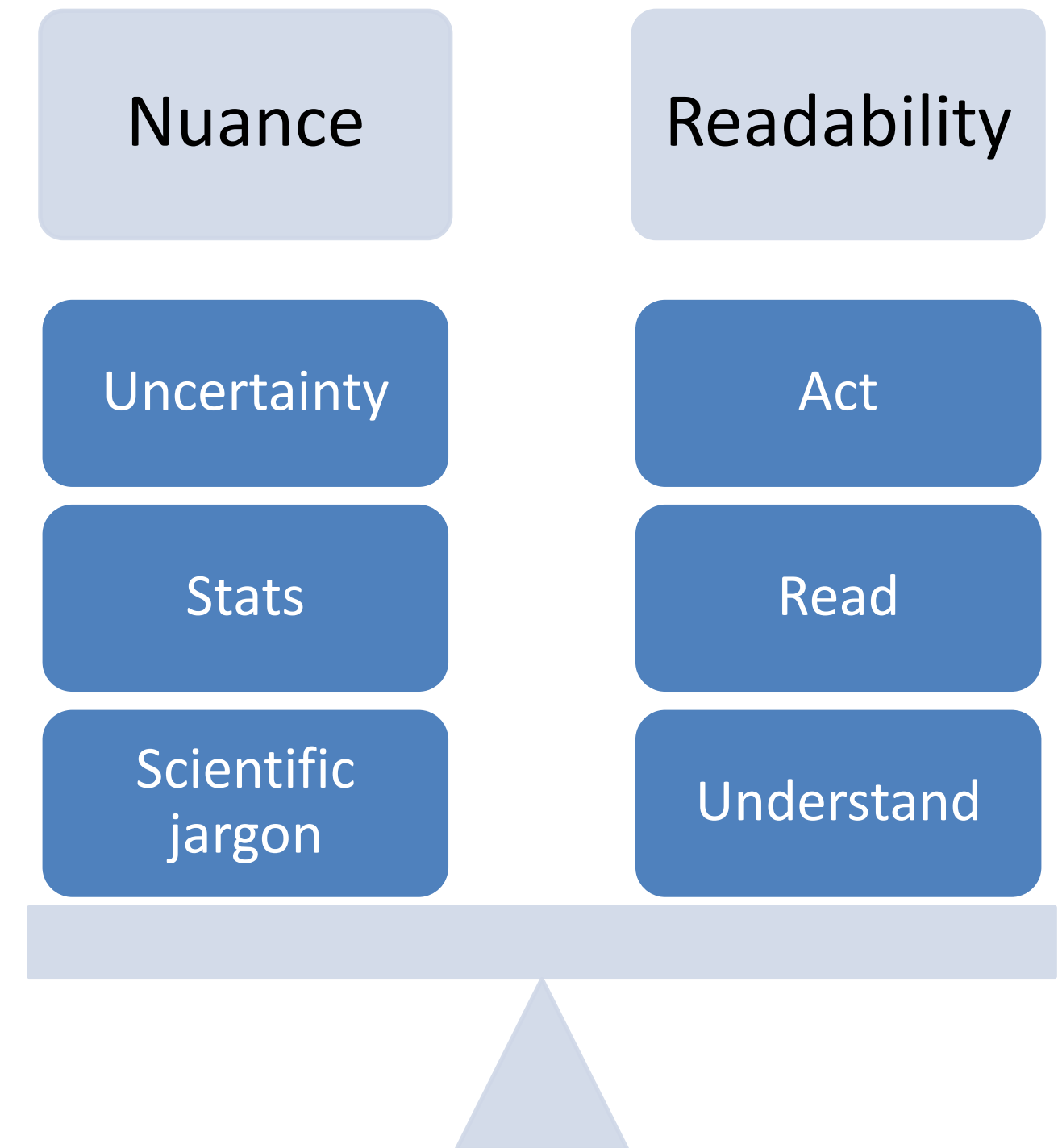


Evidence-based decision making  
Increased confidence in science  
Foster trust

Translate science

“If you can’t explain it simply, you don’t understand it well enough.”

-Albert Einstein



Equip **trusted**  
messengers

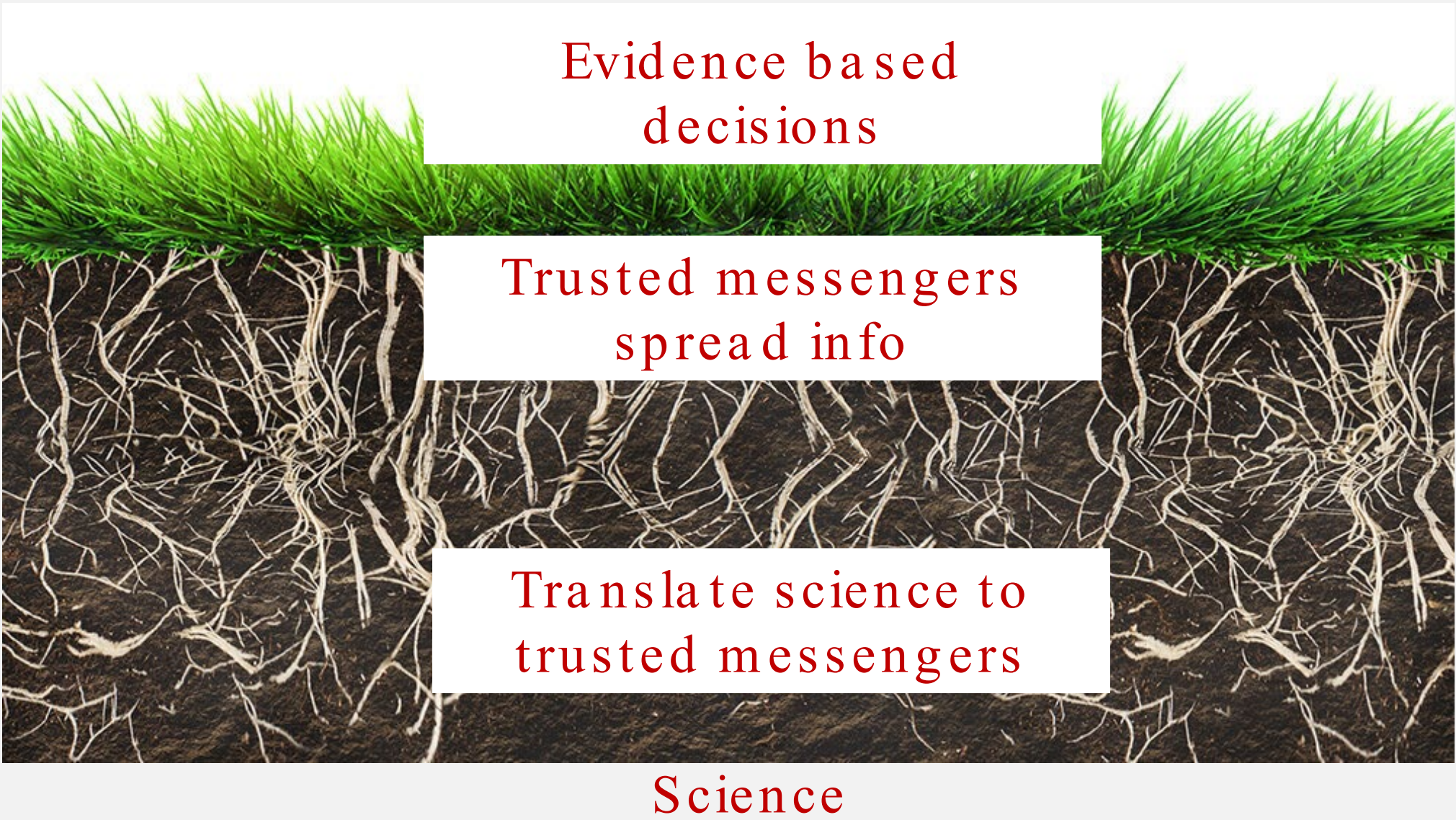
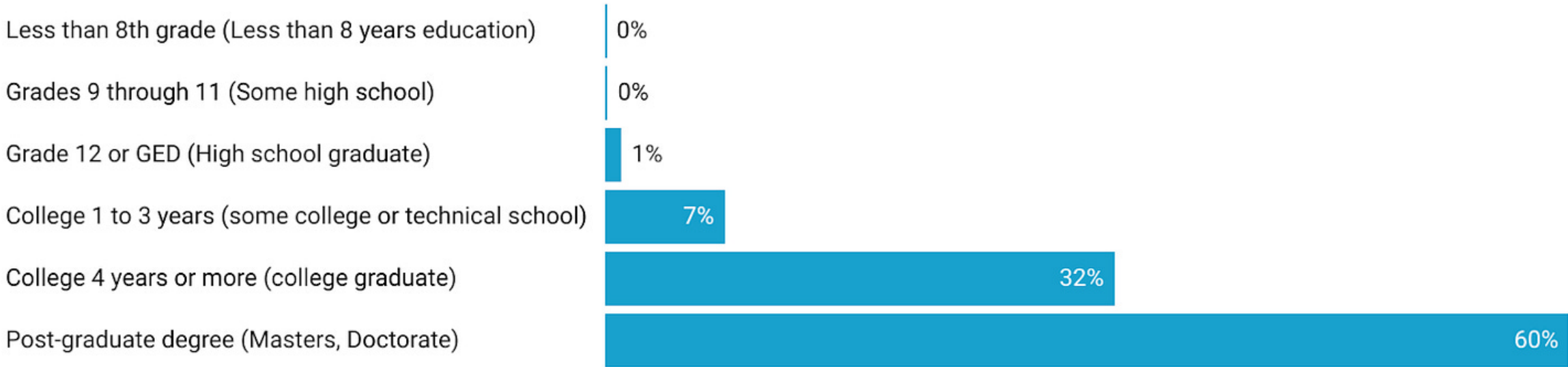
- ☑ Actual person. A face. A warm body
- ☑ Consistent voice
- ☑ Credible voice



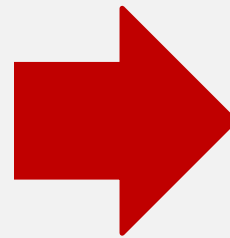


Equip **trusted**  
messengers

What is the highest grade or year of school you completed?



Open a **two-way** street



## Hearing

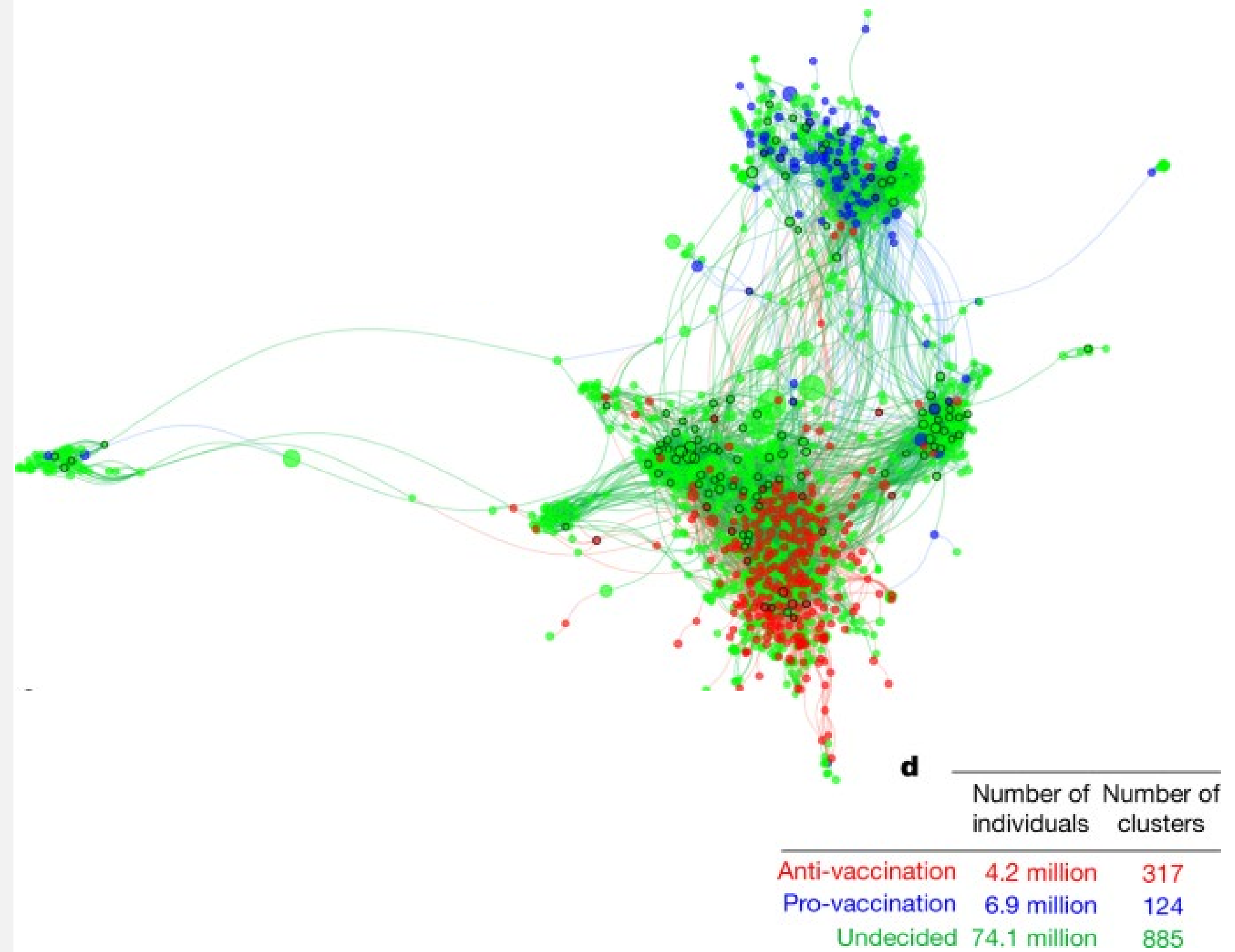
- Easy: accidental; automatic.
- Passive: involuntary; effortless.
- Physical Function: involves the ears.

## Listening

- Hard: requires practice and being alert.
- Active: a conscious effort; requires focused involvement.
- Internal Behavior: involves mind and body.

- Legitimate concerns exist
- Look for questions. Open a tip line
- Communication is a two-way street
- Know where people are talking

Be inclusive



Johnson et al. (2020) The online competition between pro- and anti-vaccination views. Nature.



# What you say **matters**

## Words matter

Rumors > Misinformation

Research > Invent

Vaccination > Injection

Pharma > Drug companies

## Tone matters

Here's why Facebook, YouTube,  
and more are removing that **dumb**  
Plandemic video

**Coronavirus : 9 réactions **absurdes** des  
humains face à l'épidémie**

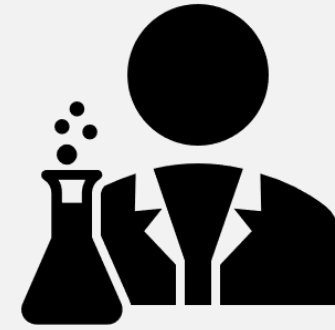
**'Absolutely insane': Anti-vaxxers promote  
coronavirus conspiracies**

**A bizarre conspiracy theory puts Bill Gates at the center of  
the coronavirus crisis — and major conservative pundits are  
circulating it**

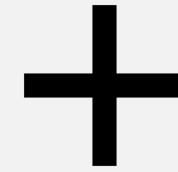
**Coronavirus y conspiración: historia de las  
**teorías absurdas** durante las pandemias**

*Alors que l'épidémie continue de gagner du  
terrain, les théories fumeuses sur l'origine du  
coronavirus fleurissent sur internet. Petit  
florilège.*

Reactive Communication



Proactive Communication



Translation

Be first

Trusted messengers

Bidirectional

What you say matters

Inclusive



Evidence-based decision making

Increased confidence in science

Foster trust

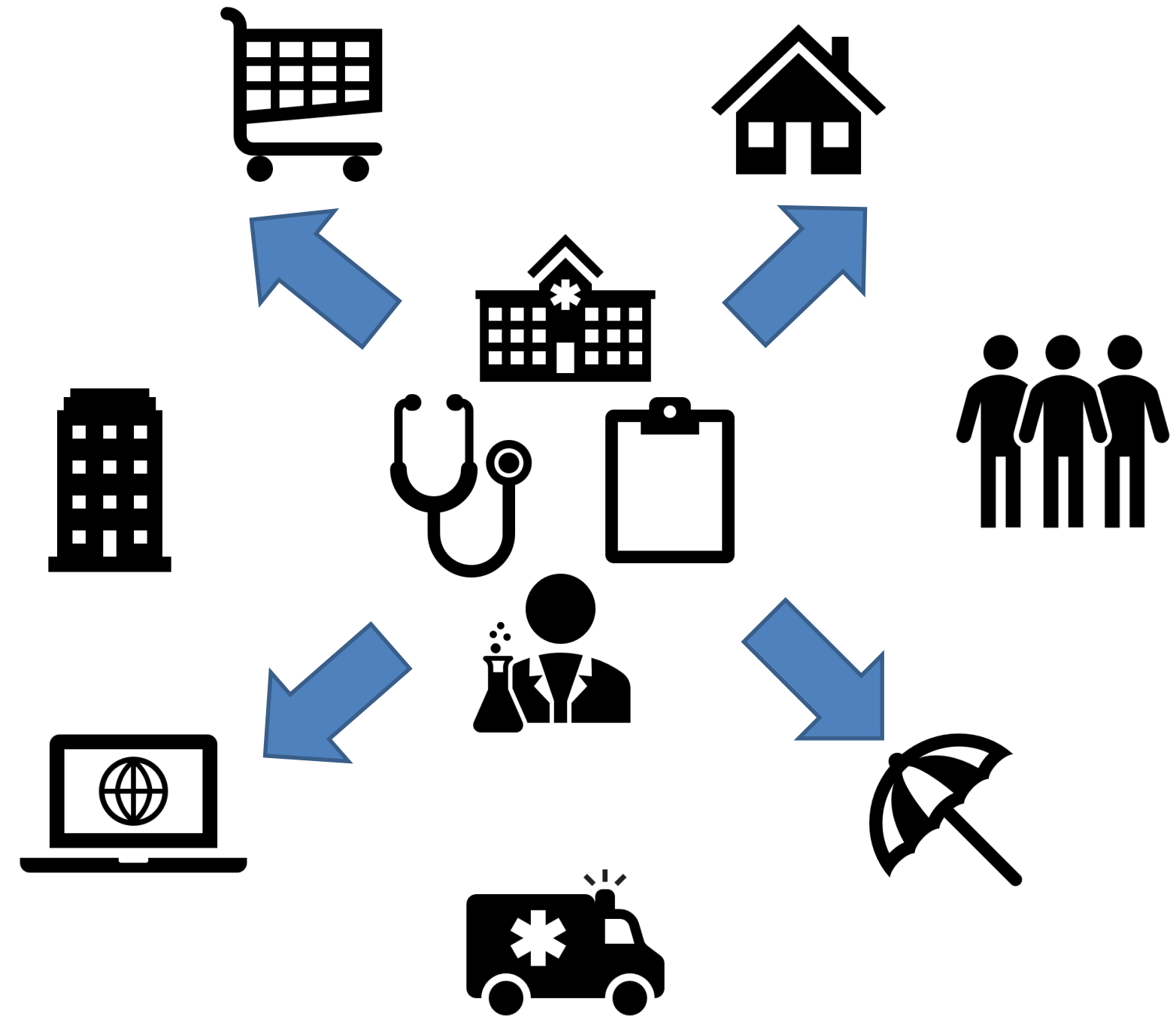


Needed now more than ever

## Serious **Viral Outbreaks** Over Past 100 Years

Table 1. Serious Viral Outbreaks Over Past 100 Years					
	Name	Virus Type	Year Began	Global Deaths	US. Deaths
1	Spanish Flu	Orthomyxovirus	1918	50,000,000	675,000
2	Asian Flu (H2N2)	Orthomyxovirus	1957	1,100,000	116,000
3	Hong Kong Flu (H3N2)	Orthomyxovirus	1968	1,000,000	100,000
4	HIV	Retrovirus	1981	32,700,000	700,000
5	SARS-CoV-1	Coronavirus	2002	774	
6	Influenza (H1N1)	Orthomyxovirus	2009	284,000	12,469
7	MERS	Coronavirus	2012	875	
8	Ebola	Filovirus	2014	11,310	1
9	Zika	Flavivirus	2015	N/A	
10	Ebola	Filovirus	2018	2,300	
11	SARS-CoV-2	Coronavirus	2019	4,100,000+	621,000+

Recognize the  
role **you** play





Thank you!

Katelyn Jetelina, MPH PhD  
Your Local Epidemiologist