RTI INTERNATIONAL

Your Weekly Briefing

COVID-19
U.S. Survey Results

WEBINAR 4

Vaccination

Webinar Series

May 6

Face Coverings and Social Distancing

May 13

Knowledge

May 20

Perceived Risk and Threat

May 27

Vaccination

Objectives

The survey collected information about perceived risk, knowledge, attitudes, beliefs, and behaviors related to COVID-19.

Topics

- Personal protective practices
  - Face-coverings
  - Handwashing
- Community mitigation strategies
  - Social distancing
  - Staying at home
  - Closings
- Vaccination
- Stigma

Open-Ended Questions

- What is your single-most urgent question about the coronavirus?
- What is the biggest challenge you are facing when following strategies in your community to try to slow down coronavirus transmission?
- What is your main motivation for following strategies in your state or community to try to slow down coronavirus transmission?

Interdisciplinary Research Team at RTI: Today's Speakers

Pia MacDonald
PhD, MPH, CPH

Brian Southwell
PhD

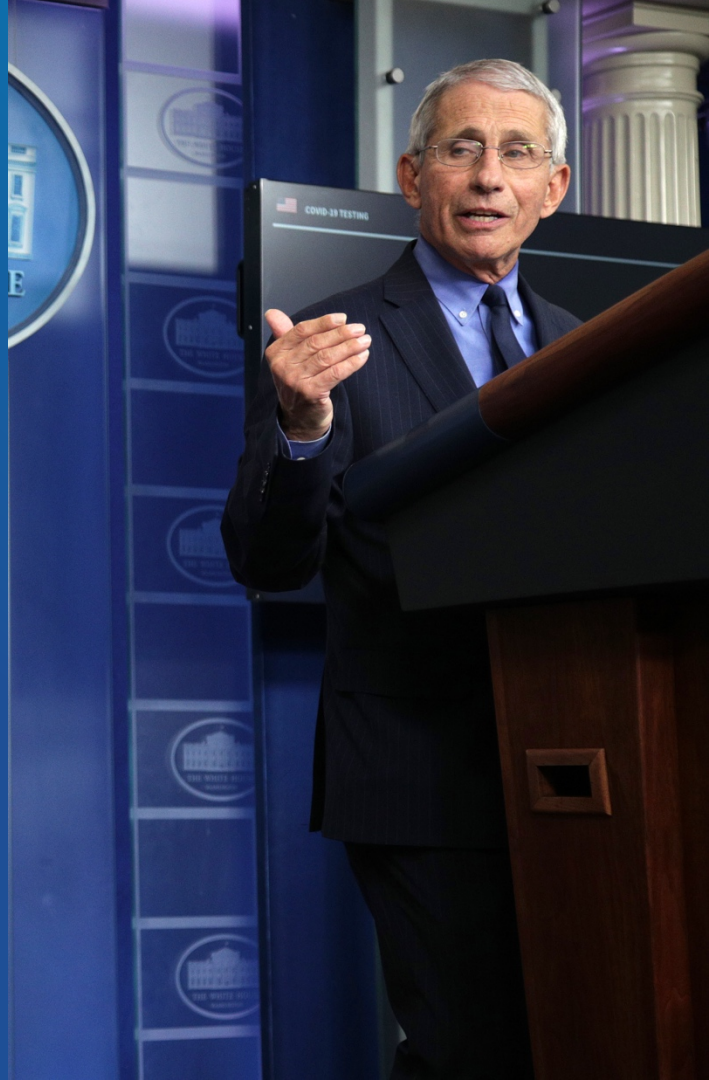
Bridget Kelly
PhD, MPH

Linda Squiers
PhD, MA

Study Team Members: Pia MacDonald, PhD; **Carla Bann,** PhD; **Alyssa Jordan**, MPH; **Molly Lynch**, MPH; **Jessica DeFrank**, PhD; **Ana Saravia**, BA; **Ashley Wheeler,** BA; Alicia Frasier, MPH; Christine Bevc, PhD, MA; Lauren McCormack, PhD, MSPH

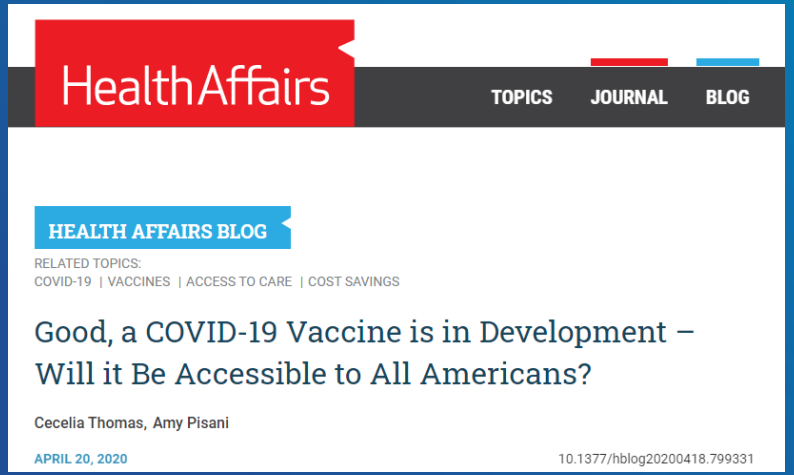
“Hopefully by the time we get to this coming winter, we will know whether or not we have a safe and effective vaccine.”

—Dr. Anthony Fauci, director of the National Institute of Allergy and Infectious Diseases, speaking at the Economic Club of Washington on April 28



COVID-19 Vaccine Opportunities and Challenges Ahead

- We already have seen:
  - Federal government efforts to encourage vaccine development, e.g., Operation Warp Speed[1]
  - Questions about access and acceptance[2]


HealthAffairs

TOPICS JOURNAL BLOG

HEALTH AFFAIRS BLOG

RELATED TOPICS:
COVID-19 | VACCINES | ACCESS TO CARE | COST SAVINGS

Good, a COVID-19 Vaccine is in Development – Will it Be Accessible to All Americans?

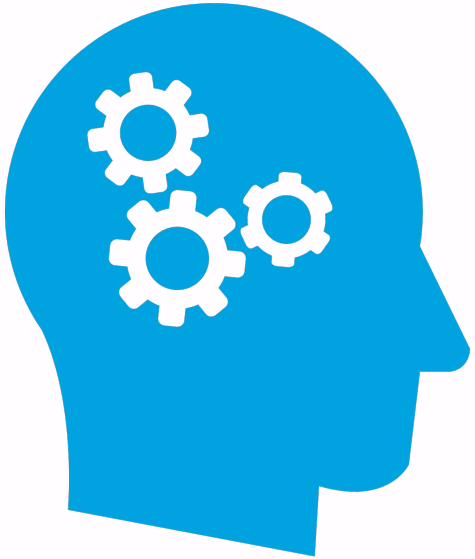
Cecelia Thomas, Amy Pisani

APRIL 20, 2020

10.1377/hblog20200418.799331

1U.S. Department of Health and Human Services. (May 15, 2020). *Trump Administration Framework and Leadership for "Operation Warp Speed"* [press release].
2Thomas, C., & Pisani, A. (2020). *Good, a COVID-19 vaccine is in development—Will it be accessible to all Americans?* [blog post]. *Health Affairs*. https://www.healthaffairs.org/do/10.1377/hblog20200418.799331/full/

Vaccination Acceptance as a Focus



Hypothetical behavior but ***real*** perceptions

Willingness or openness to future behavior can be measured and can predict future behavior[3,4]

[13]Comello, M. L. G., & Slater, M. D. (2011). Effects of adverts from a drug and alcohol prevention campaign on willingness to engage in alcohol-related risky behaviors. *Journal of Health Psychology*, 16(8), 1268-1276.
[24]Gibbons, F.X., Gerrard, M., Blanton, H., & Russell, D.W. (1998). Reasoned action and social reaction: Willingness and intention as independent predictors of health risk. *Journal of Personality and Social Psychology*, 74, 1164-1181.

How Will Current Vaccine Perceptions Affect Acceptance?

The New York Times

Antivaccination Activists Are Growing Force at Virus Protests

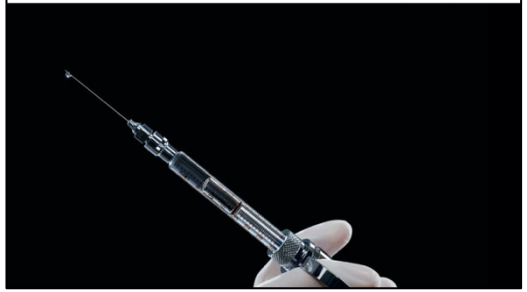
Public health experts fear that their messaging could further harm the country's response to the pandemic.

The New York Times

THE SHIFT

Get Ready for a Vaccine Information War

Social media is already filling up with misinformation about a Covid-19 vaccine, months or years before one even exists.

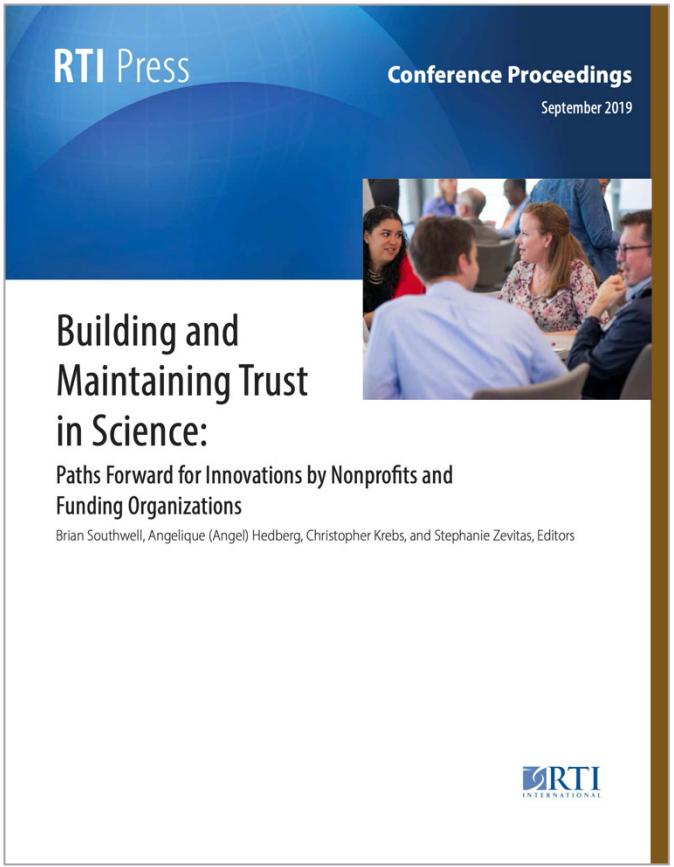


CNN health

Some anti-vaxxers are changing their minds because of the coronavirus pandemic

By Emma Reynolds, CNN

A History of Understanding Trust in Science at RTI



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Acknowledgments

The editors thank Wayne Holden for his support of the Trust in Science initiative, Adam Jennings for photography, and the RTI Press staff who supported this publication, including Anna Wetterberg, Annie Gering, and Sonja Douglas.

Photos: Participants from leading nonprofit organizations, funding organizations, and other relevant groups gathered in Research Triangle Park in July 2019 to consider how to build and maintain trust in science.

Introduction

In July 2019, participants gathered in Research Triangle Park, North Carolina, for an event organized by RTI International (RTI) called Trust in Science. As an independent, nonprofit research institute celebrating 60 years of service to society itself, RTI regularly conducts scientific research and engages in efforts to encourage public support for science. A wide range of nonprofit organizations and funding organizations also support and engage with different aspects of scientific research representing myriad fields of inquiry, some involving social dynamics and others involving phenomena at a planetary scale. Despite such diversity of fields, however, the conduct and impact of most peer-reviewed scientific research is contingent on public support. Without trust between people and communities not formally connected to scientific institutions, those institutions, and the scientists who work with and for these institutions, it is difficult to imagine the publication of data remaining a vibrant force or cornerstone of societal decisionmaking. Trust, in many ways, is a precursor to and perhaps even remedy for concerns we might raise about misinformation or the use of science in policymaking.

Our goal with the Trust in Science event was to foster collaborations and strengthen connections between nonprofit and funding organizations to address trust-related challenges that are affecting science and scientists. Collaboration between professionals and organizations is easy to cite as an abstract goal but can be challenging to pursue in practice for various reasons. One intended outcome for our effort was the forging and reinforcement of professional relationships. Beyond interpersonal meeting, though, we also worked together to generate key themes and actionable ideas that will inspire future work.

Participants generated and considered both broad challenges and specific contexts in which trust has been strained. We discussed, for example, the use of wearable technologies for data collection, vaccine acceptance, biofuel research, survey research on topics such as sexual harassment monitoring, tools to help people navigate online information, and the development of physical spaces for local community discussion about science and technology. That range might suggest difficulty in reaching consensus in themes and recommendations, and yet our participants managed to develop a coherent set of suggestions.

Here we offer an overview of key themes and ideas that emerged from our interactions. We hope that readers will consider this an open-source set of suggestions for future initiatives and innovations.

—Brian Southwell, Angelique (Angel) Hedberg, Christopher Krebs, and Stephanie Zevitas

Initial Modeling in May 2020 JHC Impact Blog Post

JHC Impact

Predicting willingness to vaccinate for COVID-19 in the US

May 12, 2020 | COVID-19, SURVEY, VACCINES

By Bridget Kelly, PhD, MPH, Carla Bann, PhD, Linda Squiers, PhD, Molly Lynch, MPH, Brian Southwell, PhD, Lauren McCormack, PhD, MSPH

jhcimpact.com/posts/f/predicting-willingness-to-vaccinate-for-covid-19-in-the-us

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Today's Presentation

- Are those most at risk willing to get the vaccine?
- What does vaccine willingness look like for the rest of the population?
- What factors predict willingness to vaccinate?
- How might vaccine hesitancy matter?

Methodology

- Probability-based, web-based panel designed to be representative of U.S. households
- Wave 1: Feb 28–March 2, 2020 (n = 1,021)
- Wave 2: April 10–13 & 17–20, 2020 (n = 2,279)
- Weighted to represent the U.S. population

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Respondent Characteristics for Wave 2 (n = 2,279)

Male	**48%**
Female	**52%**
White	**78%**
Black	**12%**
Other	**10%**
Hispanic	**16%**
Not Hispanic	**84%**
Northeast	**18%**
Midwest	**21%**
South	**38%**
West	**24%**
<$50,000	**32%**
$50,000–$99,999	**31%**
$100,000–$149,999	**17%**
≥ $150,000	**21%**
Excellent/Very Good	**50%**
Good	**35%**
Fair/Poor	**15%**
Employed	**65%**
Not Employed	**35%**
18–24	**10%**
25–34	**18%**
35–49	**24%**
50–64	**26%**
65+	**22%**
Less than High School	**11%**
High School	**28%**
Some College	**28%**
Bachelor's Degree or Higher	**33%**

Measures

"If a vaccine to prevent the coronavirus were ready to be tested in a clinical trial today, I would volunteer to be in the trial."

"When a vaccine for coronavirus becomes available, I will get it."

"When a vaccine for coronavirus becomes available, I will have my child get it."

Strongly disagree

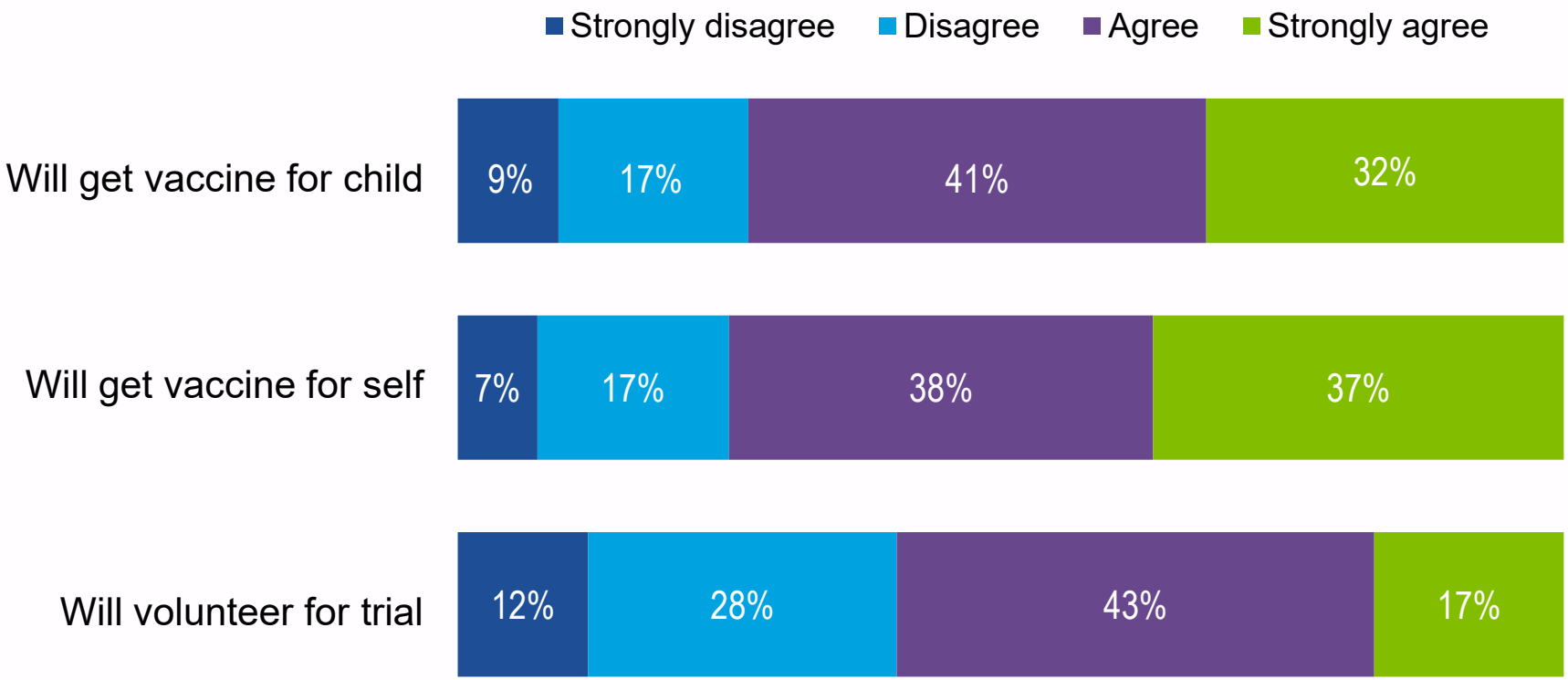
Disagree

Agree

Strongly agree

(Recoded as dichotomous: agree versus disagree)

Respondents Overall Had High Willingness to Vaccinate



High-Risk Definition

CDC currently defines high risk as

- People 65 years and older
- People in nursing homes
- People with underlying medical conditions, including
  - Chronic lung disease or moderate to severe asthma
  - Serious heart conditions
  - Conditions that cause the person to be immunocompromised
  - BMI>40
  - Diabetes
  - Kidney disease
  - Liver disease

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High-Risk in Our Sample

23%

is 65 years of age or older

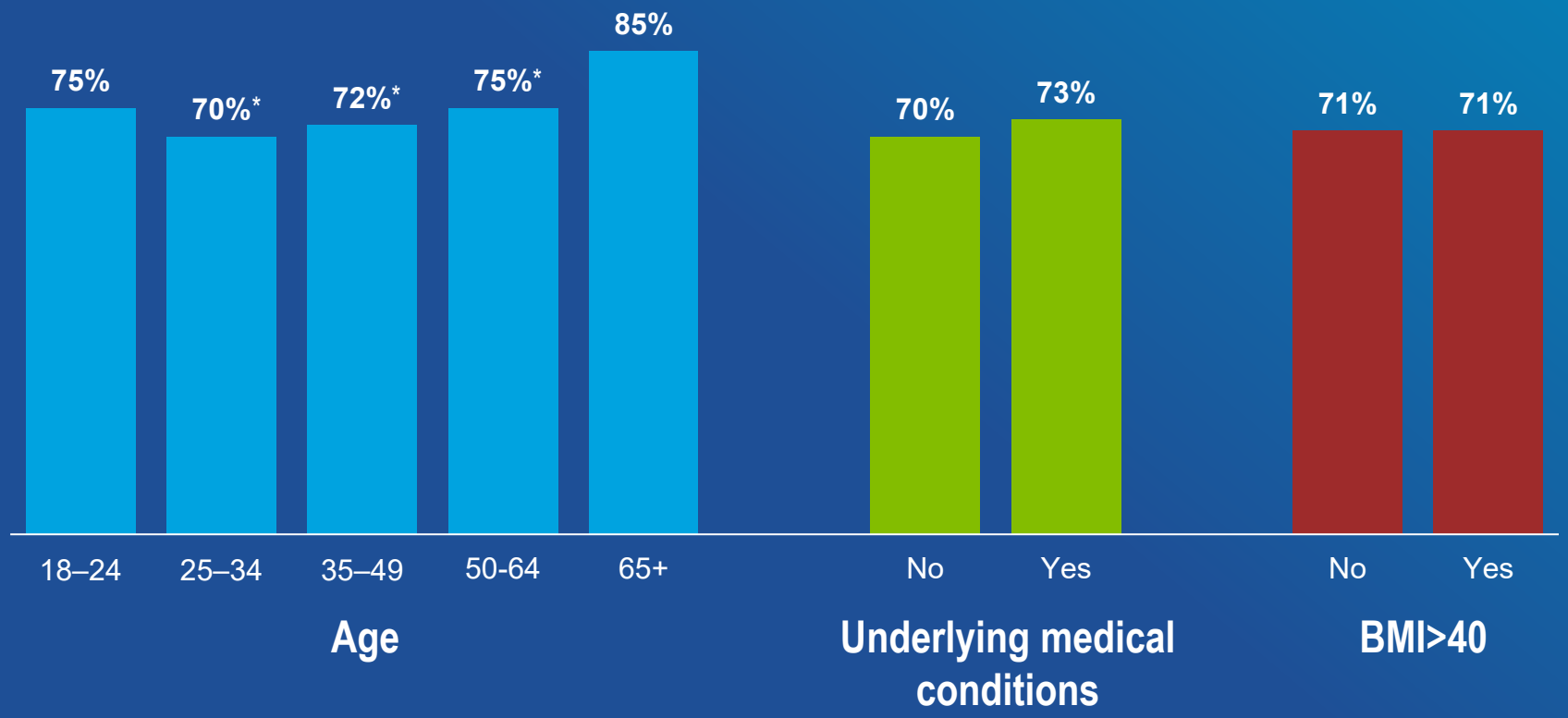
27%

≥ 1 underlying conditions

18%

BMI>40

Willingness by Age, Medical Condition, and BMI>40



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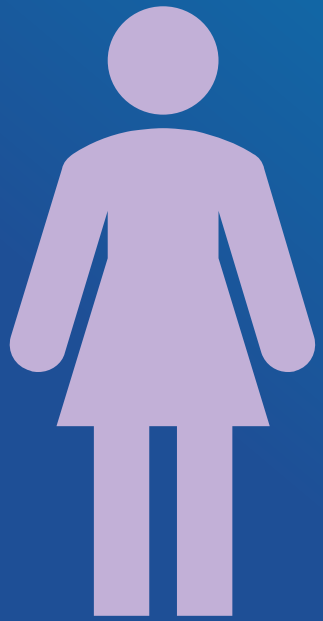
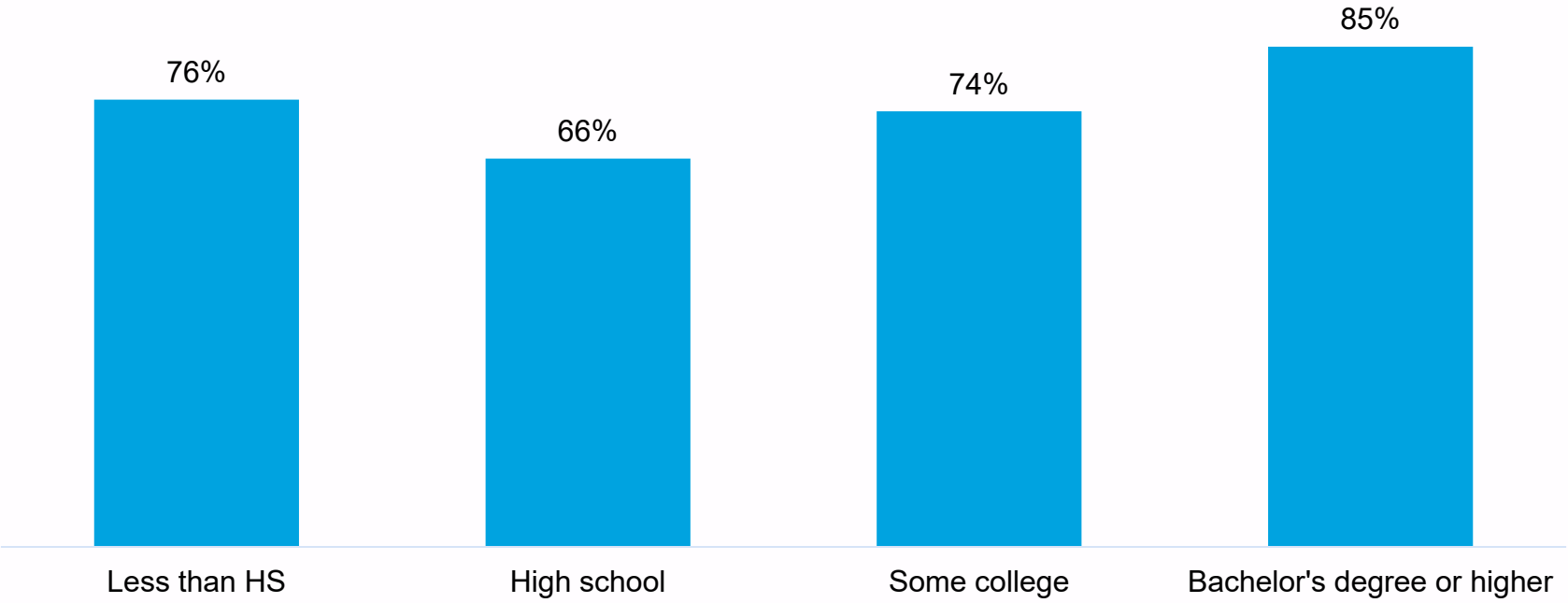
Willingness by Sex*

79%

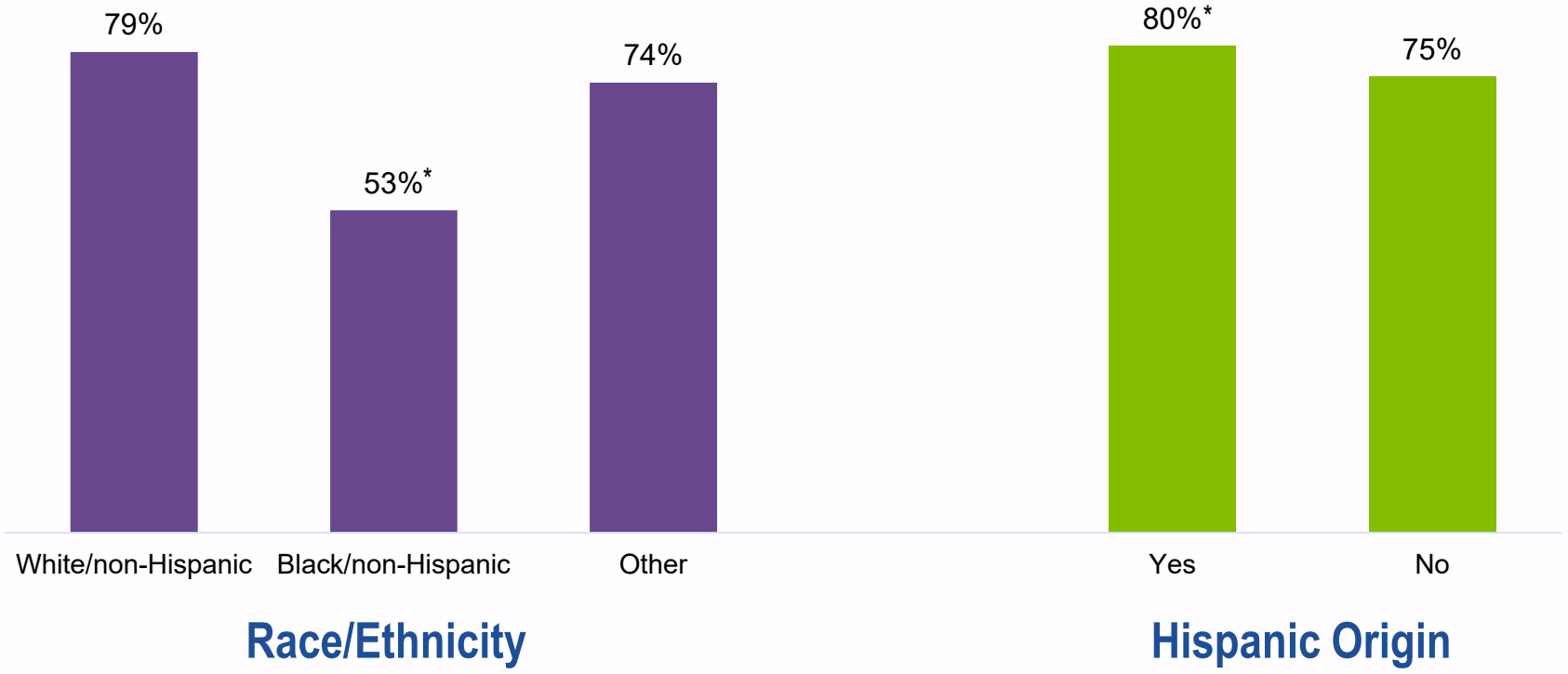


72%

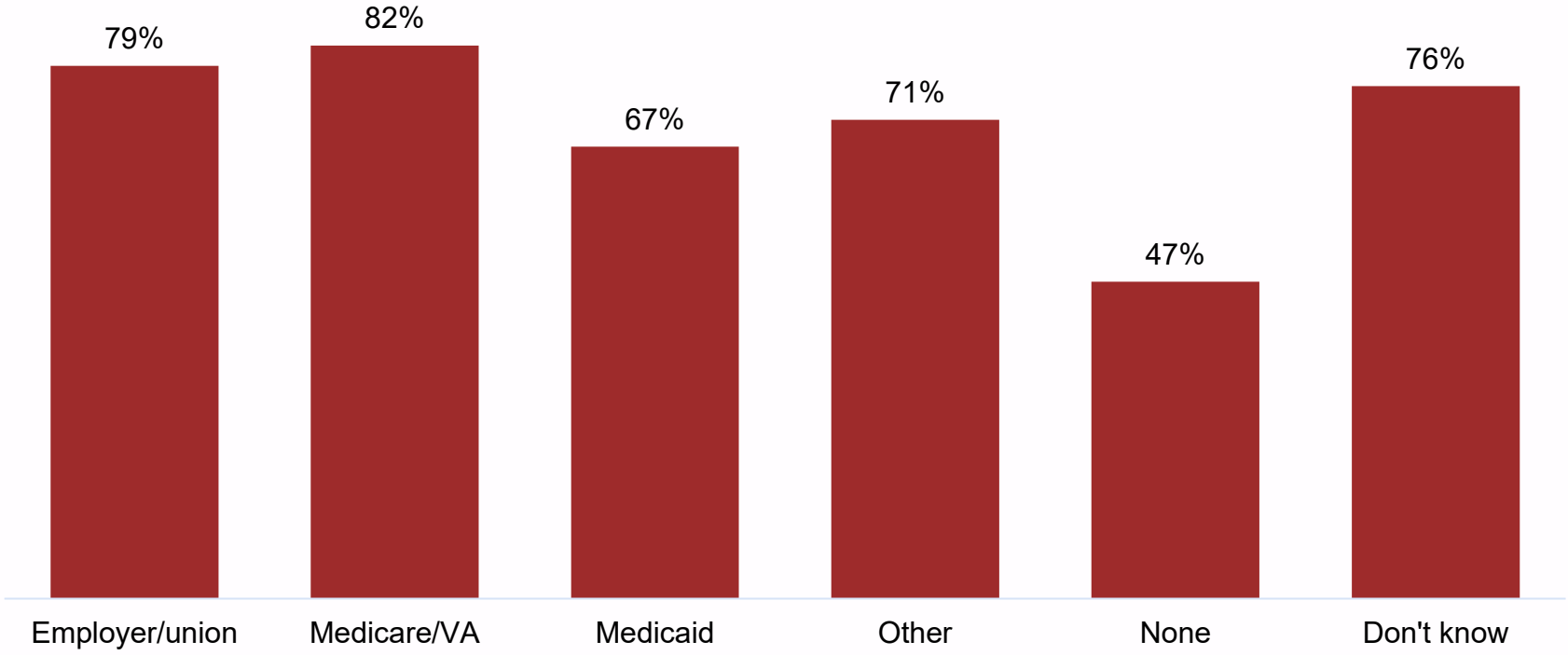
Willingness by Education*



Willingness by Race/Ethnicity and Hispanic Origin



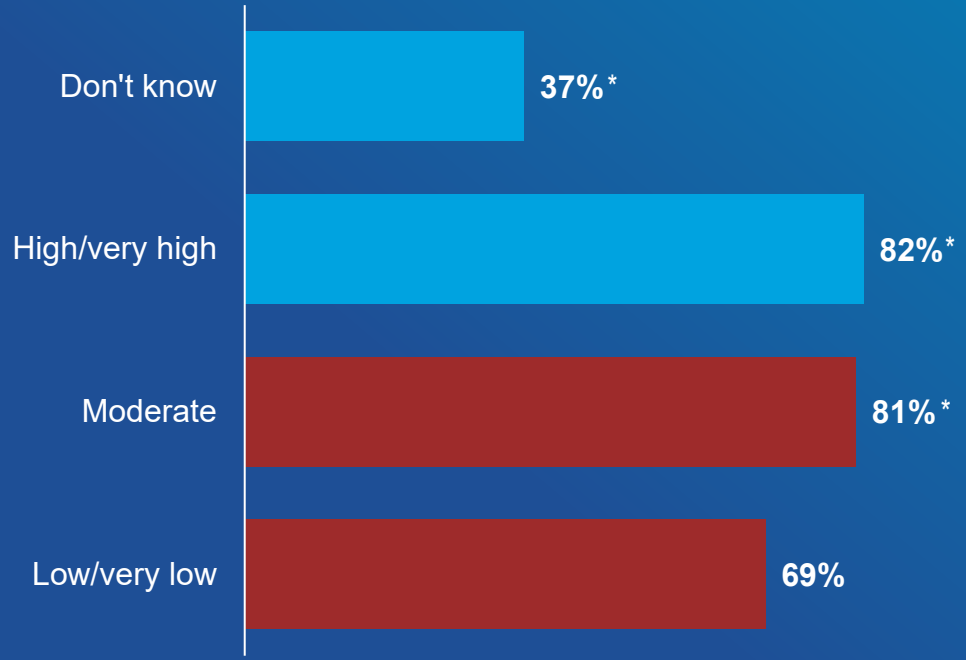
Willingness by Health Insurance*



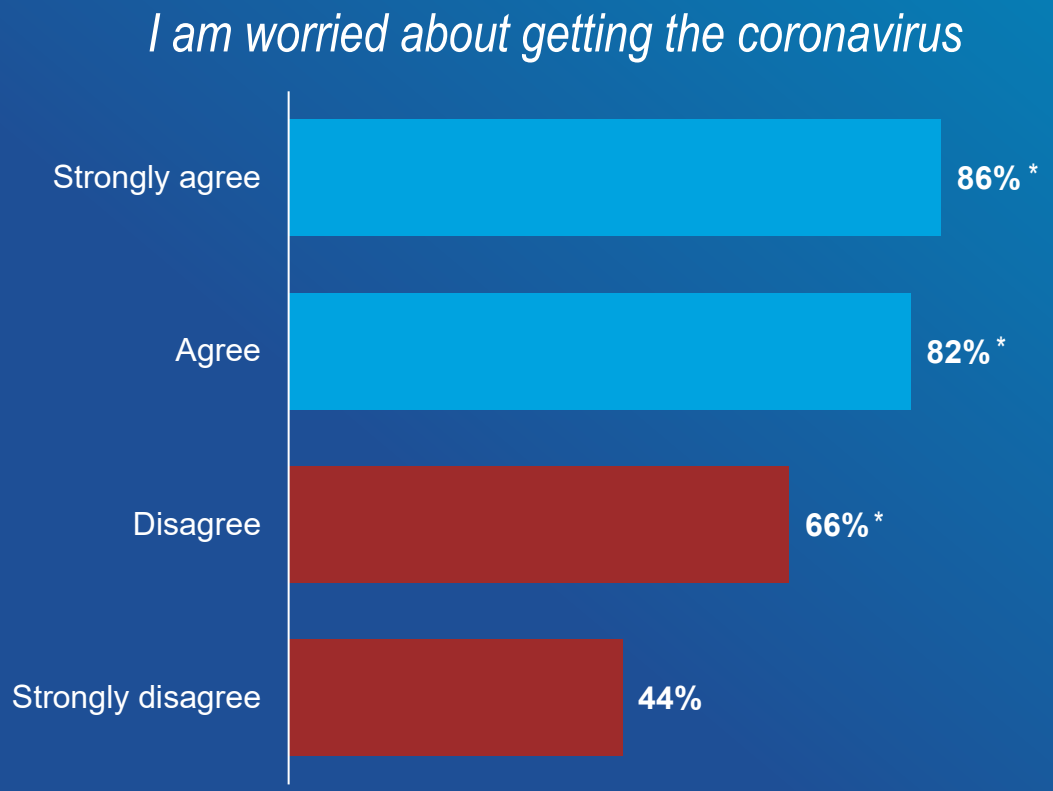
Perceived Threat Is Associated with Willingness to Get the Vaccine

Photo by Anshu A on Unsplash

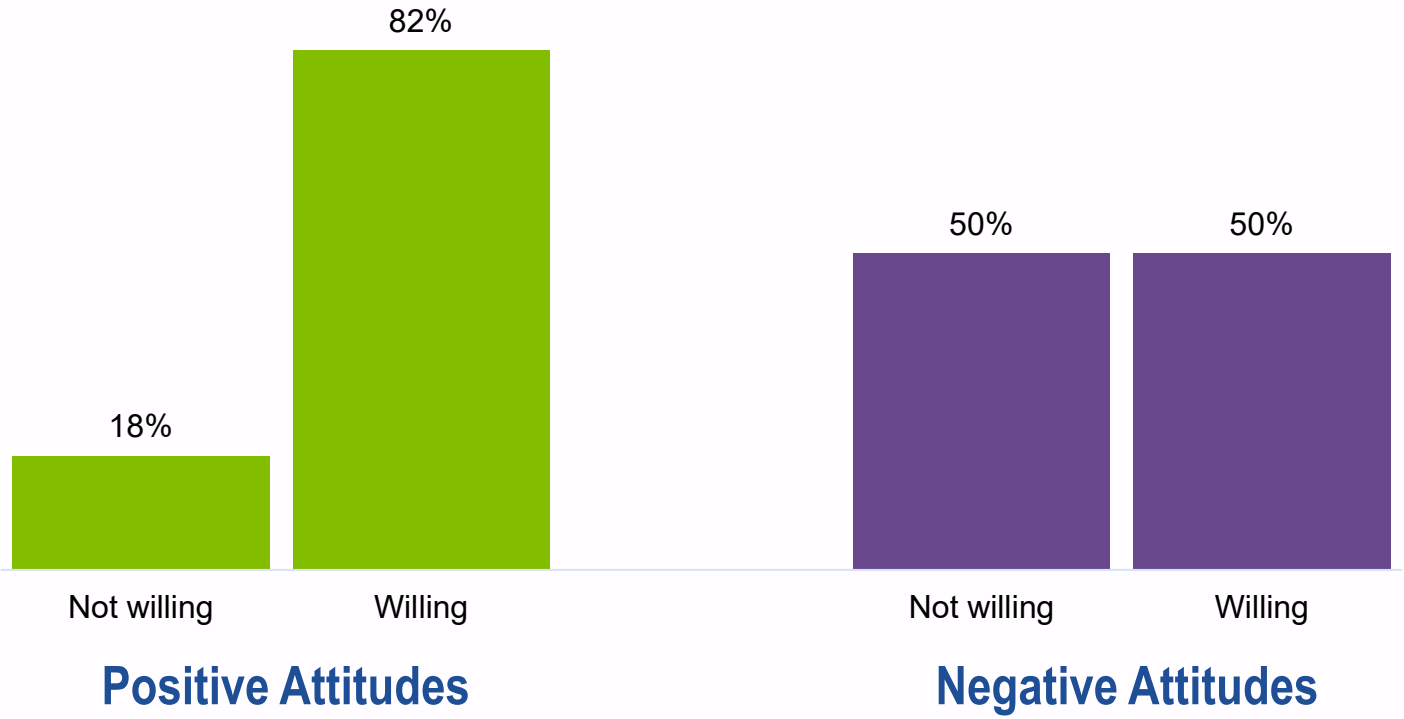
Level of threat the virus poses to you or your family



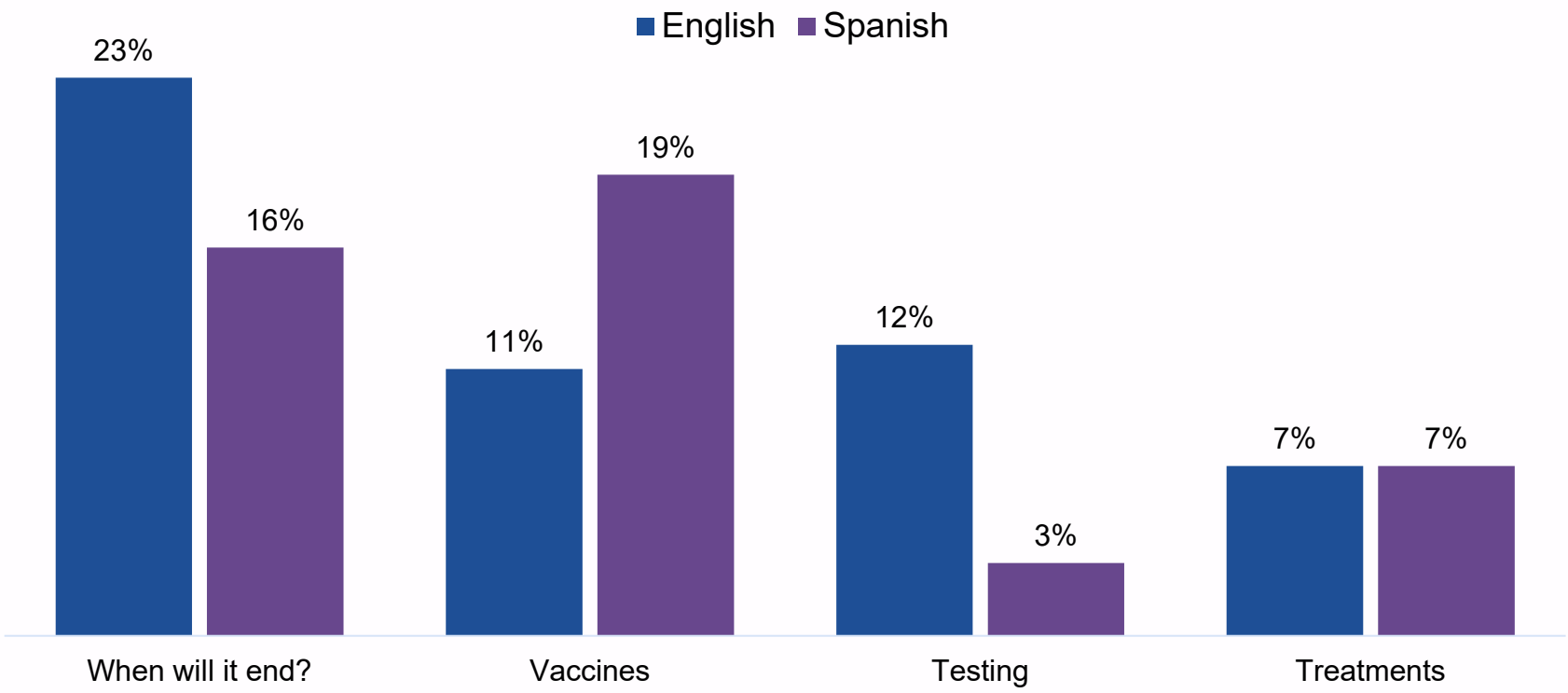
Worry About Getting the Virus and Willingness to Vaccinate



Willingness to Vaccinate Child by Attitudes Toward Childhood Vaccines*



Most Urgent Question—Major Domains



Key Takeaway: Demographic Differences

There may be a need to develop culturally appropriate messages that address beliefs and barriers specific to different audiences.

Key Takeaway: Unknown Threat

For those unaware of the threat, simply increasing awareness may have an impact...

Key Takeaway: Past Vaccine Attitudes

Opportunity to

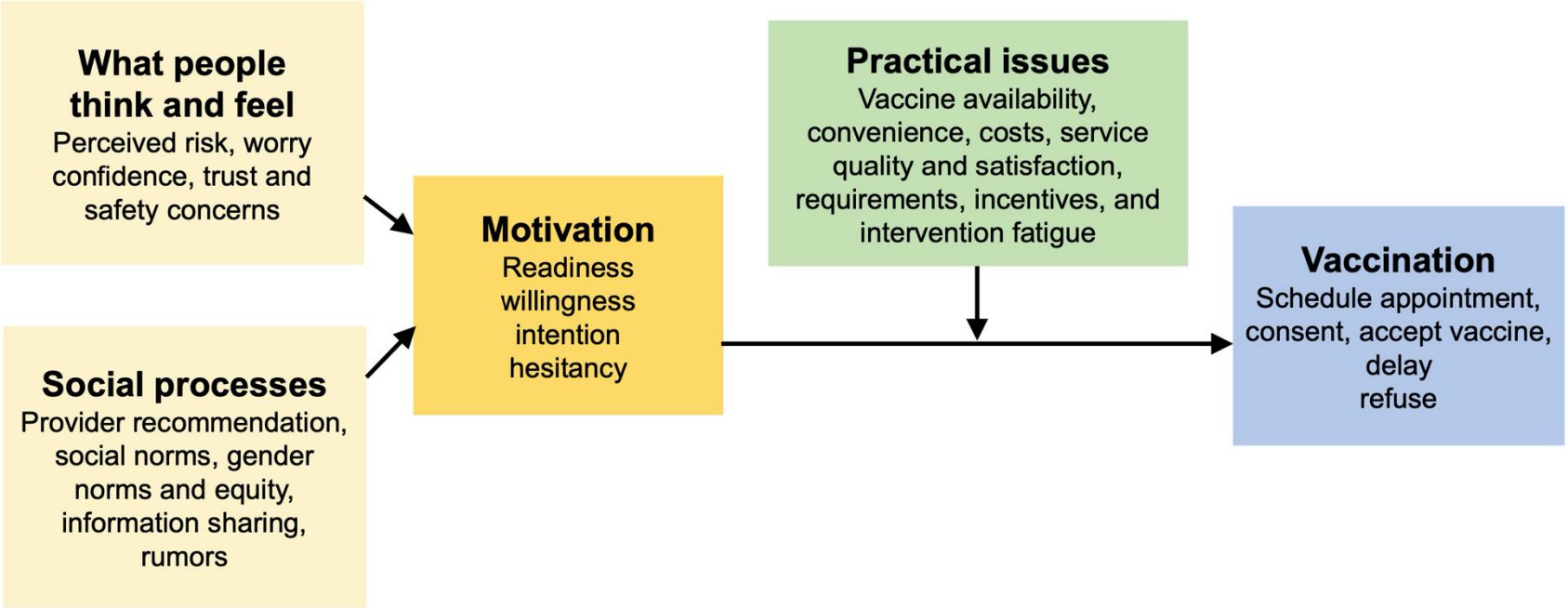
- Address misinformation
- Explore key determinants of hesitancy

Key Takeaway: Cost as Barrier

Cost is an important factor in willingness to vaccinate.

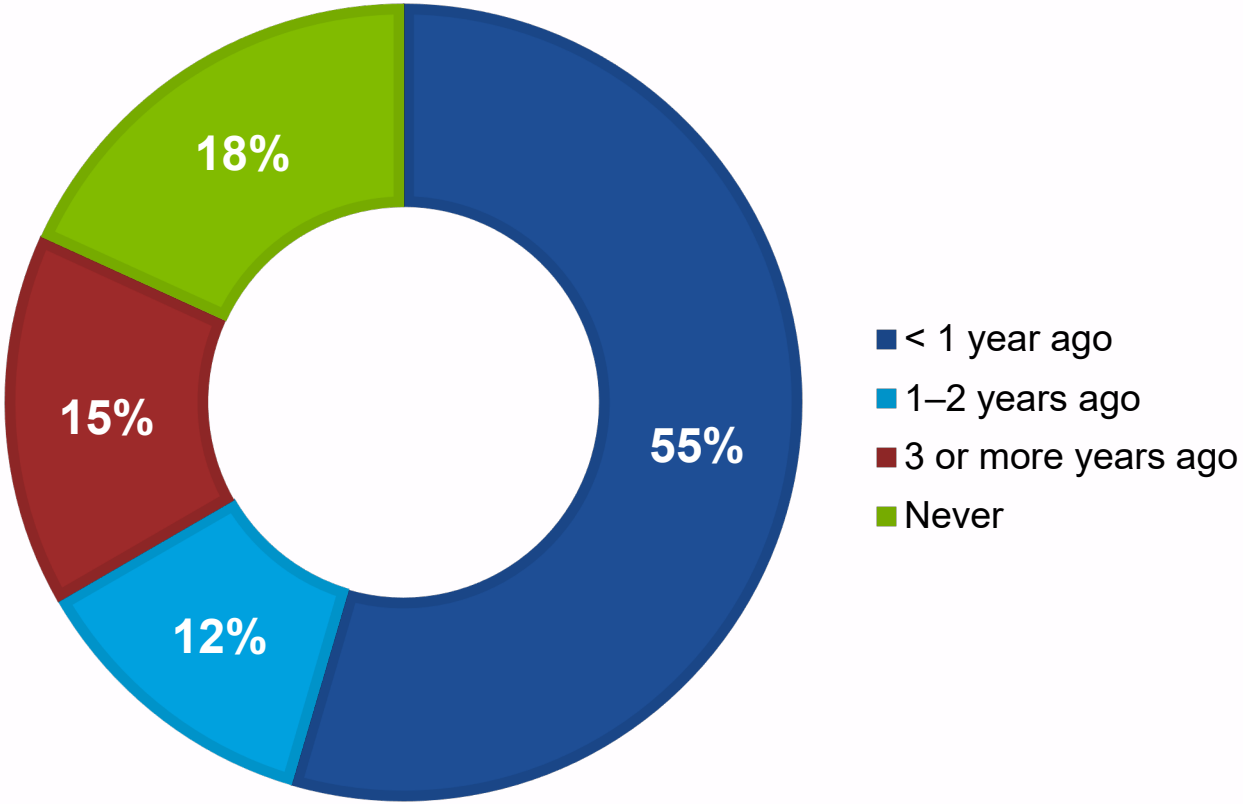
Multi-level Interventions for Vaccine Acceptance

World Health Organization's Increasing Vaccination Model



Source: The BeSD expert working group. Based on: Brewer NT, Chapman GB, Rothman AJ, Leask J, and Kempe A (2017). Increasing vaccination: Putting psychological science into action. *Psychological Science for the Public Interest*. 18(3): 149-207

Percentage Reporting Recent Flu Vaccination



Opportunity to Reframe Flu Vaccination Messages?

- Flu vaccine acceptance has been low because:
  - Flu may not seem severe
  - Vaccine not particularly effective
  - Flu not as contagious as COVID-19
  - People have some experience with flu

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Center for COMMUNICATION SCIENCE

We **research**, **design**, and **deliver** communication initiatives to promote social and behavior change. We use innovative methodologies to understand what motivates audiences and conduct comprehensive evaluations to determine impact.

www.rti.org/centers/rti-center-communication-science

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COVID-19 Response and Capabilities

To combat the unprecedented challenges presented by COVID-19, **RTI International offers broad and deep experience to address a variety of public health threats**—including Ebola, Zika, tuberculosis, malaria, and HIV.

RTI offers a deep bench of cross-functional experts, including

- Epidemiologists
- Data scientists
- Public health workers
- Educators and trainers
- Physicians
- Survey methodologists
- Evaluation specialists
- Innovation experts

Learn more about RTI's rapid response to COVID-19

rti.org/emerging-issue/covid-19-research