The National Academies of
SCIENCES · ENGINEERING · MEDICINE

Building Public Trust in Public Health Emergency Preparedness and Response (PHEPR) Science: A Workshop

Day 1: March 29, 2022 | 10:00 AM - 3:00 PM ET
Day 2: March 30, 2022 | 10:00 AM - 3:00 PM ET

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Welcome and Overview of the Workshop

SANDRA QUINN, *WORKSHOP CHAIR*
Professor and Chair
Department of Family Science
University of Maryland School of Public Health

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Trust in Public Health Emergency Preparedness and Response (PHEPR) Science

10:15-11:00 am ET

DOMINIQUE BROSSARD, MODERATOR
Professor and Chair
Department of Life Sciences Communication
University of Madison-Wisconsin

BRIAN CASTRUCCI
President and Chief Executive Officer
de Beaumont Foundation

CARY FUNK
Director
Science and Society Research
Pew Research Center

FRANCISCO GARCÍA
Deputy County Administrator for Community and Health Services Chief Medical Officer
Pima County

MARIAN MOSER JONES
Associate Professor
College of Public Health and History Department
The Ohio State University

MARCUS PLESCIA
Chief Medical Officer
Association of State and Territorial Health Officials

BRIONY SWIRE-THOMPSON
Senior Research Scientist
Network Science Institute
Northeastern University

Submit your questions for the panelists in the Sli.do below the live stream.

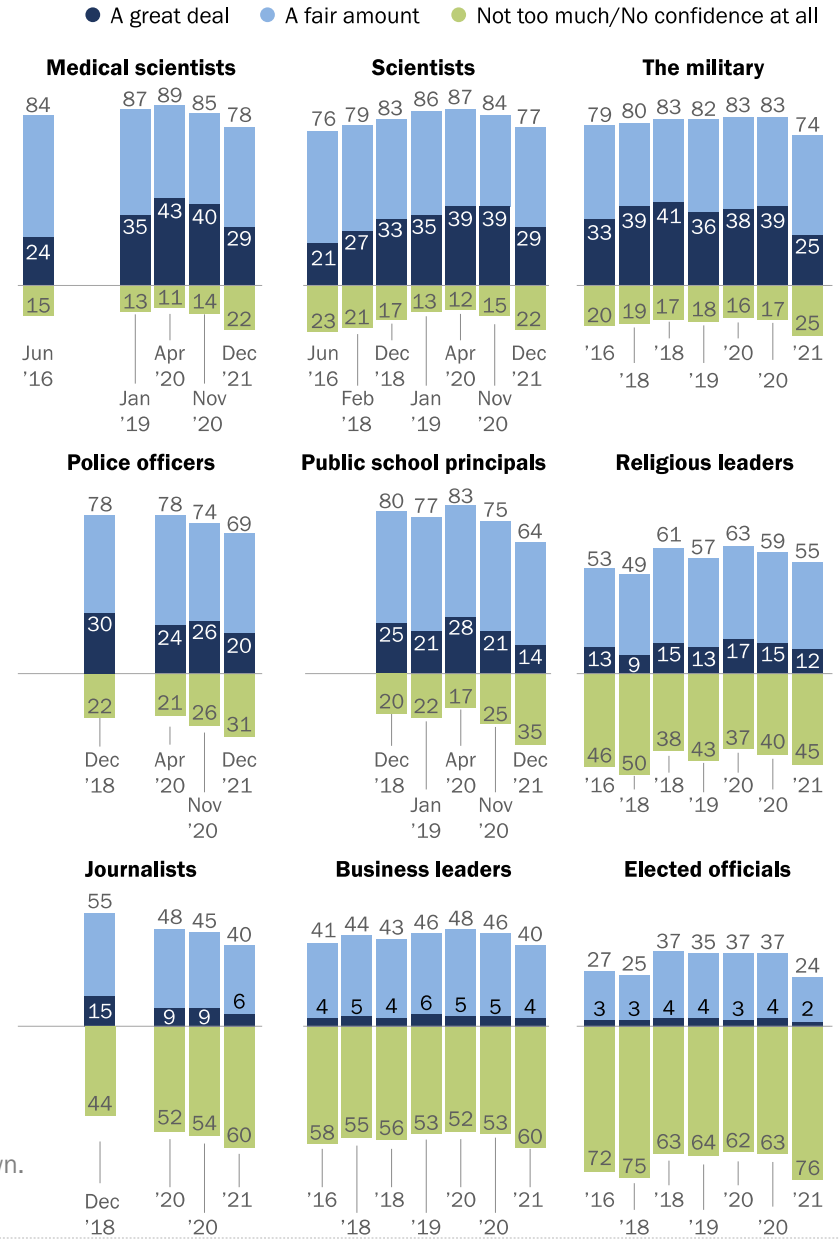
Pew Research Center

The Dynamics Public Trust in Scientists

Cary Funk, Ph.D.

Director, Science and Society Research

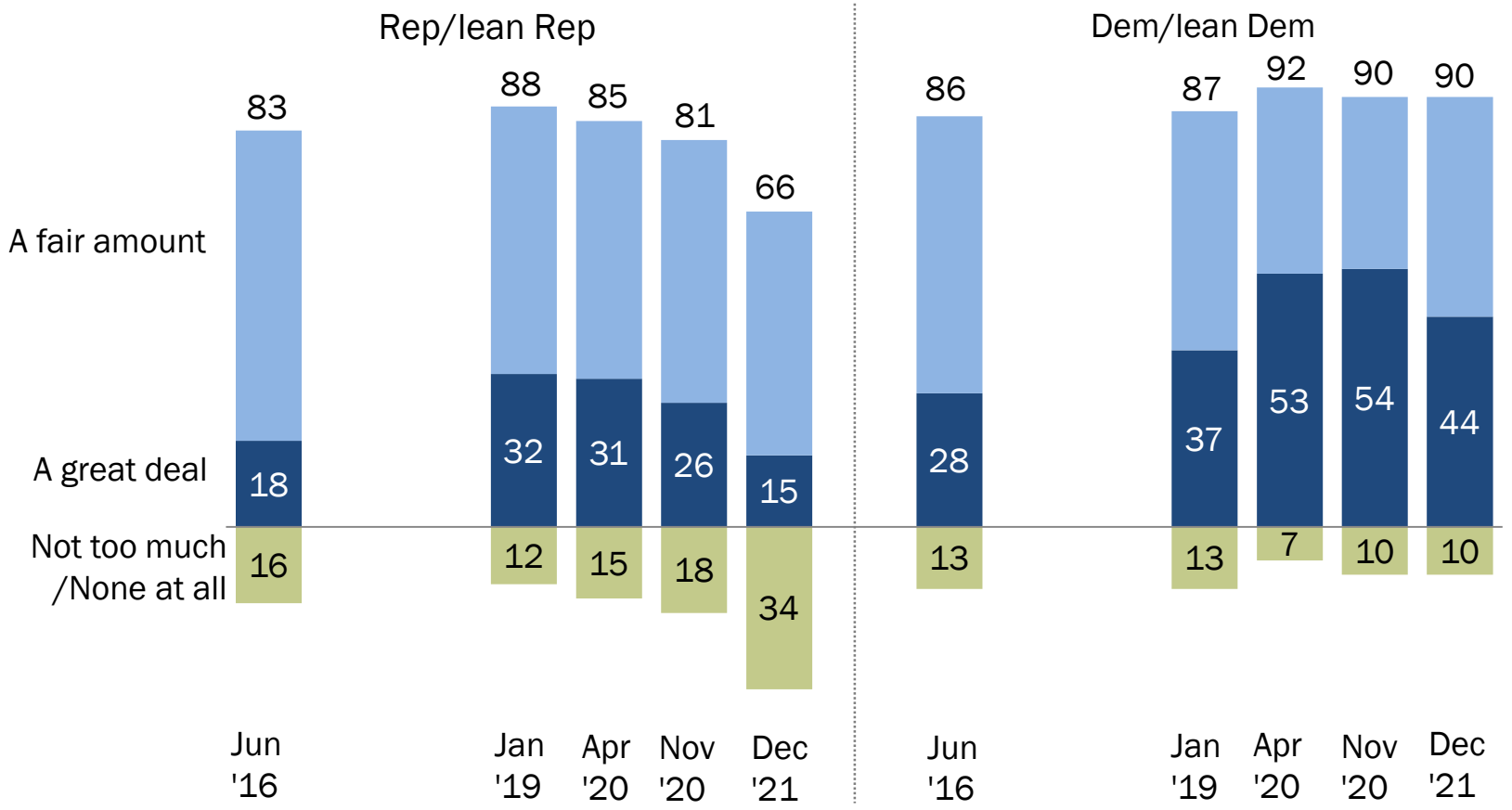
Americans' Trust in Scientists, Other Groups Declines



Note: Respondents who did not give an answer are not shown.
Source: Survey of U.S. adults conducted Jan. 24-30, 2022.

Democrats remain more confident than Republicans in medical scientists; ratings fall among both groups

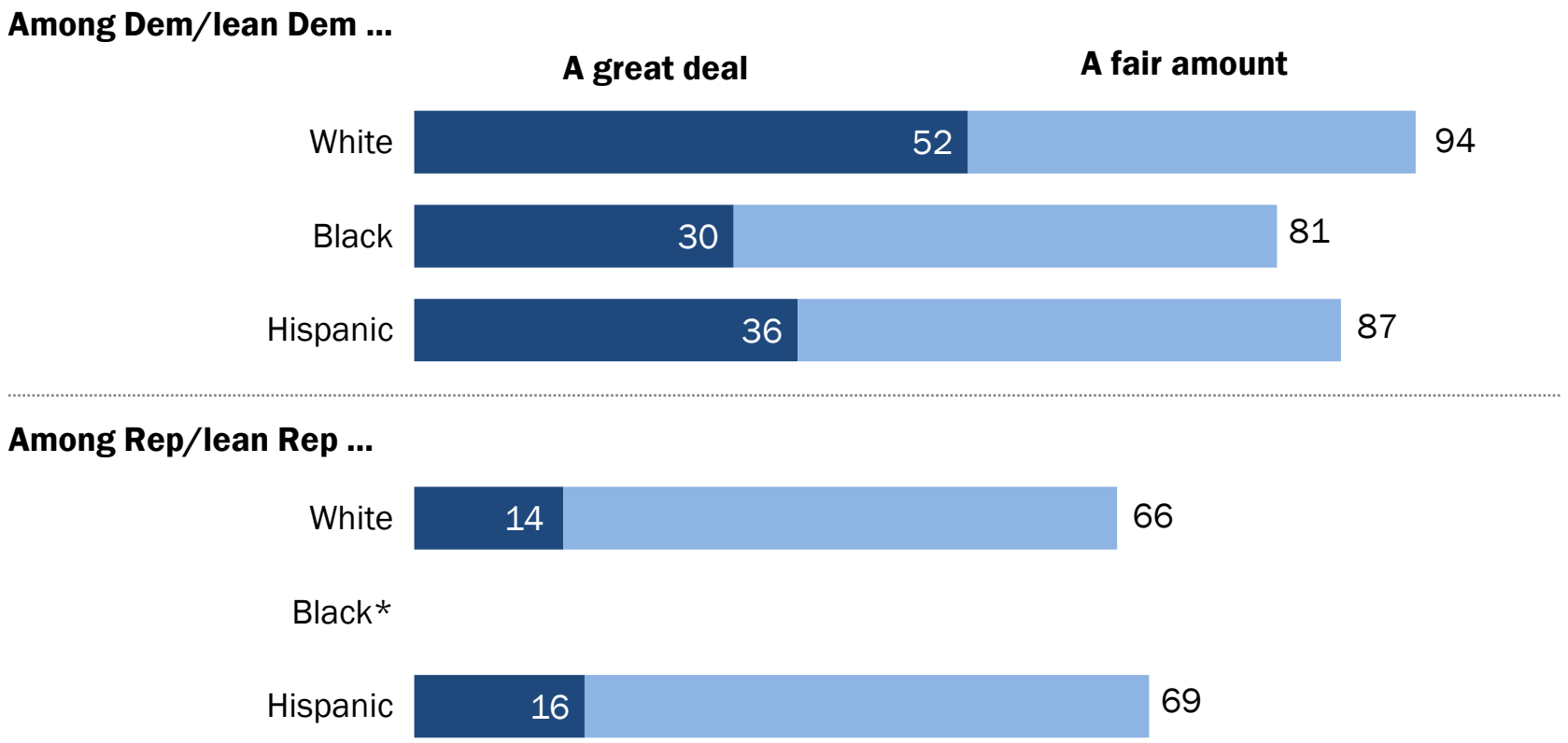
*U.S. adults who have ___ of confidence in **medical scientists** to act in the best interests of the public*



Note: Respondents who did not give an answer are not shown.
Source: Survey of U.S. adults conducted Nov. 30-Dec. 12, 2021.

White Democrats express higher levels of confidence in medical scientists than Black, Hispanic Democrats

*U.S. adults who have ___ of confidence in **medical scientists** to act in the best interests of the public*



Note: Respondents who gave other responses or did not give an answer are not shown.
Source: Survey of U.S. adults conducted Nov. 30-Dec. 12, 2021.

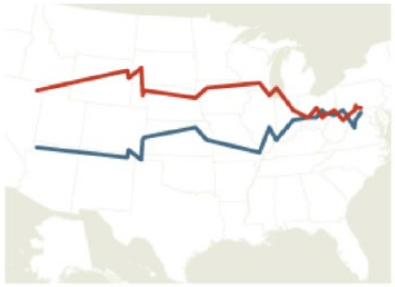
Pew Research Center

Cary Funk, Ph.D.

Director, Science and society research

Email: info@pewresearch.org

@pewscience



U.S. Survey Research

International Survey Research

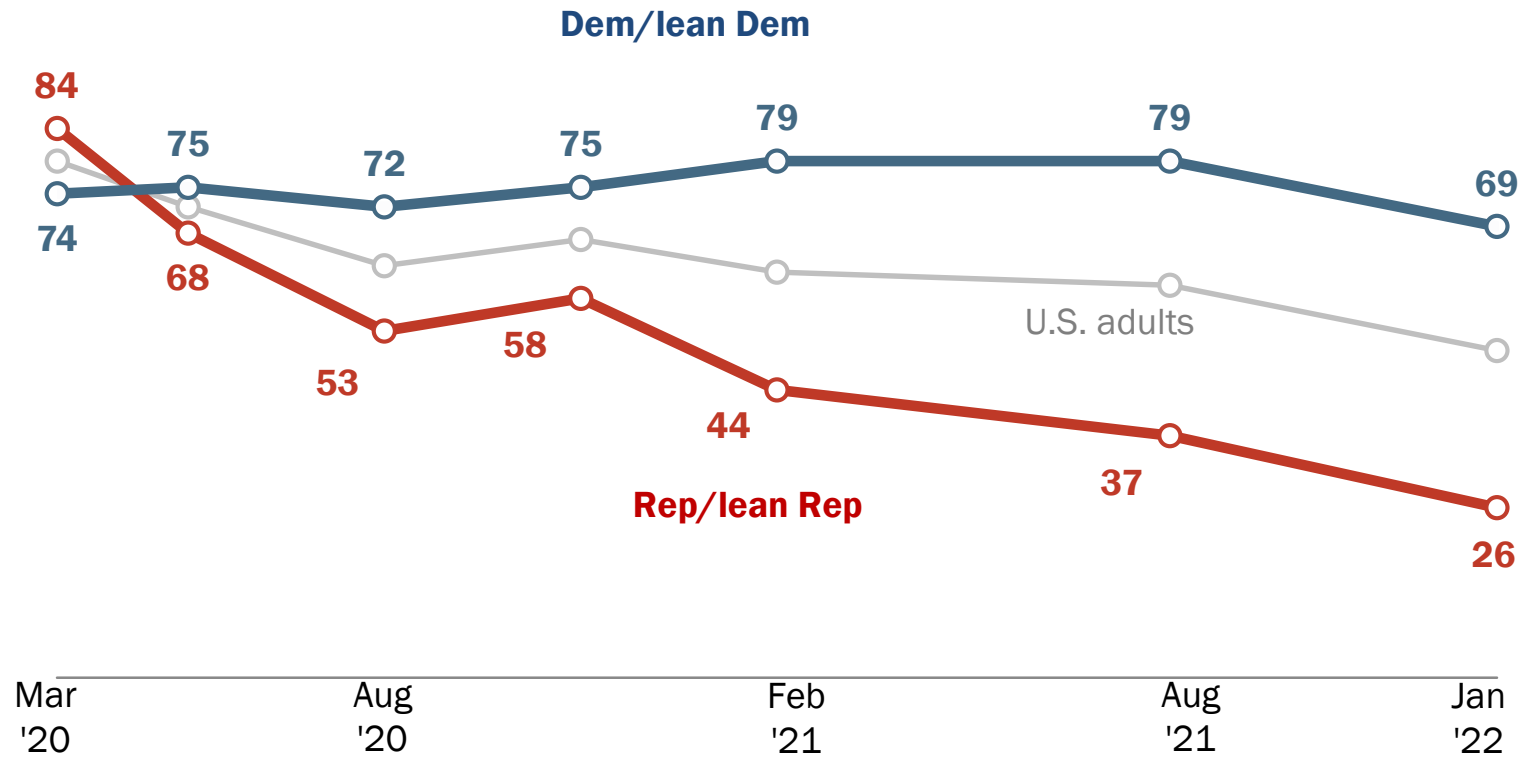
Data Science

Demographic Research

March 29, 2022

Drop in Republicans' ratings of public health officials' response to COVID-19

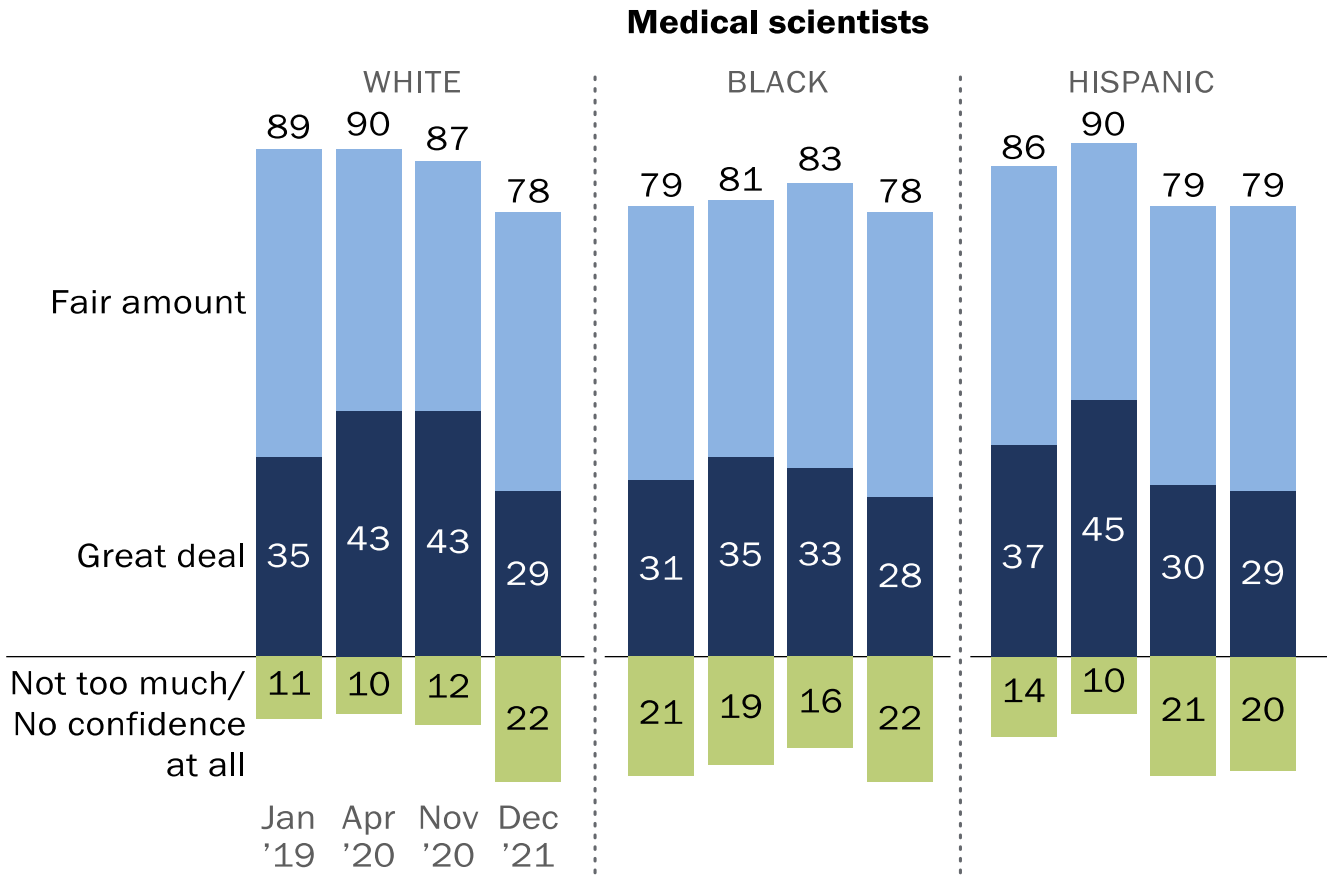
U.S. adults who say public health officials such as those at the CDC are doing an excellent/good job responding to the coronavirus outbreak



Note: Respondents who gave other responses or did not give an answer are not shown.
Source: Survey of U.S. adults conducted Jan. 24-30, 2022.

Confidence in medical scientists has declined among White, Black and Hispanic adults since early 2020

*U.S. adults who have ___ of confidence in **medical scientists** to act in the best interests of the public*



Note: Respondents who did not give an answer are not shown.
Source: Survey of U.S. adults conducted Nov. 30-Dec. 12, 2021.

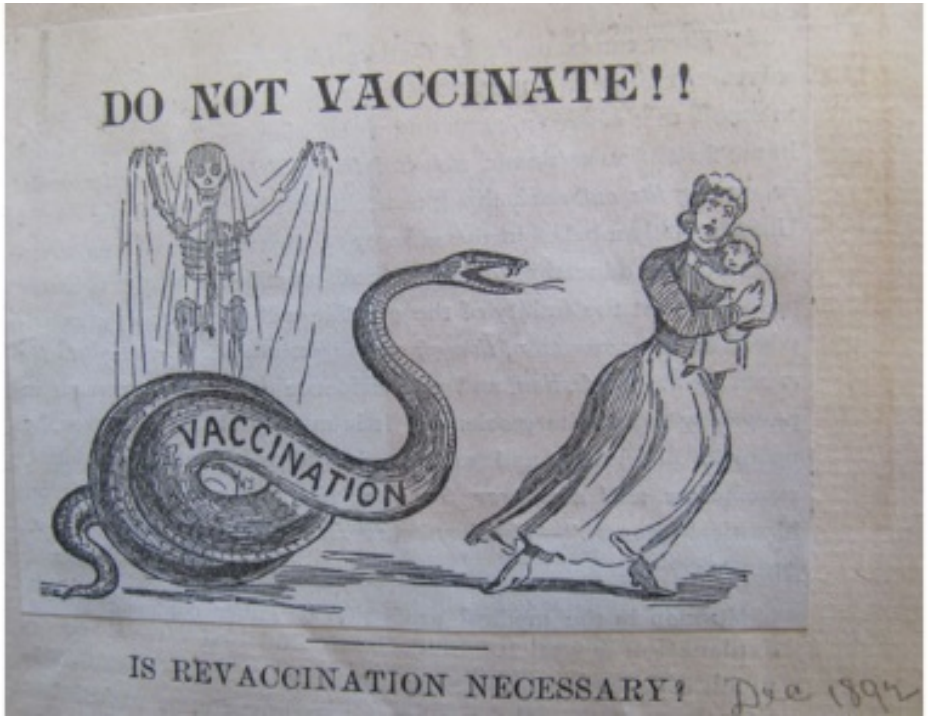
Public Health Misinformation Has a History…

Marian Moser Jones, Ph.D., M.P.H.

Associate Professor, The Ohio State University College of Public Health

Jones.7849@osu.edu

19th C. Transatlantic Anti-Vaxx Movement



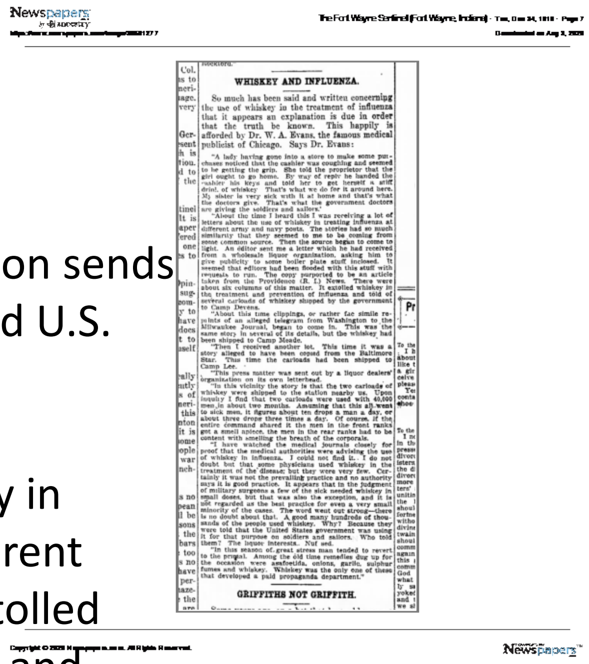
Do Not Vaccinate!! Cartoon from anti-vaccination publication.The Historical Medical Library of The College of Physicians of Philadelphia. Scrapbook of Anti-Vaccinations Clippings. 8c242. http://www.historyofvaccines.org/content/do-not-vaccinate

Fort Wayne Sentinel (Indiana)
Dec. 24, 1918:

“Whiskey and Influenza”

Liquor dealers’ organization sends newspaper editors around U.S. press releases, “letters”

”about the use of whiskey in treating influenza at different army and navy posts…extolled whiskey in the treatment and prevention of influenza.”



WHISKEY AND INFLUENZA.

So much has been said and written concerning the use of whiskey in the treatment of influenza that it appears an explanation is due in order that the truth be known. This happily is afforded by Dr. W. A. Evans, the famous medical publicist of Chicago. Says Dr. Evans:

"A lady having gone into a store to make some purchases noticed that the cashier was coughing and seemed to be getting the grip. She told the proprietor that the girl ought to go home. By way of reply he handed the cashier his keys and told her to get herself a stiff drink of whiskey. 'That's what we do for it around here. My sister is very sick with it at home and that's what the doctors give. That's what the government doctors are giving the soldiers and sailors.'

"About the time I heard this I was receiving a lot of letters about the use of whiskey in treating influenza at different army and navy posts. The stories had so much similarity that they seemed to me to be coming from some common source. Then the source began to come to light. An editor sent me a letter which he had received from a wholesale liquor organization, asking him to give publicity to some boiler plate stuff inclosed. It seemed that editors had been flooded with this stuff with requests to run. The copy purported to be an article taken from the Providence (R. I.) News. There were about six columns of this matter. It extolled whiskey in the treatment and prevention of influenza and told of several carloads of whiskey shipped by the government to Camp Devens.

"About this time clippings, or rather fac simile reprints of an alleged telegram from Washington to the Milwaukee Journal, began to come in. This was the same story in several of its details, but the whiskey had been shipped to Camp Meade.

"Then I received another lot. This time it was a story alleged to have been copied from the Baltimore Star. This time the carloads had been shipped to Camp Lee.

"This press matter was sent out by a liquor dealers' organization on its own letterhead.

"In this vicinity the story is that the two carloads of whiskey were shipped to the station nearby us. Upon inquiry I find that two carloads were used with 40,000 men in about two months. Assuming that this all went to sick men, it figures about ten drops a man a day, or about three drops three times a day. Of course, if the entire command shared it the men in the front ranks got a smell apiece, the men in the rear ranks had to be content with smelling the breath of the corporals.

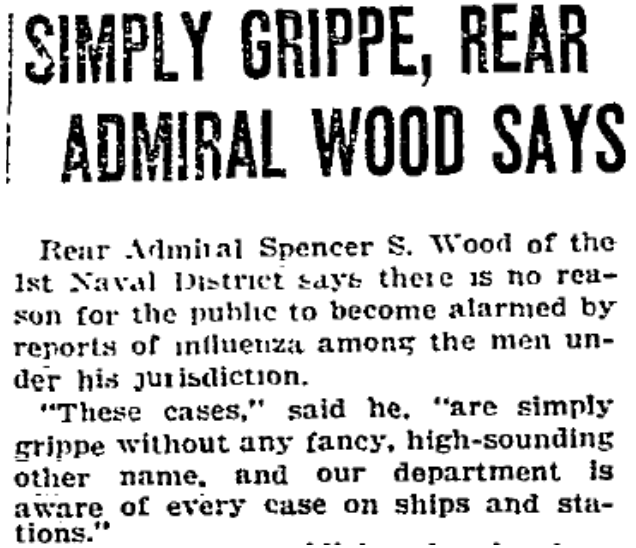
"I have watched the medical journals closely for proof that the medical authorities were advising the use of whiskey in influenza. I could not find it. I do not doubt but that some physicians used whiskey in the treatment of the disease; but they were very few. Certainly it was not the prevailing practice and no authority says it is good practice. It appears that in the judgment of military surgeons a few of the sick needed whiskey in small doses, but that was also the exception, and it is not regarded as the best practice for even a very small minority of the cases. The word went out strong—there is no doubt about that. A good many hundreds of thousands of the people used whiskey. Why? Because they were told that the United States government was using it for that purpose on soldiers and sailors. Who told them? The liquor interests. Nuf sed.

"In this season of great stress man tended to revert to the primal. Among the old time remedies dug up for the occasion were asafoetida, onions, garlic, sulphur fumes and whiskey. Whiskey was the only one of these that developed a paid propaganda department."

GRIFFITHS NOT GRIFFITH.

Sept. 15, 1918 – *Boston Globe*, p. 6

- 37 deaths among sailors
- 1,897 cases
- But “no reason for the public to be alarmed”
- On page 6????



SIMPLY GRIPPE, REAR ADMIRAL WOOD SAYS

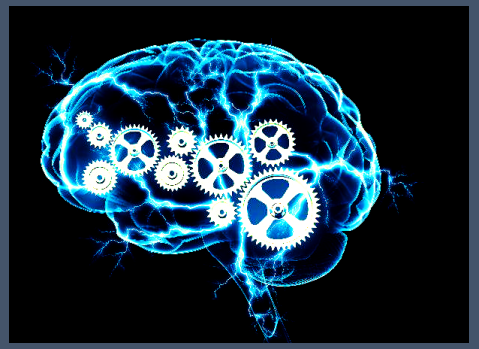
Rear Admiral Spencer S. Wood of the 1st Naval District says there is no reason for the public to become alarmed by reports of influenza among the men under his jurisdiction.

"These cases," said he, "are simply grippe without any fancy, high-sounding other name, and our department is aware of every case on ships and stations."

Reducing trust in disinformation sources

Briony Swire-Thompson

Director of the Psychology of Misinformation Lab



Information Ecosystem

Who to trust has become extremely difficult:

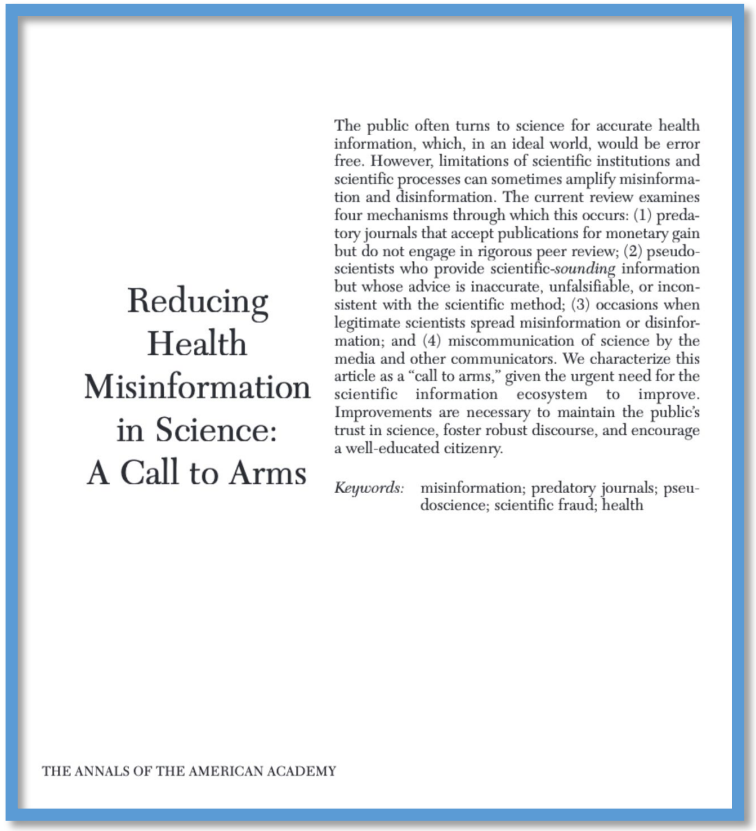
(1) Predatory journals that accept publications for monetary gain

(2) Retracted articles are not labelled

(3) Science communicators relaying inaccuracies to lay audiences

(4) Fake experts spreading disinformation

Call to arms



Reducing Health Misinformation in Science: A Call to Arms

The public often turns to science for accurate health information, which, in an ideal world, would be error free. However, limitations of scientific institutions and scientific processes can sometimes amplify misinformation and disinformation. The current review examines four mechanisms through which this occurs: (1) predatory journals that accept publications for monetary gain but do not engage in rigorous peer review; (2) pseudoscientists who provide scientific-*sounding* information but whose advice is inaccurate, unfalsifiable, or inconsistent with the scientific method; (3) occasions when legitimate scientists spread misinformation or disinformation; and (4) miscommunication of science by the media and other communicators. We characterize this article as a "call to arms," given the urgent need for the scientific information ecosystem to improve. Improvements are necessary to maintain the public's trust in science, foster robust discourse, and encourage a well-educated citizenry.

Keywords: misinformation; predatory journals; pseudoscience; scientific fraud; health

THE ANNALS OF THE AMERICAN ACADEMY

New experiment!

We first present a source that seems very credible, then…

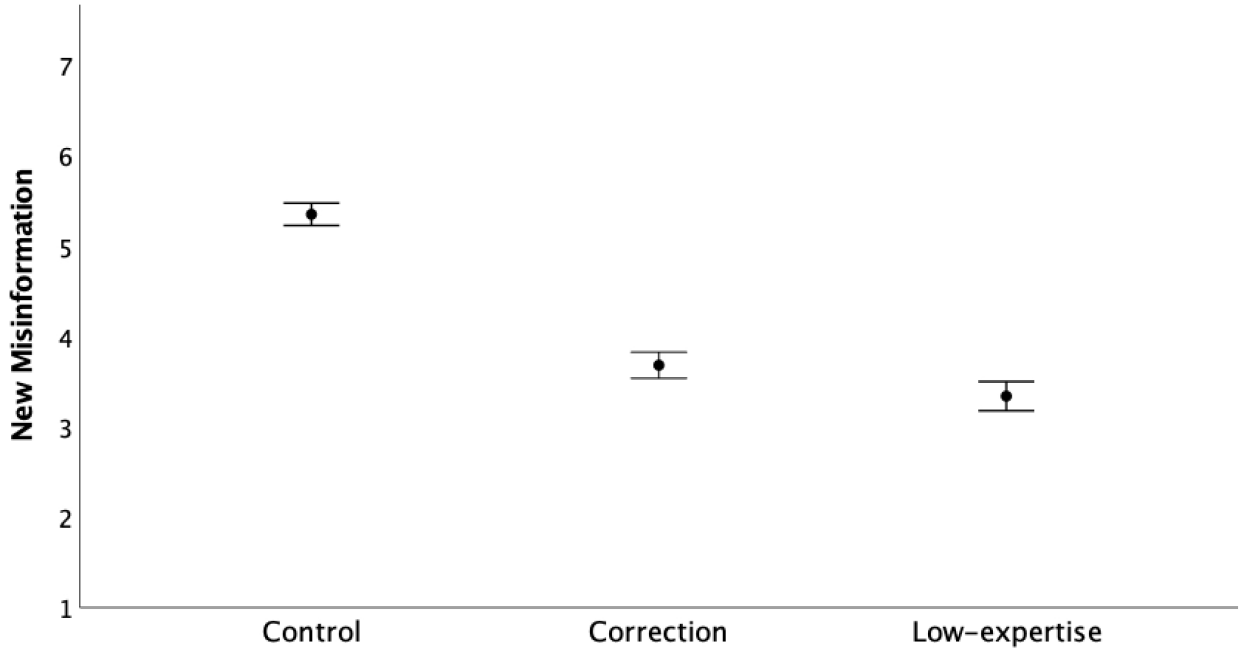
New experiment!

We first present a source that seems very credible, then…

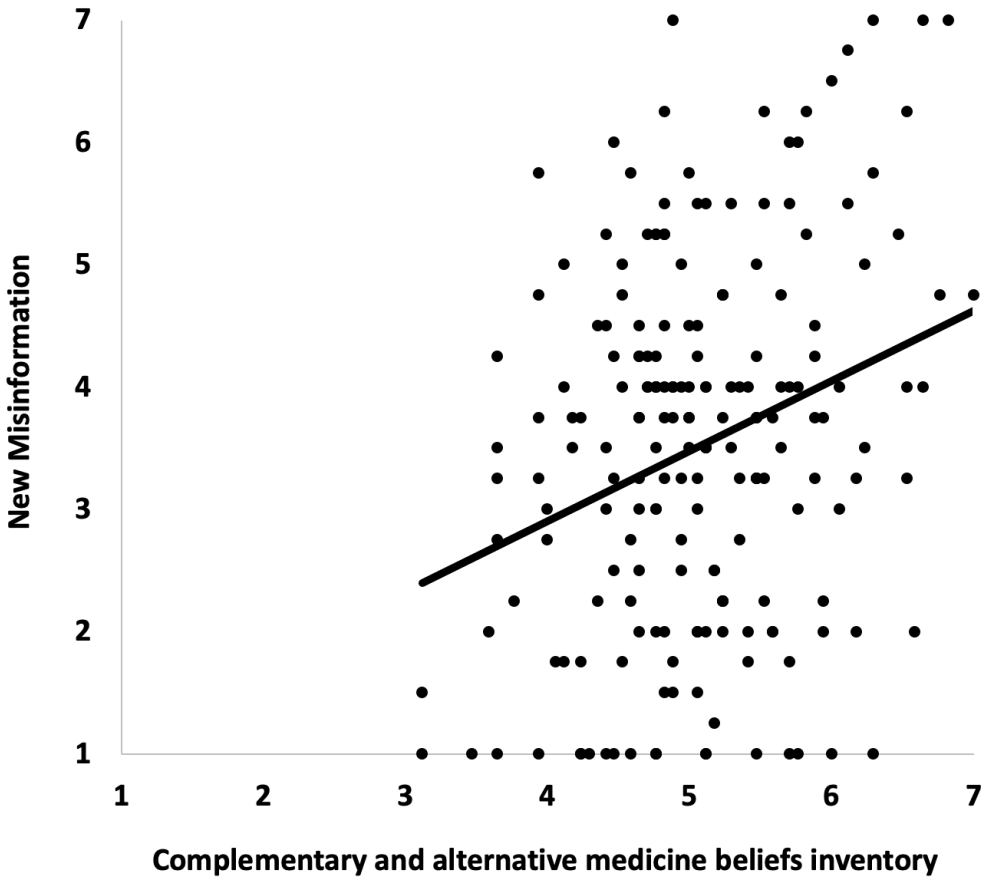
- Control condition: photographer, likes cooking
- Low-expertise condition: not qualified to give information
- Correcting misinformation condition: has made many inaccurate statements

…we next measure people's belief in new misinformation and evaluations of source credibility

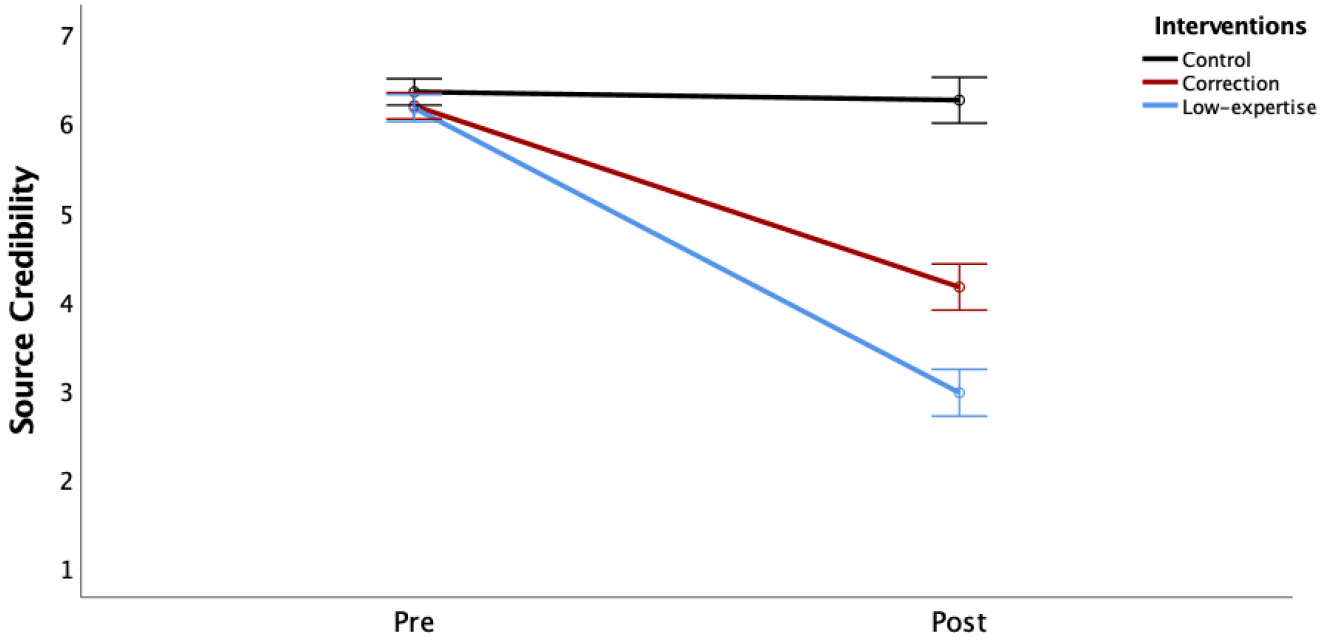
New experiment!



New experiment!



New experiment!



Th  !

@briony_swire

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Credibility and Trustworthiness

11:00-11:45 am ET

CATHY SLEMP, *MODERATOR*
Former Commissioner and State Health Officer
West Virginia Bureau for Public Health

AMBER ANDERSON
Research Epidemiologist
University of Oklahoma Health Sciences Center

GILLIAN STEELFISHER
Senior Research Scientist
Department of Health Policy and Management
Harvard T.H. Chan School of Public Health

ALAN LESHNER
Chief Executive Officer Emeritus
American Association for the Advancement of Science

ALONZO PLOUGH
Vice President, Research-Evaluation-Learning and Chief Science Officer
Robert Wood Johnson Foundation

RUEBEN WARREN
Professor and Director
National Center for Bioethics in Research and Health Care
Tuskegee University

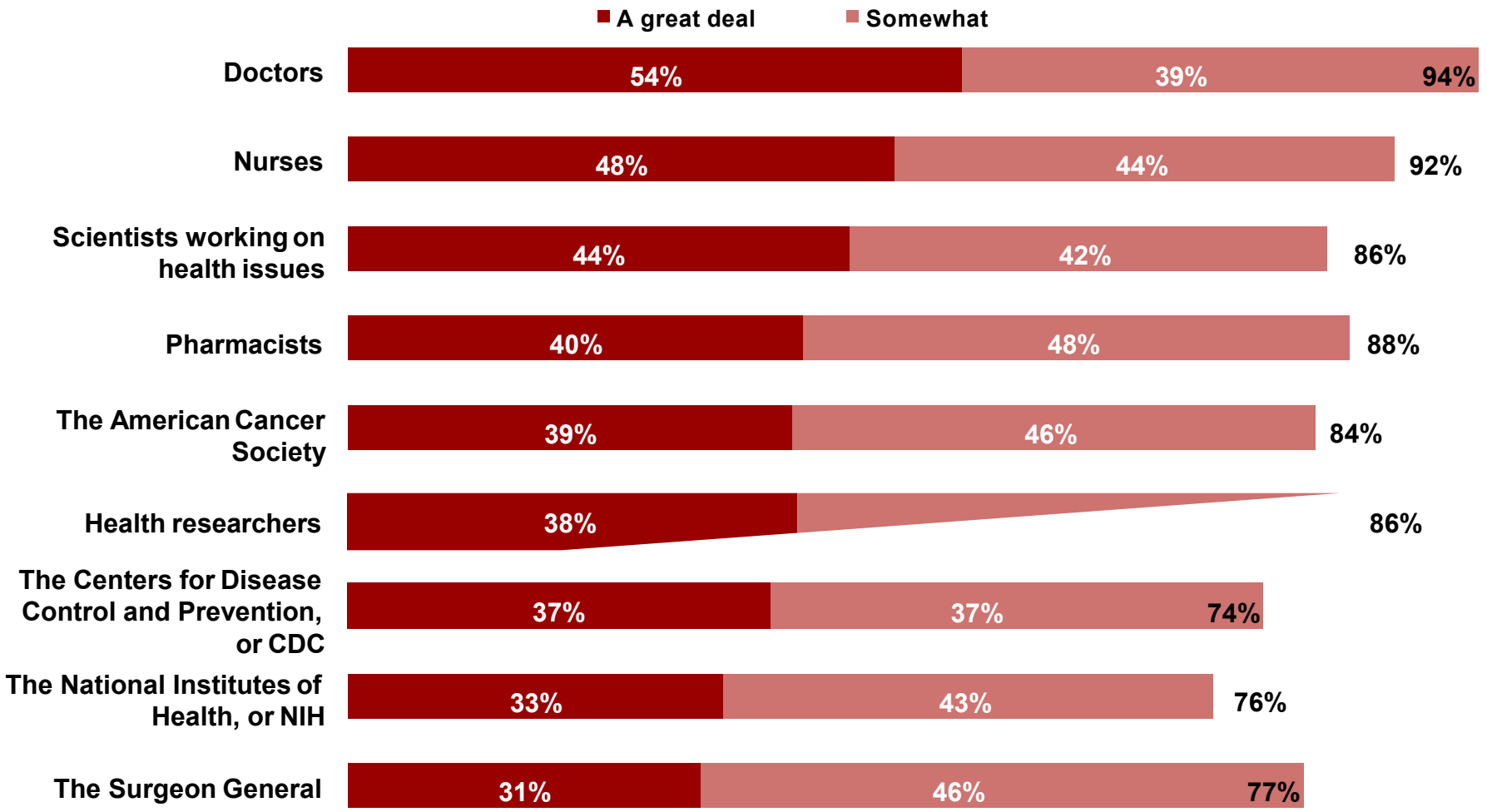
Submit your questions for the panelists in the Sli.do below the live stream.

Trusted Sources of Health Information

% saying they trust recommendations to improve health in general made by each group

Most Trusted Sources of Health Information are Medical Professionals

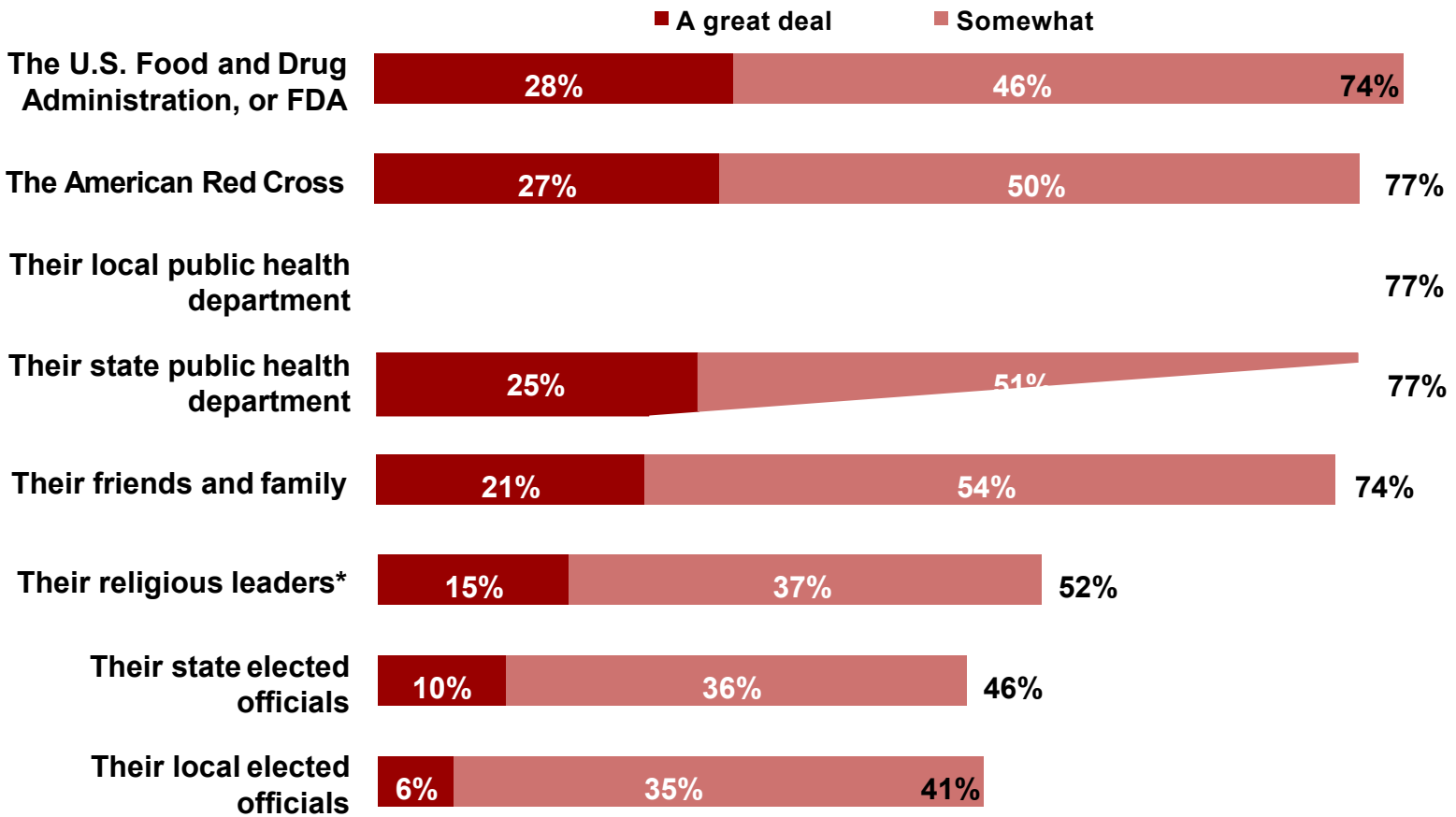
% saying they trust recommendations to improve health in general made by each group



All respondents asked about state and local public health departments and CDC (n=4208); respondents asked about random 10 institutions among remaining (n=2026-2168)

Least Trusted for Health Information are are Elected Officials

% saying they trust recommendations to improve health in general made by each group

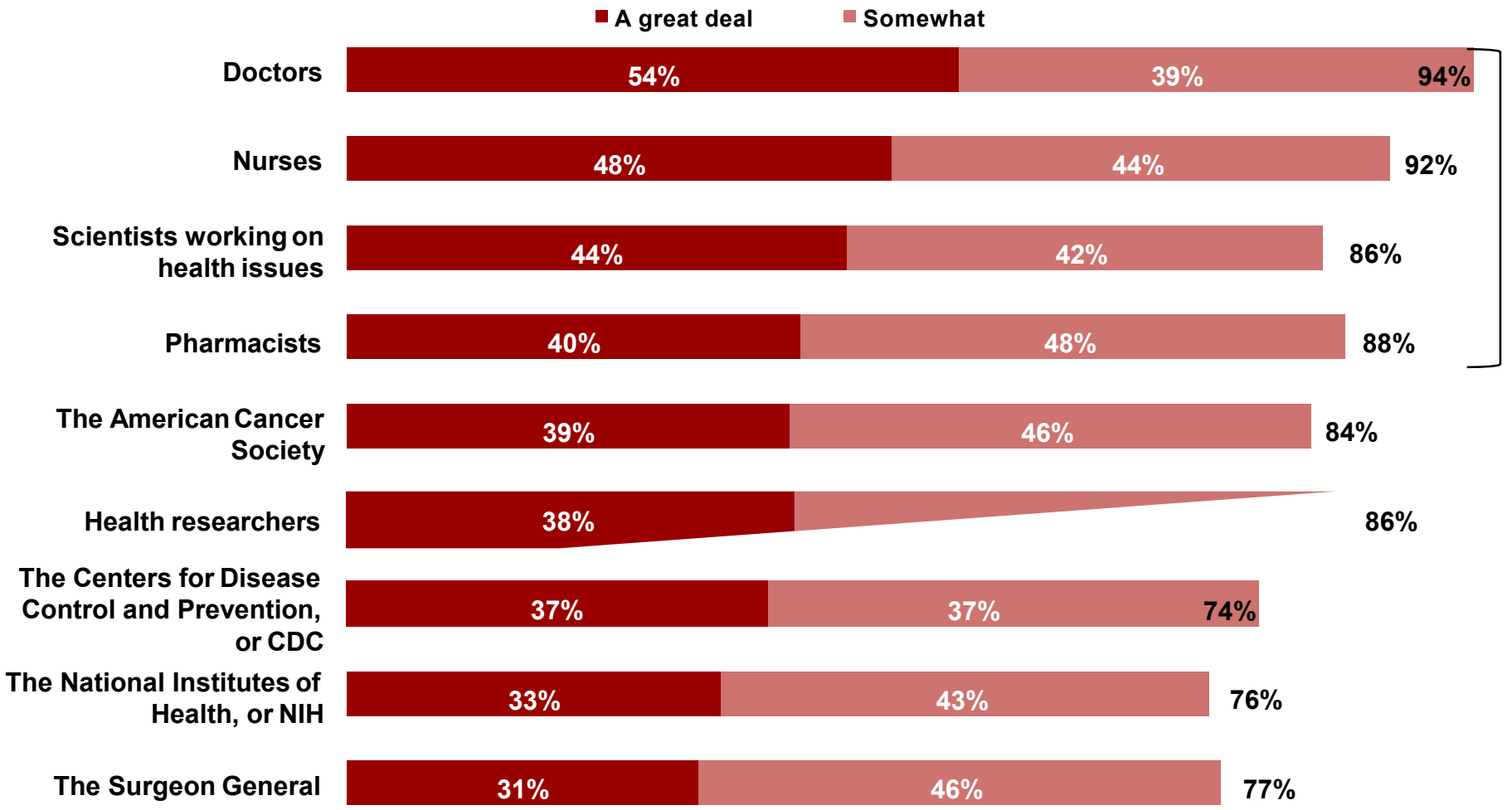


All respondents asked about state and local public health departments and CDC (n=4208); respondents asked about random 10 institutions among remaining (n=2026-2168)

*Among those who also say they have a religious leader, n=1606

Most Trusted Sources of Health Information are Medical Professionals

% saying they trust recommendations to improve health in general made by each group



All respondents asked about state and local public health departments and CDC (n=4208); respondents asked about random 10 institutions among remaining (n=2026-2168)

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Confidence and Trust in PHEPR Science Among Diverse Demographic Groups

11:45am-12:30 pm ET

KAI RUGGERI, *MODERATOR*
Assistant Professor
Columbia University Mailman School of Public Health

EMILY K. BRUNSON
Associate Professor
Texas State University

RAYMOND FOXWORTH
Vice President
First Nations Development Institute

VENUS GINÉS
President and Founder
Día de la Mujer Latina

LISA LETOURNEAU
Senior Advisor
Maine Department of Health and Human Services

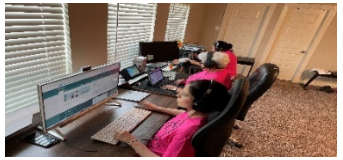
ORRIEL RICHARDSON
Vice President
Morgan Health - JPMorgan Chase & Co.

ANNE ZINK
Chief Medical Officer
State of Alaska

Submit your questions for the panelists in the Sli.do below the live stream.

DML's Community Health Worker/Promotores Outreach & Training

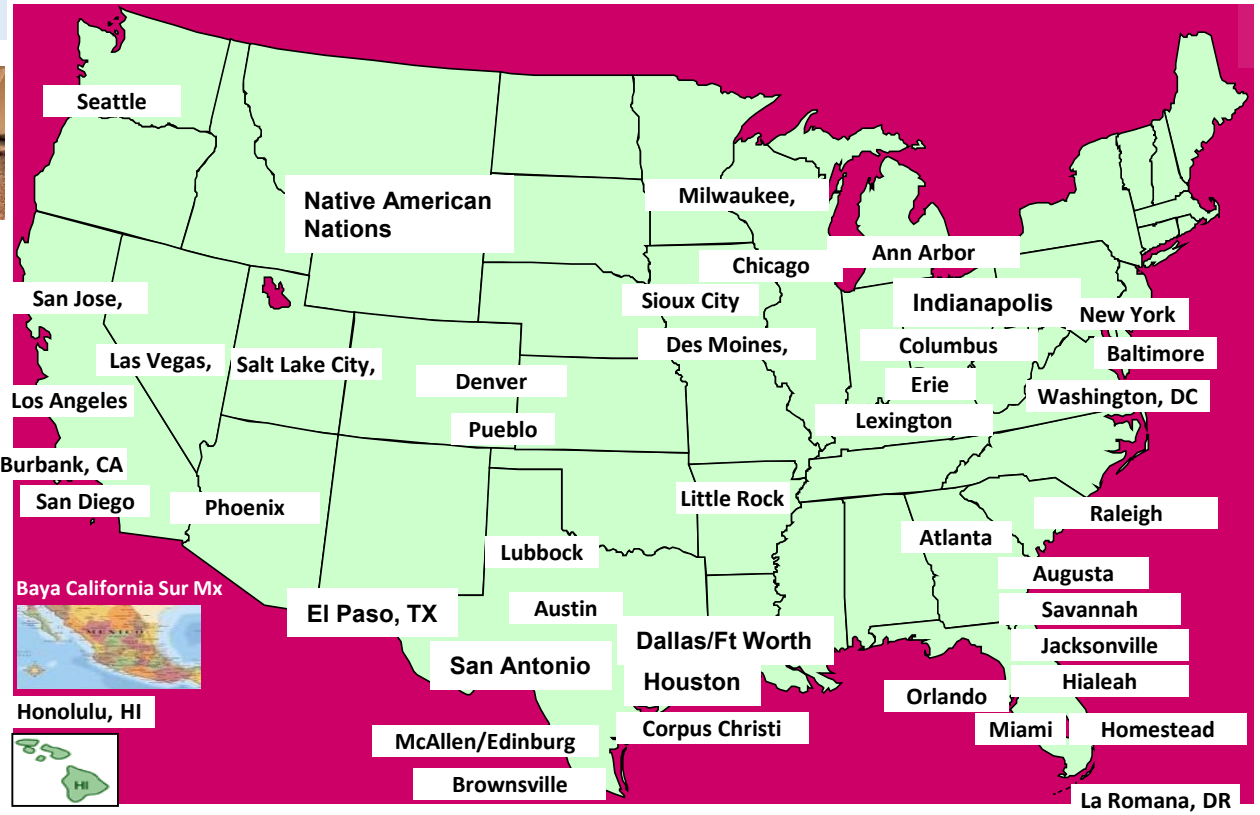
Telehealth Community Navigator



Health Fiestas

Patient Navigator

Clinical Trial Community Navigator



Behavioral Health Community Navigator

Disaster Recovery

Medical Providers

Personal-Care Navigator

School-based Navigator

Community Health Centers

Venus Ginés, MA P/CHW-I 281-801-5285
www.diadelamujerlatina.org
president@diadelamujerlatina.org

San Juan, PR

Oh man, I hope this doesn’t make me late for my covid 19 appointment

Find a vaccine:
https://www.maine.gov/covid19/vaccines/vaccination-sitesa

Community, trust, and time.

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

(Re)Building and Maintaining Trust Among Diverse Demographic Groups

12:30pm-1:30 pm ET

JENNIFER N. KIGER, *MODERATOR*
COVID-19 Division Director
Harris County Public Health

MICHELE ANDRASIK
Director
Social & Behavioral Sciences and Community Engagement
HIV Vaccine Trials Network
COVID-19 Prevention Network

LAURA BOGART
Senior Behavioral Scientist
RAND Corporation

CHRISTIAN CAPO
Healthy Equity Manager
East Harris County Empowerment Council

MATIAS VALENZUELA
Director
Office of Equity and Community Partnership
Public Health, Seattle & King County

Submit your questions for the panelists in the Sli.do below the live stream.

(Re)Building and Maintaining Trust

Among Diverse Demographic Groups

Laura M. Bogart, PhD

RAND Corporation

What is the role of mistrust among diverse demographic groups?

A social psychological and positive psychology perspective

Strategies to Increase Trust:
COMMUNITY ENGAGEMENT

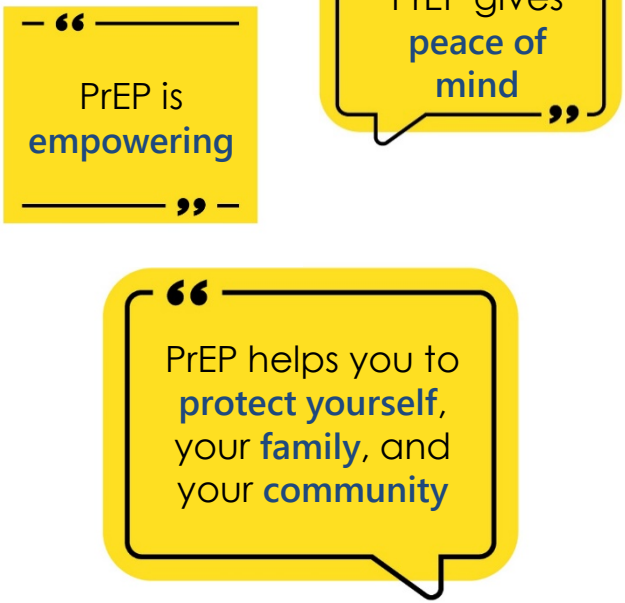
Ongoing authentic community engagement and empowerment

- Conduct needs assessment of community strengths, needs, acceptable messaging, and formal and informal leaders
- Understand the sources of mistrust

Strategies to Increase Trust: POSITIVE FRAMING

Use positive message framing of PHERP science information

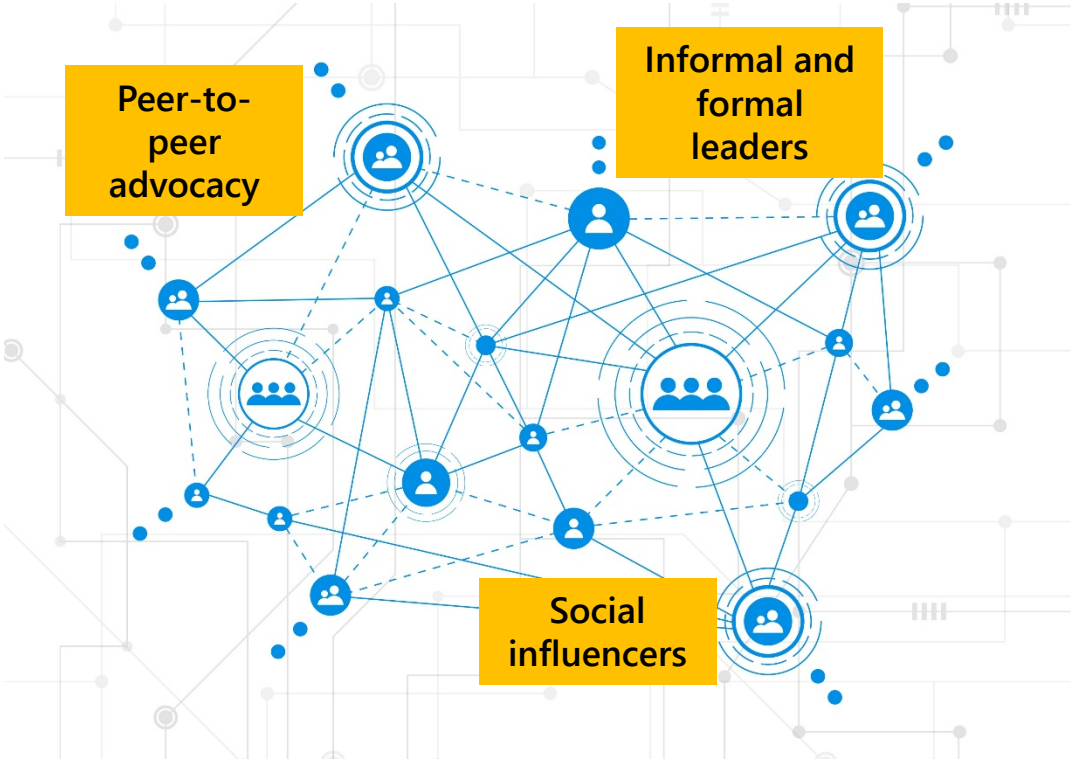
- Positive, clear, and transparent messages
- Channel community strengths and address misconceptions or areas of low knowledge
- Nonjudgmental, nonconfrontational (Motivational Interviewing) style
  - Acknowledge origins of mistrust and offer information
- Holistic health promotion (vs. disease focus)



Multiple studies, US, Uganda

Strategies to Increase Trust: SOCIAL NETWORK INTERVENTION

Leverage the power of social networks, online and offline



Examples

Social network HIV prevention advocacy intervention in Uganda

Train peer advocates on positive messaging and Motivational Interviewing style, and how to identify “strategic” social network members

Botswana COVID-19 Task Force

Agile response and clear, transparent information informed by social media monitoring of negatively valenced posts and misinformation (e.g., by social influencers)

Thank you!

Questions? Email lbogart@rand.org

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

The Infrastructure and Workforce to Build and Maintain Public Trust

12:30 pm-1:30 pm ET

MONICA L. SCHOCH-SPANA, *MODERATOR*
Senior Scholar
Johns Hopkins Center for Health Security
Senior Scientist
Department of Environmental Health and Engineering
Johns Hopkins Bloomberg School of Public Health

ANITA CHANDRA
Vice President and Director
RAND Social and Economic Well-Being
RAND Corporation

YSABEL DURON
President and Executive Director
The Latino Cancer Institute

JEFFERSON KETCHEL
Executive Director
Washington State Public Health Association

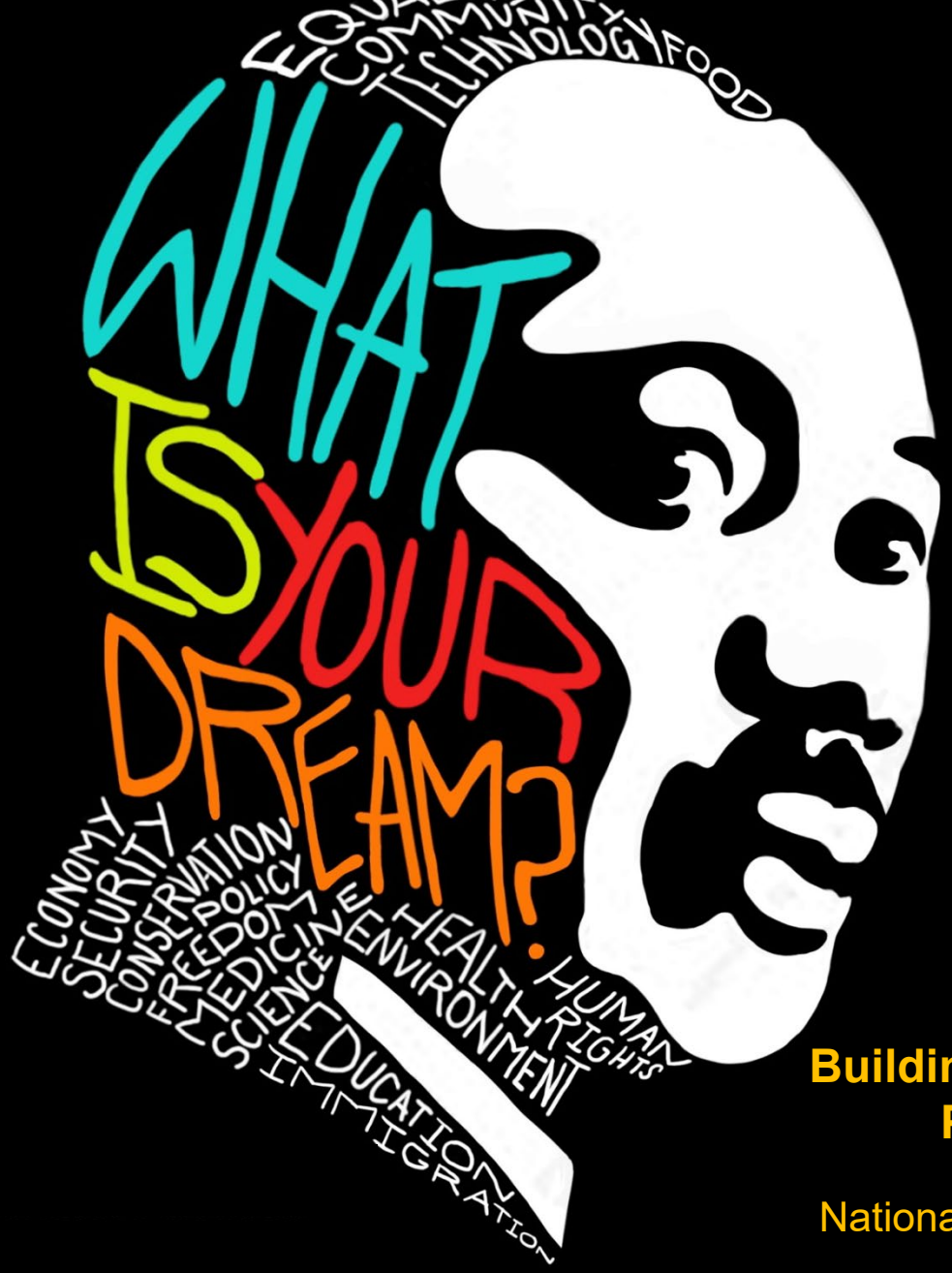
UMAIR SHAH
Secretary of Health
Washington State Department of Health

STEPHEN B. THOMAS
Director
Center for Health Equity
University of Maryland

Submit your questions for the panelists in the Sli.do below the live stream.

If not now, when!
If not us, who?

The Atlantic Magazine



Black Barbers & Stylists as Cornerstone of the Infrastructure and Workforce to Build and Maintain Public Trust

Stephen B. Thomas, Ph.D.
Professor Health Policy & Management
School of Public Health
Director, Maryland Center for Health Equity
University of Maryland
College Park, MD
301-405-8859

go.umd.edu/MDBSUH

Building Public Trust in Public Health Emergency Preparedness and Response Science

National Academies of Science, Engineering and Medicine
Tuesday, March 29, 2022

UNIVERSITY OF MARYLAND 18 56

SCHOOL OF
PUBLIC HEALTH

CENTER FOR HEALTH EQUITY

BUILDING BRIDGES
BUILDING TRUST
BUILDING
HEALTHY COMMUNITIES

Press Releases

Recovering from COVID-19 in Prince George's County, Maryland

New Report Provides Urgent Recommendations to Inform the Ongoing Response to COVID-19 and Increasing Health Equity in Majority-Black Prince George's County

Back to News

Kelly E. Blake | September 21, 2021

New Report Provides Urgent Recommendations to Inform the Ongoing Response to COVID-19 and Increasing Health Equity in Majority-Black Prince George's County

University of Maryland News Release

September 22, 2021

1. **Utilize COVID-19 vaccination campaigns as the foundation for sustained health promotion activities with community partners**

2. **Humanize delivery and communication strategies for COVID-19 vaccines**

3. **Invest in a strong public health infrastructure, properly staffed for sustained community engagement and public health preparedness, response and recovery activities**

4. **Strengthen the community health system as the backbone for equity, resilience and recovery**

The Historical Context of Health Disparities

"..If there is no **struggle**, there is no progress. Those who profess to favor freedom, and yet depreciate agitation, are men who want crops without plowing up the ground. They want rain without thunder and lightning. They want the ocean without the awful roar of its many waters…"

(Fredrick Douglass)

Health Advocates In-Reach & Research

(HAIR)

Maryland Barbers & Stylists United for Health

COMMUNITY CARE

THE DOCTOR IS IN

A community-based education program trains barbers as health advocates, reaching underserved, high-risk individuals.

BY TAMMY WORTH

PHOTOGRAPHY BY CADE MARTIN

Stephen Thomas loves barbershops. For him, as for so many African-American men, they are a place of historical and cultural relevance. In the 19th century, some barbershops doubled as abolitionist sites or stops on the Underground

FAST FACTS

- The goal is to improve the health of the barbers and their mostly African-American clientele.
- One partner in the program is Capital Digestive

games, talk sports, listen to music, watch TV, share stories, and live their lives.

"You can have a judge seated next to a guy who works on a loading dock at Safeway who has a homeless man seated on his other side,"

Early Vaccine Doubters Now Show a Willingness to Roll Up Their Sleeves

Polls show that pervasive skepticism is melting, partly because of the high efficacy rates in trials and the images of real people getting the shot.

The New York Times

December 27, 2020

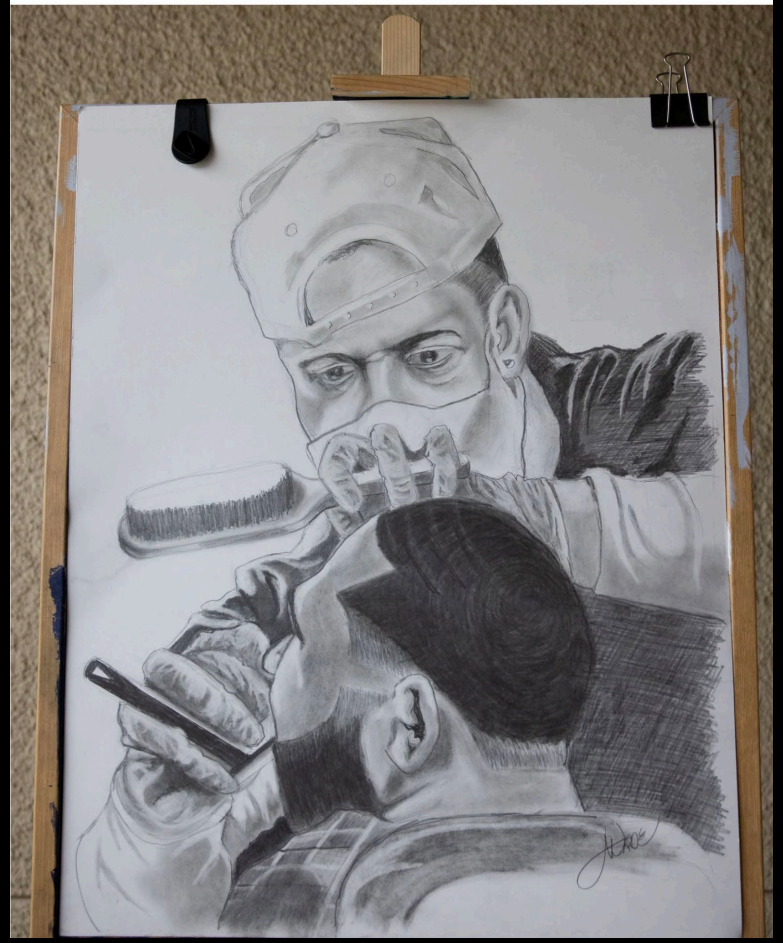
"The news that it was 95 percent effective sold me," Mr. Brown said. "The side effects sound like what you get after a bad night of drinking and you hurt the next day. Well, I've had many of those and I can deal with that to get rid of the face masks."
Still, he says, **many customers remain skeptical**. He tells them:

"**What questions do you have that you're leery about**? Just do your investigation and follow the science! Because if you're just talking about what you won't do, you're becoming part of the problem."

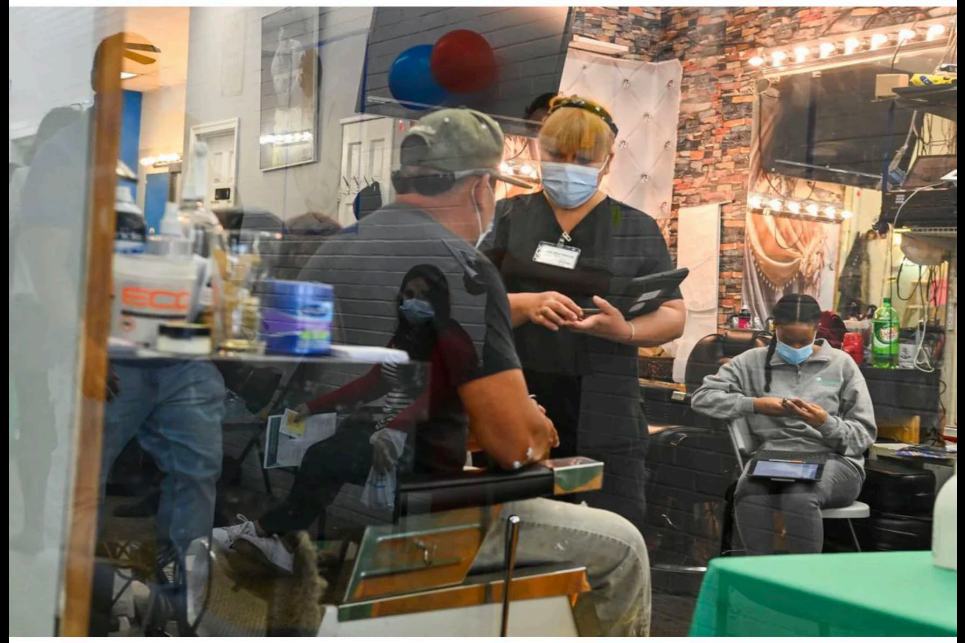
Health

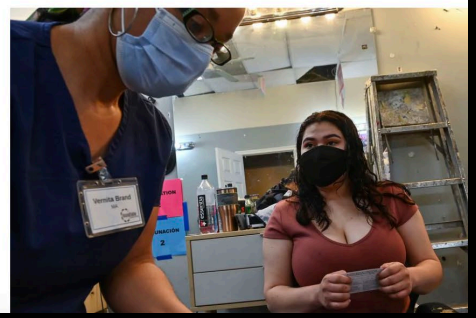
A new national model? Barbershop offers coronavirus shots in addition to cuts and shaves.

'Why not go where people already have trust?' Black community leaders, the University of Maryland and Biden White House seek to deliver accurate health information, as well as vaccines, through black-owned barbershops and salons.



'A Trusting Place'





SCHOOL OF PUBLIC HEALTH

ACADEMICS ADMISSIONS RESEARCH & IMPACT PEOPLE STUDENT OPPORTUNITIES

Home / Research & Impact / Research Centers / Maryland Center for Health Equity / Projects / Maryland Barbers & Stylists United for Health

Maryland Barbers and Stylists United for Health

FIND A PLACE TO GET VACCINATED

FIND A PLACE TO GET TESTED

FOLLOW US ON INSTAGRAM

OUR MISSION

Building Bridges, Building Trust, Building Healthy Communities

OUR PLAN

Mobilize barbershops and salons as "**trusted information centers**" for learning how best to protect family, friends and loved ones from COVID-19 infection.

LEAD PROJECT TEAM

The University of Maryland Center for Health Equity, Institute for Creative Community Initiatives and Radio One, Inc.

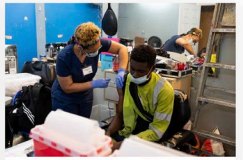
OUR EVENTS

September 28th: CommuniVax Report Back | Webinar | 6:30pm to 8pm

October 1st: Tye & Co. Beauté Bar | Mobile Vacine Clinic | 1pm to 5pm

COVID-19 Rapid Response Training for Barbers and Stylists

Featured Projects



Shots at the Shop

Shots at the Shop is a White House-backed effort from the University of Maryland's Maryland Center for Health Equity, the Black Coalition Against COVID and the beauty and personal care brand SheaMoisture to recruit 1,000 Black-owned barbershop and hair salons nationwide to promote informed decision-making as a means to increase COVID-19 vaccinations.

LEARN MORE >

The Health Advocates In-Reach and Research Campaign (HAIR)

The primary aim of HAIR is to create an infrastructure to engage barbershops and beauty salons in Prince George's County as culturally relevant portals for health education and delivery of public health and medical services in the community.

LEARN MORE >

COVID-19 Vaccines- Webinar Series

The Center for Health Equity has held several informative and informal webinars to address questions and concerns about the COVID-19 vaccines with community members and medical and public health experts.

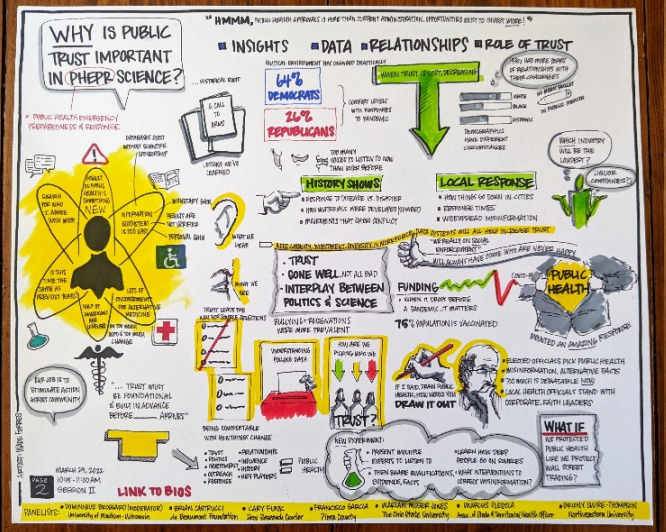
ACCESS THE COVID-19 VACCINE WEBINAR PLAYLIST >

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

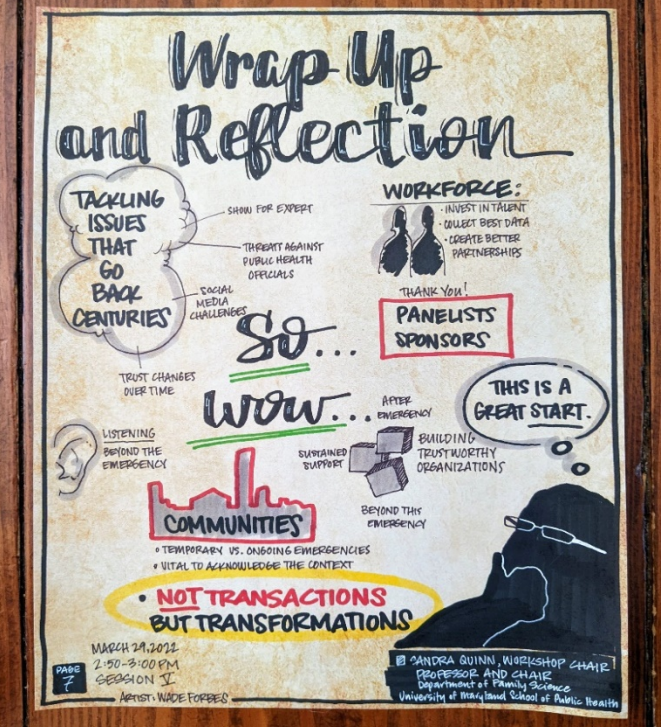
Welcome and Recap of Day 1

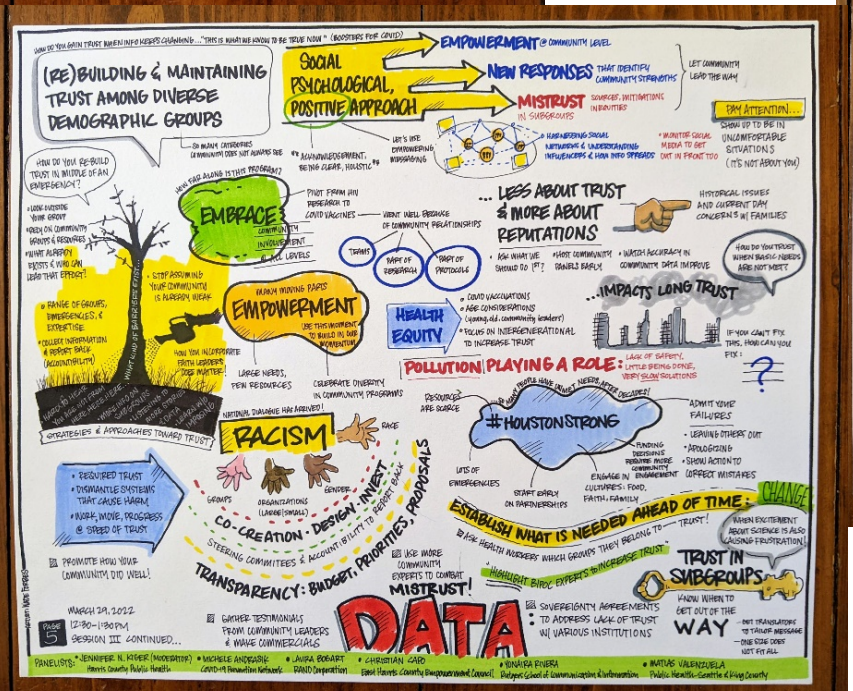
SANDRA QUINN, *WORKSHOP CHAIR*
Professor and Chair
Department of Family Science
University of Maryland School of Public Health

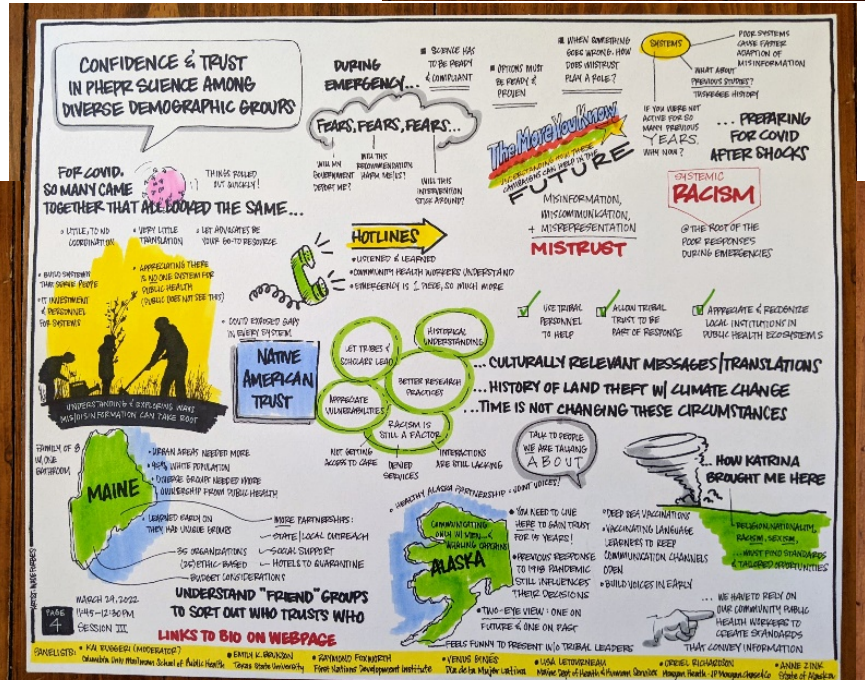

Welcome!
...MANY MOVING PARTS TO WORK THROUGH!
GOALS
•BRING PREPARED
•RESPONSES
•MITIGATION
ACADEMICS
RESEARCHERS
SCIENTISTS
PROFESSORS
MORE COMPLEXITY IN EVENTS & CIRCUMSTANCES
TRUST WORTHINESS
EXAMINE
•ORGANIZATIONS
•WHAT IS HELPFUL
•WAYS TO IMPROVE
•HOW WE COMMUNICATE
WRITE STRATEGY (TOGETHER)
WE WILL SHARE SUMMARY
HUGE TOPIC...
THIS IS A START
PARTICIPATE
•TWITTER
•SLIDO
•MIRO WHITEBOARD
THANK YOU CDC SPONSOR!
HEARING FROM OTHERS.
BUILDING TRUST!
WORKING WITH EXPERTS
SANDRA QUINN, WORKSHOP CHAIR
PROFESSOR AND CHAIR, DEPARTMENT OF FAMILY SCIENCE
UNIV OF MARYLAND SCHOOL OF PUBLIC HEALTH
MARCH 29, 2022
10:00-10:15 AM
SESSION I
ARTIST: WADE FORBES
PAGE 1


WHY IS PUBLIC TRUST IMPORTANT IN PHEPR SCIENCE?
HMMM, INSIGHTS DATA RELATIONSHIPS ROLE OF TRUST
46% DEMOCRATS
26% REPUBLICANS
HISTORY SHOWS
LOCAL RESPONSE
TRUST
GONE WELL, NOT ALL BAD
INTERPLAY BETWEEN POLITICS & SCIENCE
FUNDING
PUBLIC HEALTH
76% INFLUENZA VACCINATED
TRUST?
WHAT IF
LINK TO BIOS
MARCH 29, 2022
10:15-11:00 AM
SESSION II
PAGE 2


CREDIBILITY and TRUSTWORTHINESS
WHAT DO THESE MEAN BEFORE, DURING, & AFTER AN EVENT?
HOW DO THESE SHIFT OVER TIME? STARTS AS INTUITIVE, BUT CAN WANE...
TRUST
TRUSTWORTHINESS
POLITICS
BIO-TERRORISM
DO YOU SEE ME BEFORE CRISIS?
ADVANCE
DOCTORS
INSTITUTIONS
EVENT
DATA IS RARELY CHANGING
WHAT DO WE WANT?
CONTROVERSY
IMPACT OF TRUST ON TRIBAL POPULATIONS...
SERVICES
SEAT @ THE TABLE
WHO IT THE MESSENGER?
WHO AM I SEEING?
MARCH 30, 2022
11:00-11:45 AM
SESSION I CONTINUED...
PAGE 3


Wrap Up and Reflection
TACKLING ISSUES THAT GO BACK CENTURIES
SHOW FOR EXPERT
THREAT AGAINST PUBLIC HEALTH OFFICIALS
SOCIAL MEDIA CHALLENGES
WORKFORCE:
•INVEST IN TALENT
•COLLECT BEST DATA
•CREATE BETTER PARTNERSHIPS
THANK YOU!
PANELISTS
SPONSORS
SO...
TRUST CHANGES OVER TIME
WOW...
THIS IS A GREAT START.
LISTENING BEYOND THE EMERGENCY
AFTER EMERGENCY
SUSTAINED SUPPORT
BUILDING TRUSTWORTHY ORGANIZATIONS
BEYOND THIS EMERGENCY
COMMUNITIES
•TEMPORARY VS. ONGOING EMERGENCIES
•VITAL TO ACKNOWLEDGE THE CONTEXT
•NOT TRANSACTIONS BUT TRANSFORMATIONS
MARCH 29, 2022
2:50-3:00 PM
SESSION V
ARTIST: WADE FORBES
PAGE 7
SANDRA QUINN, WORKSHOP CHAIR
PROFESSOR AND CHAIR
Department of Family Science
University of Maryland School of Public Health


(RE)BUILDING & MAINTAINING TRUST AMONG DIVERSE DEMOGRAPHIC GROUPS
SOCIAL PSYCHOLOGICAL, POSITIVE APPROACH
EMPOWERMENT @ COMMUNITY LEVEL
NEW RESPONSES THAT IDENTIFY COMMUNITY STRENGTHS
MISTRUST IN SUBGROUPS
EMBRACE
EMPOWERMENT
RACISM
#HOUSTONSTRONG
HEALTH EQUITY
POLLUTION PLAYING A ROLE:
ESTABLISH WHAT IS NEEDED AHEAD OF TIME:
TRUST IN SUBGROUPS
TRANSPARENCY: BUDGET, PRIORITIES, PROPOSALS
CO-CREATION · DESIGN · INVEST
MISTRUST!
DATA
LESS ABOUT TRUST & MORE ABOUT REPUTATIONS
...IMPACTS LONG TRUST
CHANGE
MARCH 29, 2022
12:30-1:30 PM
SESSION III CONTINUED...
PAGE 5


CONFIDENCE & TRUST IN PHEPR SCIENCE AMONG DIVERSE DEMOGRAPHIC GROUPS
FOR COVID, SO MANY CAME TOGETHER THAT ALL LOOKED THE SAME...
DURING EMERGENCY...
FEARS, FEARS, FEARS...
The More You Know
FUTURE
MISINFORMATION, MISCOMMUNICATION, + MISREPRESENTATION
MISTRUST
SYSTEMIC RACISM
...PREPARING FOR COVID AFTER SHOCKS
HOTLINES
NATIVE AMERICAN TRUST
...CULTURALLY RELEVANT MESSAGES/TRANSLATIONS
...HISTORY OF LAND THEFT W/ CLIMATE CHANGE
...TIME IS NOT CHANGING THESE CIRCUMSTANCES
MAINE
ALASKA
HOW KATRINA BROUGHT ME HERE
UNDERSTANDING + EXPERIENCES HAVE MISTRUST/MISINFORMATION CAN TAKE ROOT
UNDERSTANDING MISTRUST
MARCH 30, 2022
11:45-12:30 PM
SESSION III
PAGE 4


BUILDING the NECESSARY INFRASTRUCTURE & SKILLED WORKFORCE
INFRASTRUCTURE
BUILDING
WORKFORCE
90% INFECTIONS NEARLY ENTIRE TOWN!
THIS IS OUR MOMENT TO DISRUPT
PUBLIC HEALTH
OUTREACH & EDUCATION REVEALED MORE DATA
EQUITY (KEY PIECE)
INNOVATION
EMPOWERMENT
INVESTMENT
DO WE ALL KNOW WHAT IS NEEDED OR JUST A FEW?
SUSTAINABLE OPTIONS HAVE BEGUN IN COMMUNITY (GRASS ROOTS)
KEEPING PUBLIC IN PUBLIC HEALTH!
EMERGENCY
DOES YOUR JURISDICTION VALUE____?
PARTNERS IN HEALTH
TRUST WINS OVER SCIENCE EVERY TIME
SCHOOL TO WORK PIPELINE
CONNECTED
THINGS TO CONSIDER
MARCH 29, 2022
2:00-2:50 PM
SESSION IV
PAGE 6

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Translating and Communicating PHEPR Science Information

10:15am-11:15 pm ET

HILARY N. KARASZ, *MODERATOR*
Deputy Communications Director
Public Health, Seattle & King County

AMY ACTON
Former Director
Ohio Department of Health

MEREDITH LI-VOLLMER
Risk Communication Manager
Public Health - Seattle & King County

ENOLA PROCTOR
Professor
Brown School at Washington University in St. Louis

ULIE SEAL
Fire Chief and Emergency Manager
Bloomington Fire Department

MITCH STRIPLING
Director
Pandemic Response Institute
Columbia University

JEANNETTE SUTTON
Associate Professor
University of Albany, SUNY

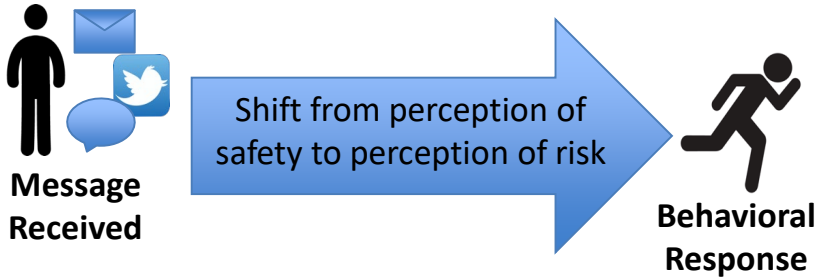
Submit your questions for the panelists in the Sli.do below the live stream.

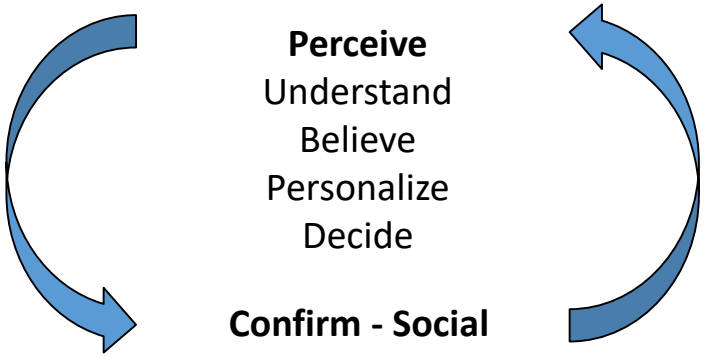
PHEPR Science Workshop

Session VII Key Elements of PHEPR Science Communication Strategies
Translating and Communicating PHEPR Science Information

Jeannette Sutton, PhD.
College of Emergency Management, Homeland Security and Cybersecurity

Messages can be effectively designed to warn people of imminent threat





Message Contents

Source – credible and known
Threat & consequences
Location/Populations
Protective Actions
Time – action & expiration

Message Style

Certain
Credible
Consistent
Coherent

We have applied this research in an all-hazards approach.

[local, familiar, authoritative message source]. [Description of threat/event] in [Location of threat] [and consequences]. [Protective Action][Protective Action Timeframe]. Message expires [time here]

_____Police Department: WILDFIRE EMERGENCY located _____moving toward _____. Wildfires can cause injury/death, burn down homes/other structures. If you are receiving this message EVACUATE NOW. Do not delay to pack belongings. Check ____for updates.

Doermann, J., Kuligowski, E., *Planning for Wildfire: Tips for creating 360-character Wireless Emergency Alert templates*, Fire Adapted Communities Networks, 2020

Sutton, J., Kuligowski,E. *Alerts and Warnings on Short Messaging Channels: Guidance from an Expert Panel Process*, Natural Hazard Review 20:2, 2019.

See also: www.Albany.edu/erc-lab

Longitudinal PHEPR risk communication is an under-studied area

- How to keep people engaged over a long period of time
- How to motivate people to continue to take protective actions
- How to help people to sift through massive troves of information
- How to counter misinformation and disinformation
- How to manage human resources for the long haul

Sutton, J., Rivera, Y., Sell, T. K., Moran, M. B., Bennett, D. M., Schoch-Spana, M., Stern, E. K., Turetsky, D. (2020). Longitudinal risk communication: A research agenda for communicating in a pandemic. *Health Security*

Balancing certainty-uncertainty as researcher and professor

When I teach researchers

When I teach front-line providers

How to deal with the tentativeness of evidence?

New discoveries lend credence
to the scientific process

….new discoveries do not undermine the
trustworthiness of science

Start early
Audience segmentation
Pre-bunk misinformation

Preparation strategies

Trusted institutions
Champions
Homophily

Choose the messengers

Synthesize: not to much, not too little
Contextualize
Normalize emergence of new data

Strategies: choose the message

Print Media Networks

Strategies: Dissemination channels

Interactive
Varied: data & narrative
Multiple

Dissemination strategies: Engage

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Misinformation and Disinformation

11:15 am-12:15 pm ET

RACHAEL PILTCH-LOEB, *MODERATOR*
Researcher
Emergency Preparedness Research Evaluation and Practice Program
Harvard T.H. Chan School of Public Health

DAVID BRONIATOWSKI
Associate Professor
School of Engineering & Applied Science
The George Washington University

MICHAEL OSTERHOLM
Director
Center for Infectious Disease Research and Policy
University of Minnesota

JON ROOZENBEEK
Postdoctoral Fellow
University of Cambridge

TARA KIRK SELL
Senior Scholar
Johns Hopkins Center for Health Security

WILMA J. WOOTEN
Public Health Officer
Public Health Services
County of San Diego

Submit your questions for the panelists in the Sli.do below the live stream.

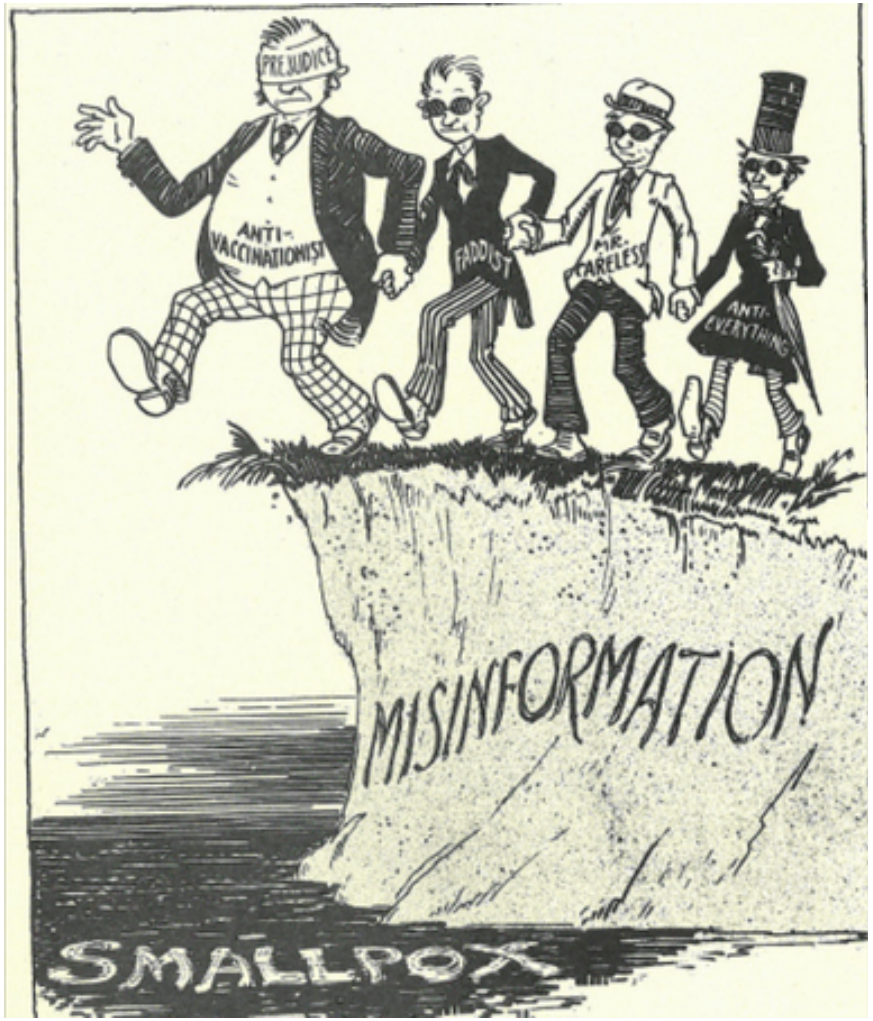
Misinformation, Disinformation, and Trust in PHEPR – A Once and Future Problem

Tara Kirk Sell, PhD
Senior Scholar Johns Hopkins Center for Health Security
Assistant Professor, Department of Environmental Health and Engineering

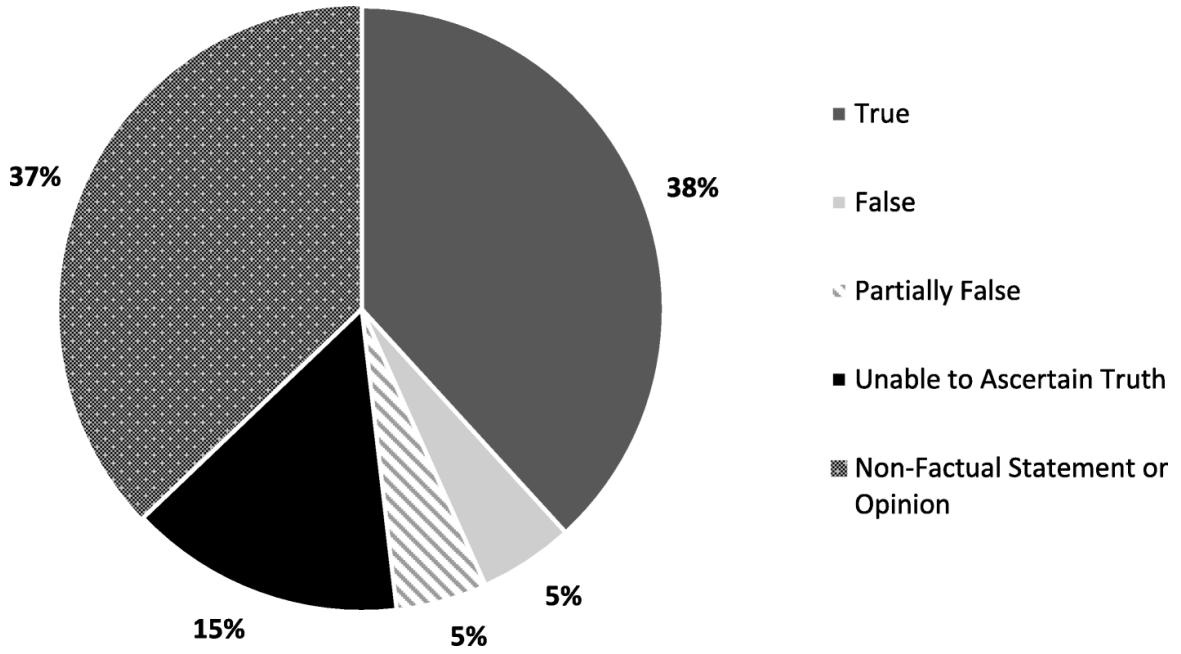
Building Public Trust in Public Health Emergency Preparedness and Response (PHERP) Science
March 30, 2022

Health-related misinformation – Old but New

- Source: “Health in Pictures,” 1930, American Public Health Association
- Fact check: https://www.snopes.com/fact-check/1930s-cartoon-vaccine-warning/

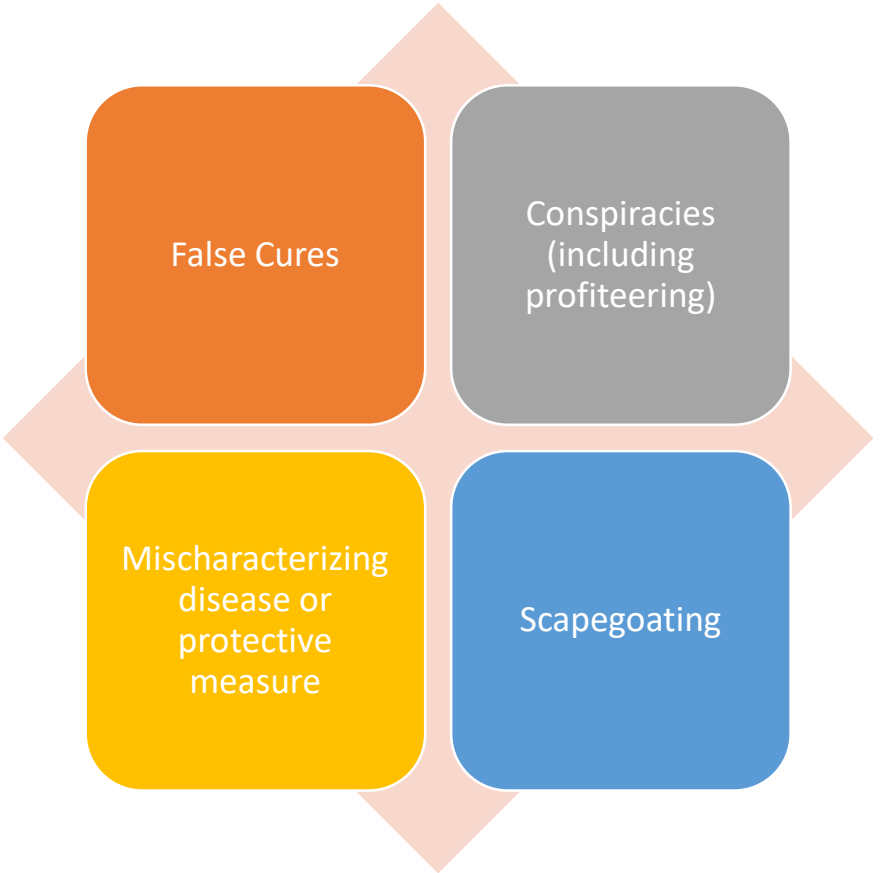


Ebola - Prevalence of Misinformation and True Information Among Non-Joke Tweets



Sell TK, Hosangadi D, Trotochaud M. Misinformation and the US Ebola Communication Crisis: Analyzing the veracity and content of social media messages related to a fear-inducing infectious disease outbreak. *BMC Public Health.* 20, 550 (2020)

Misinformation Rumor Types



Misinformation and Disinformation During the COVID-19 Pandemic

Photo Courtesy of JHU Bloomberg School of Public Health (2021) https://hub.jhu.edu/2020/03/27/mark-dredze-social-media-misinformation/

Costs (US)

COVID-19 vaccine misinformation and disinformation (just related to non-vaccination) costs an estimated $50 to $300 million each day

An effort that reduced or countered misinformation and was able to reduce related non-vaccination by 10% would be worth between $5 and $30 million per day

Bruns R, Hosangadi D, Trotochaud M, Sell TK. COVID-19 Vaccine Misinformation and Disinformation Costs an Estimated $50 to $300 Million Each Day. October 20, 2021. The Johns Hopkins Center for Health Security. Baltimore, MD. https://www.centerforhealthsecurity.org/our-work/publications/covid-19-vaccine-misinformation-and-disinformation-costs-an-estimated-50-to-300-million-each-da

National Priorities to Combat Health Related Misinformation and Disinformation

A Call for a National Strategy

Key Strategy Pillars

Control	Promote	Resilience	Stakeholders
Control misleading content and sources •National security issue •Non-governmental task force for guidance •Active, transparent, intervention from social media	Promote factual information •Prioritize public health risk communication •Coordination with social media/news media	Increase public resilience •Health and digital literacy •Improve resources for public verification of content	Bring together all stakeholders •Government •Civil Society •Industry

JOHNS HOPKINS
BLOOMBERG SCHOOL
of PUBLIC HEALTH

Center for Health Security

National Academies Workshop Panel
Misinformation and Disinformation

Wilma Wooten, M.D., M.P.H.
Public Health Officer, Public Health Services
County of San Diego Health and Human Services Agency

March 30, 2022

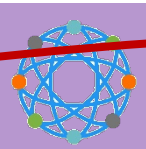

STRATEGIC APPROACH
CORONAVIRUS
DISEASE 2019
(COVID-19)

COVID-19 STRATEGIC APPROACHES FOR EMERGENCY RESPONSE

ICS — INCIDENT COMMAND SYSTEM

 CONTAINMENT AND MITIGATION (NON-PHARMACEUTICAL INTERVENTIONS)

 SECTOR PARTNERSHIPS

 COMMUNICATION: INTERNAL & EXTERNAL

T3 — T3 STRATEGY: TEST, TRACE, AND TREAT

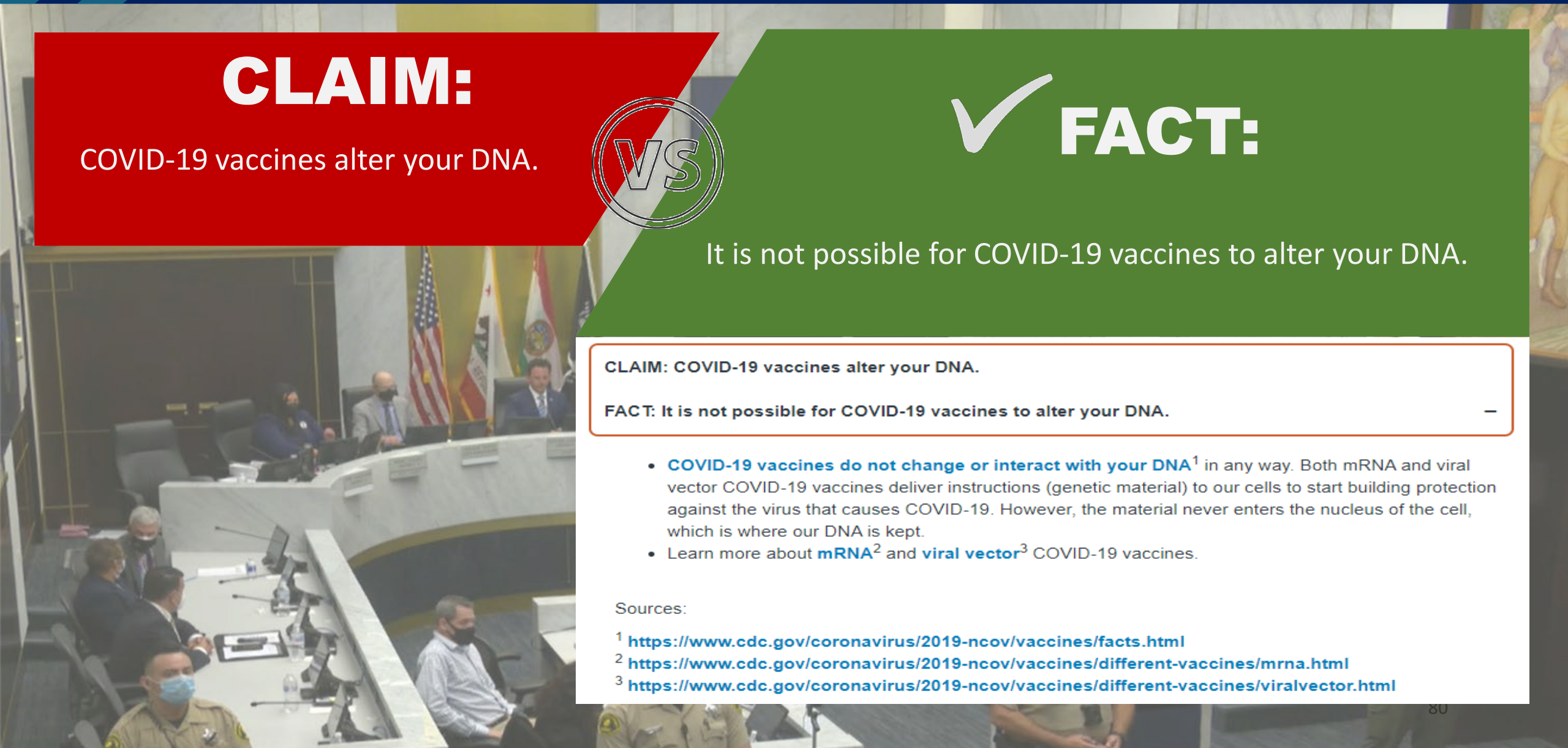
 HEALTH EQUITY

 VACCINES

PROBLEM

CORONAVIRUS DISEASE 2019 **(COVID-19)**

COVID-19 CLAIMS AND FACTS



CLAIM:

COVID-19 vaccines alter your DNA.

VS

✓ FACT:

It is not possible for COVID-19 vaccines to alter your DNA.

CLAIM: COVID-19 vaccines alter your DNA.

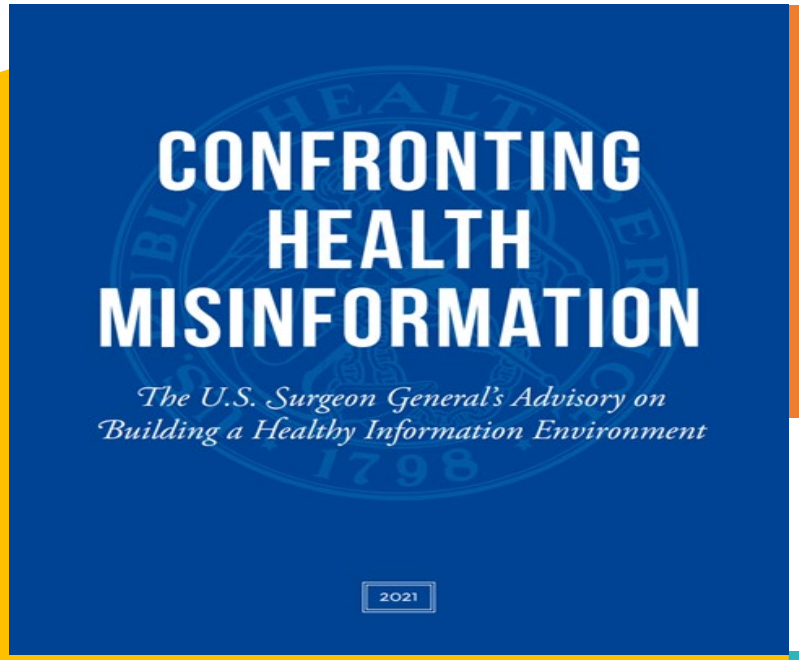
FACT: It is not possible for COVID-19 vaccines to alter your DNA. –

- **COVID-19 vaccines do not change or interact with your DNA**[1] in any way. Both mRNA and viral vector COVID-19 vaccines deliver instructions (genetic material) to our cells to start building protection against the virus that causes COVID-19. However, the material never enters the nucleus of the cell, which is where our DNA is kept.
- Learn more about **mRNA**[2] and **viral vector**[3] COVID-19 vaccines.

Sources:

[1] **https://www.cdc.gov/coronavirus/2019-ncov/vaccines/facts.html**
[2] **https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/mrna.html**
[3] **https://www.cdc.gov/coronavirus/2019-ncov/vaccines/different-vaccines/viralvector.html**

HEALTH MISINFORMATION A PUBLIC HEALTH CRISIS

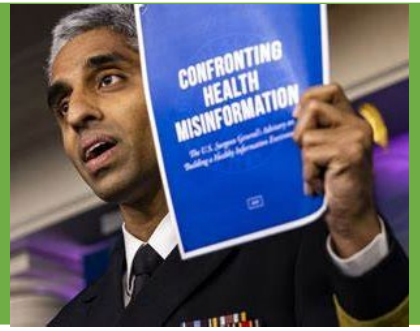


The U.S. Surgeon General's Advisory on Building a Healthy Information Environment calls the American people's attention to health misinformation and provides recommendations for how to build a healthier information environment.

Addressing health misinformation will require a whole-of-society effort.

"I am urging all Americans to help slow the spread of health misinformation during the COVID-19 pandemic and beyond. Health misinformation is a serious threat to public health. It can cause confusion, sow mistrust, harm people's health, and undermine public health efforts. Limiting the spread of health misinformation is a moral and civic imperative that will require a whole-of society effort." – Dr. Vivek H. Murthy

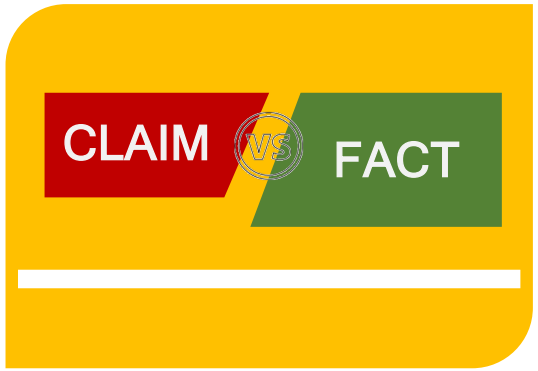
GOAL



To implement strategies cited by the U.S General's Advisory to build a local healthy, safe, and thriving information environment.

- **Strategy 1: Counter Misinformation**
- **Strategy 2: Community Engagement**
- **Strategy 3: Research Efforts**
- **Strategy 4: Sector Trainings**
- **Strategy 5: Government Partners**
- **Strategy 6: Resource Gaps**
- **Strategy 7: External Website**

STRATEGY 1: COUNTER MISINFORMATION



Devote resources to identify and label health misinformation and disseminate timely health information to **counter misinformation** that is impeding our ability to keep our communities safe.

Objectives

A.1. Conduct community-based and culturally-and linguistically appropriate messaging to provide factual health information and to dispel myths and misinformation in order to increase COVID-19 immunizations rates.

A.2. Expand website accessibility and information for combating health misinformation in our community.

EVALUATING COVID-19 INFORMATION

NEW WEBPAGE FOR ADDRESSING CLAIMS ABOUT COVID-19

Finding Credible Sources

- How to Find Accurate Information
- Trusted and Dependable Resources
- Scholarly Journals

Claims and Facts

COVID-19 Claims and Facts on:

- Children
- Masks
- Testing
- Vaccines

Frequently Asked Questions

- Overview and Symptoms
- Risk of Infection and Serious Illness
- Testing and Treatment
- Quarantine and Isolation
- Prevention
  - COVID-19 Vaccines
- Healthcare
- Congregate Living Facilities
- Social Interactions
- County of San Diego Efforts
- FAQs from Other Sources
- Additional Sources

STRATEGY 2: COMMUNITY ENGAGEMENT

Modernize PH communications with investments to better understand gaps in health information, and questions and concerns of the community, especially in hard-to-reach communities. Develop targeted **community engagement** strategies, including partnership with trusted messengers.

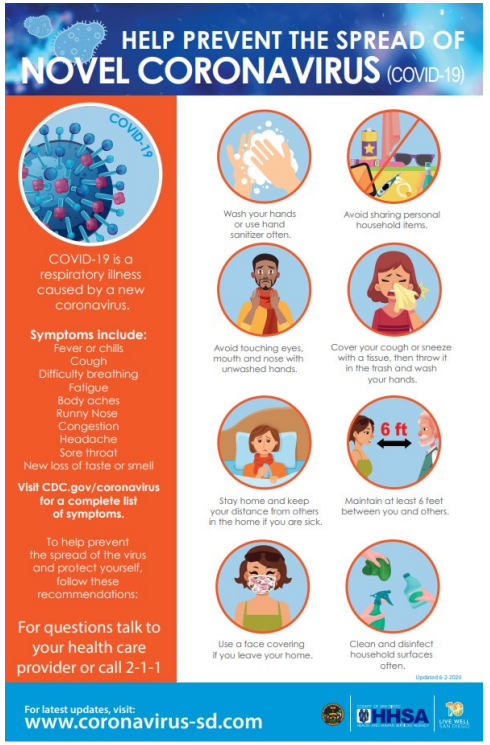
Objectives

B.1. Host critical conversations in the community, with a focus on **high-risk populations**, to discuss the importance of vaccinations.

B.2. Dispel myths and misinformation of providers and their staff by conducting academic detailing with health care providers.

B.3. Address misinformation and disseminate information and links to trusted sources via social media platforms.

B.4. Identify and train trusted community-level spokespersons to communicate the importance of vaccination and the ramifications COVID-19 cases poses on the community.



STRATEGY 3: RESEARCH EFFORTS

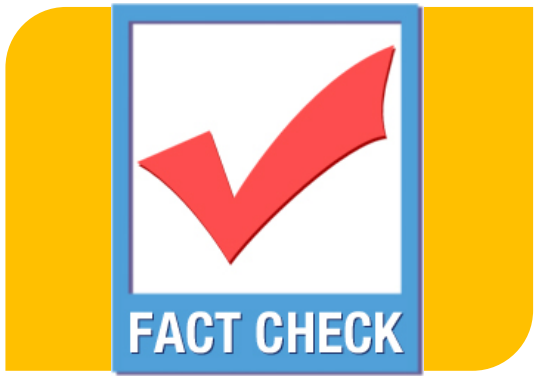
Expand our **research efforts** to better define and understand the sources of health misinformation, document, and trace its negative impacts, and develop strategies to address and counter it across mediums and diverse communities.

Objectives

C.1. Perform a survey of unvaccinated persons to better understand San Diegan's view of the COVID-19 vaccines

C.2. Develop comprehensive media campaign to counter vaccine hesitancy and address local community members concerns.

STRATEGY 4: SECTOR TRAININGS



Invest in resilience against health misinformation including digital resources and **training for health practitioners and health workers**. Explore educational programs to help our communities distinguish evidence-based information from opinion and personal stories.

Objectives

D.1. Partner with **community practitioners** in addressing vaccine misinformation/hesitancy and develop messaging.

D.2. Partner with **professional healthcare associations** in addressing vaccine misinformation/hesitancy and developing messaging.

D.3. Partner with **healthcare systems** to address vaccine misinformation/ hesitancy and developing messaging.

STRATEGY 5: GOVERNMENT PARTNERS

Partner with federal, state, territorial, tribal, private, nonprofit, research, and other local entities to identify best practices to stop the spread of health misinformation and develop and implement coordinated recommendations.

Objectives

- E.4. Partner with educational institutions to address vaccine misinformation/hesitancy and developing messaging.
- E.5. Partner with places of worship in addressing vaccine misinformation/hesitancy and developing messaging.
- E.6. Partner with media organizations in addressing vaccine misinformation/hesitancy and developing messaging.
- E.7. Partner with businesses in addressing vaccine misinformation/hesitancy and developing messaging.
- E.8. Partner with community sectors in addressing vaccine misinformation and hesitancy by developing messaging.
- E.9. Participate in the COVID-19 Equity Task Force to ensure underrepresented communities are provided access to information and services.

COUNTY OF SAN DIEGO HHSA HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL SAN DIEGO

STRATEGY 6: RESOURCE GAPS

Identify **resource gaps** to combating health misinformation and working with state and federal partners to meet ongoing needs.

Objectives

F.1. Disseminate up-to-date state and federal COVID-19 communications to dispel health misinformation in the community (e.g., pregnancy and breastfeeding).

GOAL 7: EXTERNAL WEBSITE

Work with the medical community and local partners to develop a **website** that will serve as a central resource for combating health misinformation in our community.

Objectives

G.1. Develop an external COVID website to combat health misinformation.

Thank You

COUNTY OF SAN DIEGO
HHSA
HEALTH AND HUMAN SERVICES AGENCY

LIVE WELL
SAN DIEGO

ACCREDITED HEALTH DEPARTMENT
PHAB
Advancing public health performance
PUBLIC HEALTH ACCREDITATION BOARD

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Addressing the Information Environment

12:15 pm - 1:15 pm ET

ESTHER D. CHERNAK, *MODERATOR*
Associate Clinical Professor
Drexel University Dornsife School of Public Health
Drexel College of Medicine

RAPHAEL M. BARISHANSKY
Former Deputy Secretary for Health Preparedness & Community Protection
Pennsylvania Department of Health

SUPRIYA BEZBARUAH
Team Lead
Science and Knowledge Translation
World Health Organization

KIMBERLY HENDERSON
Director
Communications and Community Relations
District of Columbia Department of Health

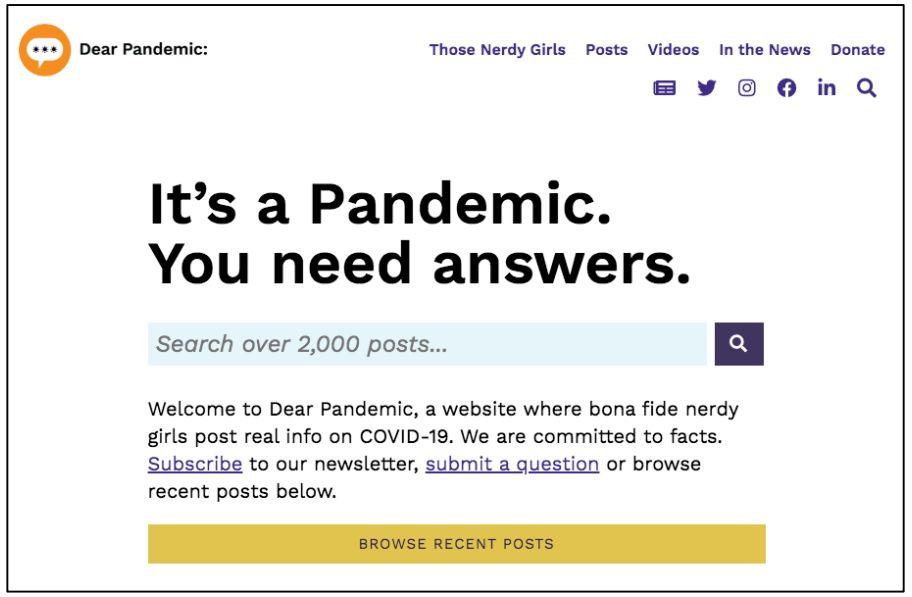
LINDSEY LEININGER
Clinical Professor
Tuck School of Business Dartmouth University

DAVID OLSON
Reporter
Newsday

Submit your questions for the panelists in the Sli.do below the live stream.

Notes from a Nerdy Girl

THOSE NERDY GIRLS



- Public education campaign turned non-profit science translation platform (!)
- 200k+ readers across social media channels
- 2,000+ evidence-based posts about pandemic-era living
- Website selected for the Library of Congress digital pandemic archive
- Featured at a promising crisis communication case study conference by the WHO

Who the heck are we in the CERC ecosystem?

Deloitte. Insights

Strategy | Economy & Society | Organization | People | Technol

The future of public health campaigns

by Kimberly McGuire, RJ Krawiec, Neha Malik, John McInerney

Partner with culturally relevant influencers

nature medicine

Explore content | About the journal | Publish with us

nature > nature medicine > articles > article

Article | Open Access | Published: 19 August 2021

Effects of a large-scale social media advertising campaign on holiday travel and COVID-19 infections: a cluster randomized controlled trial

Emily Breza, Fatima Cody Stanford, Marcella Alsan, Burak Alsan, Abhijit Banerjee, Arun G. Chandrasekhar, Sarah Eichmeyer, Traci Glushko, Paul Goldsmith-Pinkham, Kelly Holland, Emily Hoppe, Mohit Karnani, Sarah Liegl, Tristan Loisel, Lucy Ogbu-Nwobodo, Benjamin A. Olken, Carlos Torres, Pierre-Luc Vautrey, Erica T. Warner, Susan Wootton & Esther Duflo

Nature Medicine **27**, 1622–1628 (2021) | Cite this article

15k Accesses | **3** Citations | **452** Altmetric | Metrics

CORONAVIRUS

Social media 'micro-influencers' join effort to get America vaccinated

Health care leaders are relying on social media and local doctors and nurses to battle vaccine skepticism, especially in hard-hit minority communities.

A healthcare worker receives a second Pfizer-BioNTech COVID-19 vaccine shot at Beaumont Health in Southfield, Mich. | Paul Sancya/AP Photo

By MOHANA RAVINDRANATH
01/30/2021 07:00 AM EST

"Micro-influencers"?! Maybe?! Feels weird.

My current policy obsession:

How do we build and scale science translation platforms in future emergencies?

Being at a business school is proving very, very useful!

Science for Communities in Public Health Emergencies

Dr Supriya Bezbaruah
Team Lead, EPI-WIN and Science Translation, WHO
Bezbaruahs@who.int

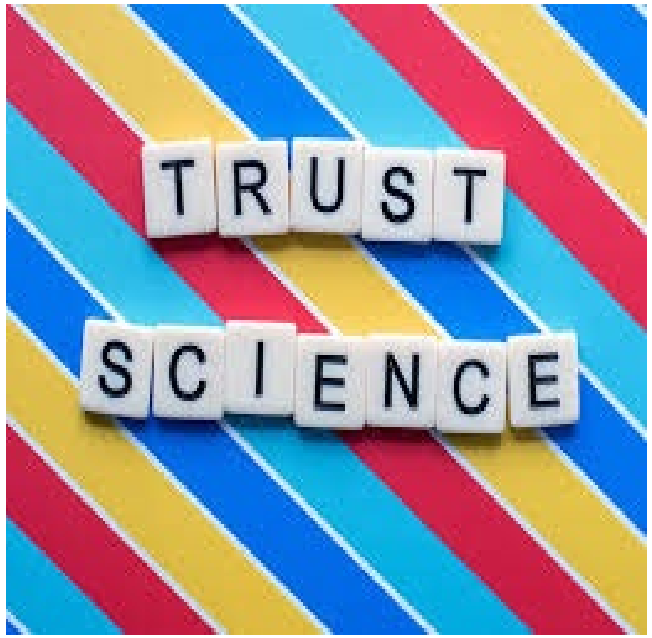
World Health Organization

Making science accessible in emergencies

Google

what is long covid-19 syndrome

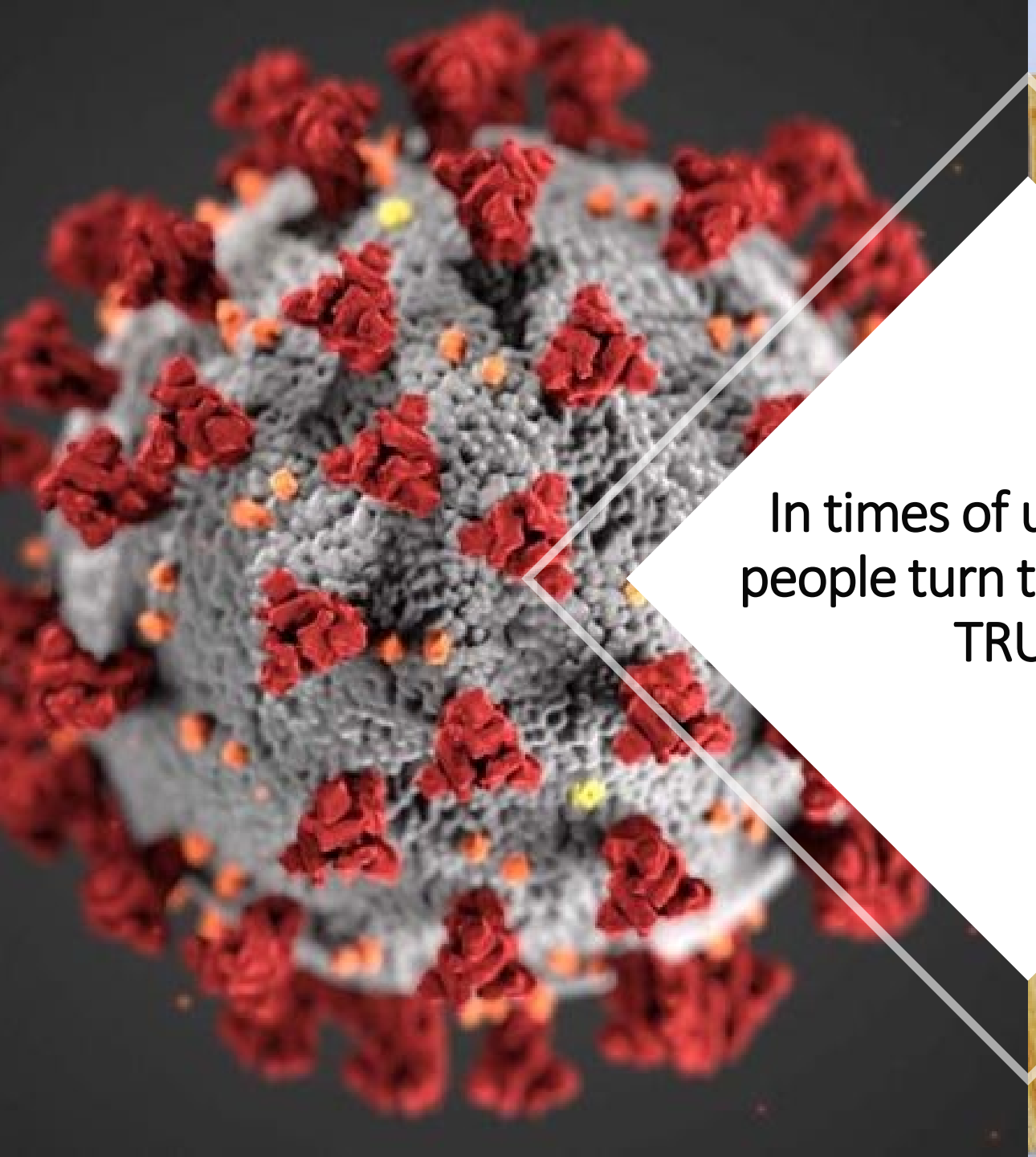
How are the different COVID-19 vaccines different? How safe are they?



how dangerous is Omicron - Twi

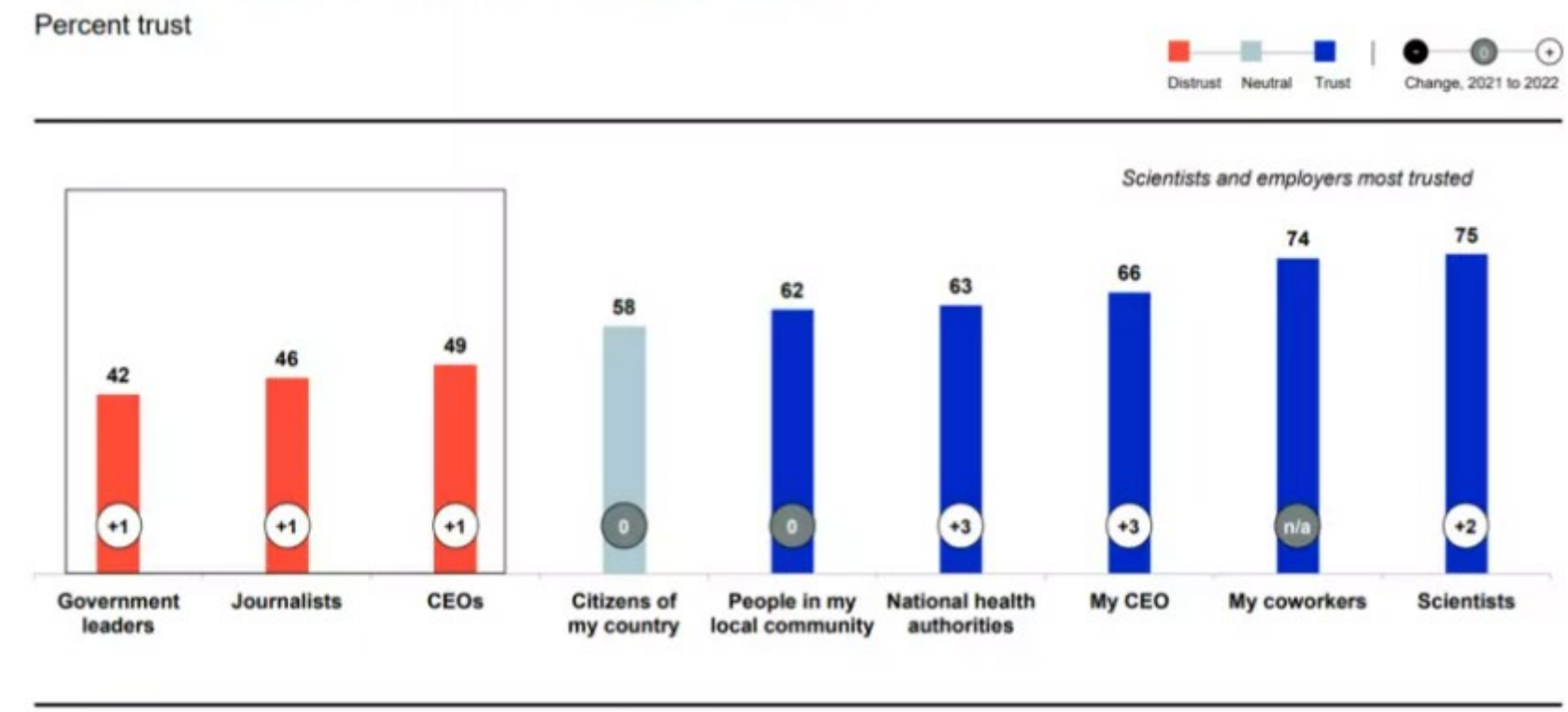
What are the testing Strategies for COVID-19?

World Health Organization



In times of uncertainty, people turn to those they TRUST

Trusted: Scientists, employers, community leaders

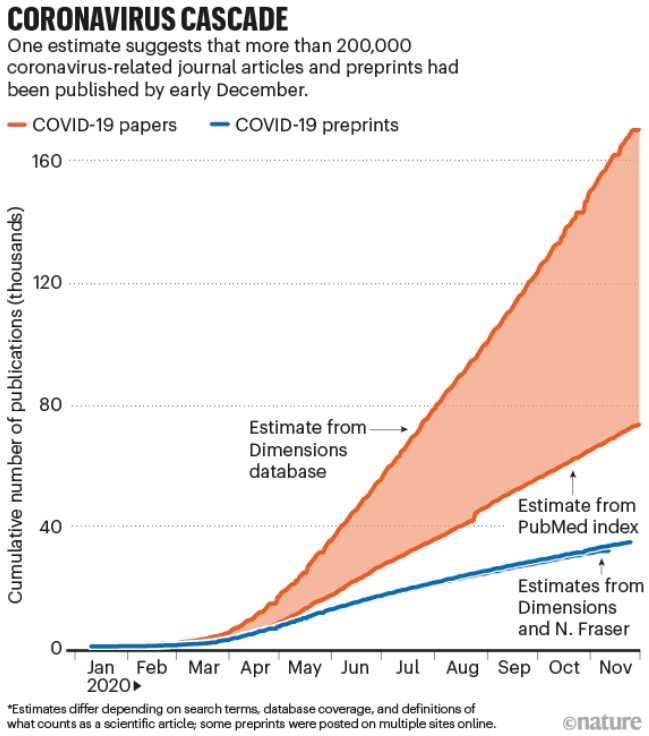


Scientists are among the most trusted in society. Image: Edelman Trust Barometer

Source: Edelman Trust Barometer 2022

World Health Organization

WHO Epidemic Information Network (EPI-WIN): making information accessible and meaningful



Sources: *Journal papers:* Dimensions & *Nature* tabulations; Primer (for PubMed estimate); *Preprints:* Dimensions; N. Fraser & B. Kramer https://doi.org/10.6084/m9.figshare.12033672 (2020)

Technical briefs, academic papers, guidelines, recommendations

- EPI-WIN Updates
- EPI-WIN webinars with WHO experts
- Convene, document, share good practices on innovative science communication
- Engagement, Co-developing with EPI-WIN Global Networks: Faith leaders, Health in the World of Work, supporting Youth Council

EPI-WIN Distill Science Network (multi-stakeholder) in process

World Health Organization

EPI-WIN updates: Global info, local solutions

- MoH at national and subnational → Locally adapted, used in multiple fora
- Health Cluster → Local clinicians Local health workers Village heads
- Health Development Partners → Share with non-health local government officials , local NGOS
- UN Country Team → Share with non-health local government officials , local NGOS
- WHO Country Office local staff → Adapted and used by staff to explain to their stakeholders

World Health Organization

Photos are representative of local communities that may be affected, do not represent specific EPI-WiN activities

Collaboration between faith and health

- WHO DG Dr Tedros engaged in a **high-level dialogue** with religious leaders hosted by Religions for Peace in early 2021
- WHO-RfP-UNICEF joint webinar series in spring 2021 on COVID-19 **communications and advocacy for vaccine equity, access and uptake**
- November 2021: publication of the ***World Health Organization strategy for engaging religious leaders, faith-based organizations and faith communities in health emergencies***
- Late 2021, global conference co-hosted by WHO and RfP: ***Strengthening national responses to health emergencies: WHO, Religious Leaders, Faith-based Organizations, Faith Communities and National Governments***

Co-developing guidance for industry sectors

- Tourism sector deeply affected by COVID-19
- EPI-WIN team had consultation with partners like Food, Farms, Hotels and Catering Global Union (IUF)
- Mutual listening, discussion and collaborative design
- COVID-19 management in hotels and other entities of the accommodation sector published 25 Aug 2020
- IUF Guide to COVID-19 Occupational Safety and Health (OSH) in hotels published January 2022

World Health Organization

Looking Ahead

- EPI-WIN Science Translation Network
  - ➢ Involves scientists, media professionals, health professionals, decision makers and others
- Field guides on establishing local platforms for science translation
- Documentation of good practices for innovative science translation
- Engagement with decision makers to support evidence-informed policies and decisions


Thank You!

The National Academies of
SCIENCES · ENGINEERING · MEDICINE

Perspectives from Invited Workshop Participants and the Public

Participatory Session

1:45 pm ET – 2:30 pm ET

SARAH LUNSFORD
Workshop Consultant & Facilitator
Sarah Lunsford Consulting

Join the Miro Board by clicking the link in the announcement below

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Closing Remarks

SANDRA QUINN, *WORKSHOP CHAIR*
Professor and Chair
Department of Family Science
University of Maryland School of Public Health

ABBIGAIL TUMPEY
Associate Director for Communication Science
Center for Surveillance, Epidemiology, and Laboratory Services
Centers for Disease Control and Prevention

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

Building Public Trust in Public Health Emergency Preparedness and Response (PHEPR) Science: A Workshop

Thank you for watching!

A summary report of the workshop will be available this summer.

For any questions or comments please contact Matt Masiello (mmasiello@nas.edu)