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

**Objectives**

**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
We already have seen:

- Federal government efforts to encourage vaccine development, e.g., Operation Warp Speed
- Questions about access and acceptance

Vaccination Acceptance as a Focus

Hypothetical behavior but real perceptions

Willingness or openness to future behavior can be measured and can predict future behavior\textsuperscript{3,4}

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.

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.
Building and Maintaining Trust in Science: Paths Forward for Innovations by Nonprofits and Funding Organizations

Brian Southwell, Angelique (Angel) Hedberg, Christopher Krebs, and Stephanie Zenitas, Editors

A History of Understanding Trust in Science at RTI

Introduction

In July 2019, participants gathered in Research Triangle Park, North Carolina, for an event organized by RTI International’s (RTI) Center for Trust in Science. The event, themed "Building and Maintaining Trust in Science: Paths Forward for Innovations by Nonprofits and Funding Organizations," brought together experts from various fields to discuss the importance of trust in the scientific community and how organizations can work to build and maintain trust in science.

The event featured a range of speakers, including experts from RTI, other nonprofit organizations, and government agencies. Participants discussed the challenges facing the scientific community, such as the spread of misinformation and the role of trust in scientific research. The event also highlighted successful strategies for building trust and fostering collaboration between scientists and the public.

Acknowledgments

The editors thank Allene Holden for his support of the Trust in Science initiative and Adam Jennings for photography, and the RTI Press staff who supported this publication, including Anna Wettenberg, Annie Geing, and Sonya Douglas.

Photo: Participants from feeding nonprofits and organizations funding research gathered to learn and network.

"The goal of the Trust in Science event was to foster collaboration and strengthen connections between nonprofit and funding organizations to address trust issues and challenges that are affecting science and its integrity. Collaboration between professionals and organizations is key to achieving this goal, as it can help to build and maintain trust in science."

"The conference is a platform for learning from and engaging with other organizations and their experiences, as well as establishing new connections. It’s a great opportunity for those who are interested in building trust in science and supporting the efforts of organizations working in this area."

"The event was a great opportunity to learn from and engage with others who are working on building and maintaining trust in science. It was a valuable experience to hear from different organizations and individuals, and to discuss the challenges and successes they’ve encountered."

"I think it’s important for organizations to be aware of the role they play in building trust, and to take proactive steps to ensure that their work is conducted in a trustworthy manner."

"Trust is a key factor in the success of scientific research, and it’s important for organizations to take steps to build and maintain trust with the public. This event was a great opportunity to learn from others and to discuss strategies for building trust in science."

"It was a great event that brought together experts from different organizations and fields. It was a valuable opportunity to learn from each other and to discuss strategies for building trust in science."
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

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

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>48%</td>
</tr>
<tr>
<td>Female</td>
<td>52%</td>
</tr>
<tr>
<td>Race</td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>78%</td>
</tr>
<tr>
<td>Black</td>
<td>12%</td>
</tr>
<tr>
<td>Other</td>
<td>10%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>16%</td>
</tr>
<tr>
<td>Not Hispanic</td>
<td>84%</td>
</tr>
<tr>
<td>Region</td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>18%</td>
</tr>
<tr>
<td>Midwest</td>
<td>21%</td>
</tr>
<tr>
<td>South</td>
<td>38%</td>
</tr>
<tr>
<td>West</td>
<td>24%</td>
</tr>
<tr>
<td>Income</td>
<td></td>
</tr>
<tr>
<td>&lt;$50,000</td>
<td>32%</td>
</tr>
<tr>
<td>$50,000–$99,999</td>
<td>31%</td>
</tr>
<tr>
<td>$100,000–$149,999</td>
<td>17%</td>
</tr>
<tr>
<td>≥ $150,000</td>
<td>21%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>Less than High School</td>
<td>11%</td>
</tr>
<tr>
<td>High School</td>
<td>28%</td>
</tr>
<tr>
<td>Some College</td>
<td>28%</td>
</tr>
<tr>
<td>Bachelor's Degree or Higher</td>
<td>33%</td>
</tr>
<tr>
<td>Employment Status</td>
<td></td>
</tr>
<tr>
<td>Employed</td>
<td>65%</td>
</tr>
<tr>
<td>Not Employed</td>
<td>35%</td>
</tr>
<tr>
<td>Health Status</td>
<td></td>
</tr>
<tr>
<td>Excellent/Very Good</td>
<td>50%</td>
</tr>
<tr>
<td>Good</td>
<td>35%</td>
</tr>
<tr>
<td>Fair/Poor</td>
<td>15%</td>
</tr>
</tbody>
</table>
“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.”

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Recoded as dichotomous: agree versus disagree)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Respondents Overall Had High Willingness to Vaccinate

<table>
<thead>
<tr>
<th>Survey</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Will get vaccine for child</td>
<td>9%</td>
<td>17%</td>
<td>41%</td>
<td>32%</td>
</tr>
<tr>
<td>Will get vaccine for self</td>
<td>7%</td>
<td>17%</td>
<td>38%</td>
<td>37%</td>
</tr>
<tr>
<td>Will volunteer for trial</td>
<td>12%</td>
<td>28%</td>
<td>43%</td>
<td>17%</td>
</tr>
</tbody>
</table>
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
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

<table>
<thead>
<tr>
<th>Age</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>18–24</td>
<td>75%</td>
<td>70%*</td>
</tr>
<tr>
<td>25–34</td>
<td>70%*</td>
<td>72%*</td>
</tr>
<tr>
<td>35–49</td>
<td>72%*</td>
<td>75%*</td>
</tr>
<tr>
<td>50-64</td>
<td>75%*</td>
<td>85%</td>
</tr>
<tr>
<td>65+</td>
<td>70%</td>
<td>73%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Underlying medical conditions</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>71%</td>
<td>71%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>BMI&gt;40</th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>71%</td>
<td>71%</td>
<td></td>
</tr>
</tbody>
</table>

* indicates significant difference.
Willingness by Sex*

79%  72%
Willingness by Education*:

- Less than HS: 76%
- High school: 66%
- Some college: 74%
- Bachelor’s degree or higher: 85%
Willingness by Race/Ethnicity and Hispanic Origin

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Hispanic Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>White/non-Hispanic</td>
<td>79%</td>
</tr>
<tr>
<td>Black/non-Hispanic</td>
<td>53%*</td>
</tr>
<tr>
<td>Other</td>
<td>74%</td>
</tr>
<tr>
<td>Yes</td>
<td>80%*</td>
</tr>
<tr>
<td>No</td>
<td>75%</td>
</tr>
</tbody>
</table>
Willingness by Health Insurance

- Employer/union: 79%
- Medicare/VA: 82%
- Medicaid: 67%
- Other: 71%
- None: 47%
- Don't know: 76%
Perceived Threat Is Associated with Willingness to Get the Vaccine

Level of threat the virus poses to you or your family

- Don't know: 37%
- High/very high: 82%
- Moderate: 81%
- Low/very low: 69%
Worry About Getting the Virus and Willingness to Vaccinate

I am worried about getting the coronavirus

- Strongly agree: 86% *
- Agree: 82% *
- Disagree: 66% *
- Strongly disagree: 44%
Willingness to Vaccinate Child by Attitudes Toward Childhood Vaccines

- **Positive Attitudes**
  - Not willing: 18%
  - Willing: 82%

- **Negative Attitudes**
  - Not willing: 50%
  - Willing: 50%
Most Urgent Question—Major Domains

When will it end? 23% English 16% Spanish
Vaccines 11% English 19% Spanish
Testing 12% English 3% Spanish
Treatments 7% English 7% Spanish
There may be a need to develop culturally appropriate messages that address beliefs and barriers specific to different audiences.
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
Cost is an important factor in willingness to vaccinate.
Multi-level Interventions for Vaccine Acceptance

World Health Organization's Increasing Vaccination Model

**What people think and feel**
Perceived risk, worry, confidence, trust, and safety concerns

**Social processes**
Provider recommendation, social norms, gender norms and equity, information sharing, rumors

**Motivation**
Readiness, willingness, intention, hesitancy

**Practical issues**
Vaccine availability, convenience, costs, service quality and satisfaction, requirements, incentives, and intervention fatigue

**Vaccination**
Schedule appointment, consent, accept vaccine, delay refuse

Percentage Reporting Recent Flu Vaccination

- 55% < 1 year ago
- 18% 1–2 years ago
- 15% 3 or more years ago
- 12% Never
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
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
Contact Us

Bridget Kelly, PhD, MPH
bkelly@rti.org
202.728.2098

Brian Southwell, PhD
bsouthwell@rti.org
919.541.8037
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