Addressing COVID-19 Vaccine Hesitancy in Communities with Significant Health Disparities

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NIH CEAL Initiative
Racial and Ethnic Minority Populations

**Categories by Race**
1. American Indian or Alaska Native
2. Asian American
3. Black or African American
4. Native Hawaiian or Other Pacific Islander

**Categories by Ethnicity**
1. Latino/Hispanic
2. Not Latino/Hispanic

**Two or More Race Categories**
The COVID-19 Pandemic in the U.S. Disproportionately Affects Communities of Color

Interplay of clinical characteristics and social determinants of health puts minority communities at high risk for COVID-19 complications

- Heart Disease
- Hypertension
- Diabetes
- Lung Disease

Among some racial and ethnic minority groups, evidence points to higher rates of hospitalization or death from COVID-19 than among non-Hispanic white persons.

COVID-19-Associated Hospitalization Rates March 7–November 21

Rate per 100,000 Population

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>Rate per 100,000 Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian or Alaska Native</td>
<td>445.5</td>
</tr>
<tr>
<td>Black</td>
<td>390.8</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>368.5</td>
</tr>
<tr>
<td>White</td>
<td>146.4</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>135.4</td>
</tr>
</tbody>
</table>

Among some racial and ethnic minority groups, evidence points to higher rates of hospitalization or death from COVID-19 than among non-Hispanic white persons.

## COVID-19 and Health Disparities

<table>
<thead>
<tr>
<th>Rate ratios compared to White, Non-Hispanic persons</th>
<th>American Indian or Alaska Native, Non-Hispanic persons</th>
<th>Asian, Non-Hispanic persons</th>
<th>Black/African American, Non-Hispanic persons</th>
<th>Hispanic or Latino persons</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cases</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>1.8x</td>
<td>0.6x</td>
<td>1.4x</td>
<td>1.7x</td>
</tr>
<tr>
<td><strong>Hospitalizations</strong>&lt;sup&gt;2&lt;/sup&gt;</td>
<td>4.0x</td>
<td>1.2x</td>
<td>3.7x</td>
<td>4.1x</td>
</tr>
<tr>
<td><strong>Deaths</strong>&lt;sup&gt;3&lt;/sup&gt;</td>
<td>2.6x</td>
<td>1.1x</td>
<td>2.8x</td>
<td>2.8x</td>
</tr>
</tbody>
</table>

1. Data source: Data reported by state and territorial jurisdictions (accessed 11/27/2020). Numbers are ratios of age-adjusted rates standardized to the 2000 US standard population. Calculations use only the 52% of reports with race/ethnicity; this can result in inaccurate estimates of the relative risk among groups.


Vaccine Hesitancy is a Continuum Between Complete Acceptance & Complete Refusal

**HESITANCY**

- **ACCEPT ALL**
  - "I’m ready"

- **ACCEPT BUT UNSURE**
  - "OK, I guess I’ll vaccinate"
  - "I don’t know"

- **ACCEPT SOME, DELAY AND REFUSE SOME**

- **REFUSE BUT UNSURE**
  - "No, I’m not sure this is right for my child/for me"
  - "I don’t trust vaccines"

**Community Engagement Alliance (CEAL) Against COVID-19 Disparities**

Courtesy: Jennifer Williams. https://www.bcemergencynetwork.ca
1. Questions and concerns about benefits, safety and side effects.

2. Concerns about speed of development process and representation of people “like me.”

3. Distrust in political and economic motivations of the government and companies involved

4. Misinformation: Established and new conspiracy theories about vaccines and COVID-19
National Trends: Percentage of US Adults Who Say They Are Likely to Get a COVID-19 Vaccine, Apr 1 – Dec 8, 2020

Percent of Adults Who Stated in April & December 2020 That They Were Somewhat or Very Likely to Get Vaccinated for COVID-19, and Change Over Time

<table>
<thead>
<tr>
<th>Demographic characteristic</th>
<th>April 2020 survey (April 1-14); likely to get a vaccine, % (95% CI)</th>
<th>December 2020 survey (November 25-December 8); likely to get a vaccine, % (95% CI)</th>
<th>Adjusted risk ratio (95% CI)&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Change over time: April 2020 survey to December 2020 survey, % (95% CI)&lt;sup&gt;b&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>74.1 (72.4-75.8)</td>
<td>5660 56.2 (54.4-58.1)</td>
<td>-17.9 ( -20.0 to -15.8)</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>79.1 (76.8-81.5)</td>
<td>2362 62.3 (59.6-65.0)</td>
<td>1 [Reference]</td>
<td>-16.9 ( -20.0 to -13.8)</td>
</tr>
<tr>
<td>Women</td>
<td>69.5 (67.1-71.9)</td>
<td>3298 50.6 (48.1-53.1)</td>
<td>0.9 (0.8-0.9)</td>
<td>-18.9 ( -21.8 to -16.0)</td>
</tr>
<tr>
<td>Age group, y</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18-49</td>
<td>69.1 (66.5-71.7)</td>
<td>2431 50.9 (48.2-53.7)</td>
<td>1 [Reference]</td>
<td>-18.2 ( -21.4 to -15.0)</td>
</tr>
<tr>
<td>50-64</td>
<td>76.7 (73.8-79.6)</td>
<td>1755 57.0 (53.7-60.4)</td>
<td>1.2 (1.1-1.3)</td>
<td>-19.7 ( -23.5 to -15.8)</td>
</tr>
<tr>
<td>≥65</td>
<td>83.8 (81.0-86.6)</td>
<td>1473 69.1 (65.7-72.5)</td>
<td>1.4 (1.3-1.5)</td>
<td>-14.7 ( -18.6 to -10.8)</td>
</tr>
<tr>
<td>Race/ethnicity&lt;sup&gt;c&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>77.8 (75.9-79.6)</td>
<td>3851 58.6 (56.5-60.8)</td>
<td>1 [Reference]</td>
<td>-19.1 ( -21.5 to -16.8)</td>
</tr>
<tr>
<td>Black</td>
<td>50.7 (44.7-56.7)</td>
<td>413 37.6 (32.0-43.2)</td>
<td>0.7 (0.6-0.8)</td>
<td>13.1 ( -19.9 to -6.3)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>73.1 (67.8-78.3)</td>
<td>810 52.7 (47.1-58.2)</td>
<td>1.0 (0.9-1.1)</td>
<td>-20.4 ( -27.2 to -13.6)</td>
</tr>
<tr>
<td>Asian</td>
<td>90.9 (86.1-95.7)</td>
<td>290 80.6 (73.9-87.2)</td>
<td>1.3 (1.2-1.4)</td>
<td>-10.3 ( -18.5 to -2.2)</td>
</tr>
</tbody>
</table>

<sup>a</sup> Adjusted for age, sex, race/ethnicity, and education.

<sup>b</sup> Calculated using the logit model.

<sup>c</sup> Race/ethnicity is an interactive variable.
Vaccine Intent is Lowest Among Black and Young Adults

Ad Council/Ipsos National Survey Adults 18+ Dec 15-21, 2020
In this survey, nearly two-thirds of African Americans were COVID-19 vaccine hesitant.

African Americans/Blacks are more likely to be hesitant to COVID-19 Vaccination

<table>
<thead>
<tr>
<th></th>
<th>As soon as possible</th>
<th>Wait and see</th>
<th>Only if required</th>
<th>Definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>34%</td>
<td>39%</td>
<td>9%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Black</strong></td>
<td>20%</td>
<td>52%</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td><strong>Hispanic</strong></td>
<td>26%</td>
<td>43%</td>
<td>11%</td>
<td>18%</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>40%</td>
<td>36%</td>
<td>7%</td>
<td>15%</td>
</tr>
</tbody>
</table>

Willingness to accept the COVID-19 vaccine is increasing; however, we have more work to do.

If a COVID-19 vaccine was determined to be safe by scientists and available for free to everyone who wanted it, would you...?

- **Definitely/Probably get it**
  - Total: 63% in Sep-20, 71% in Dec-20
  - Black: 50% in Sep-20, 62% in Dec-20
  - Hispanic: 60% in Sep-20, 71% in Dec-20
  - White: 65% in Sep-20, 73% in Dec-20

- **Definitely/Probably NOT get it**
  - Total: 34% in Sep-20, 27% in Dec-20
  - Black: 49% in Sep-20, 35% in Dec-20
  - Hispanic: 37% in Sep-20, 26% in Dec-20
  - White: 33% in Sep-20, 26% in Dec-20

Important concepts in addressing vaccine hesitancy

• A one-size approach does not fit all communities.
• Begin by listening to the community’s needs and concerns.
• Needs should be tailored to the individual or targeted and contextualized to the community.
• No single intervention strategy addresses all instances of vaccine hesitancy.
• **Assess the 3Cs:** community’s vaccine confidence, complacency, and convenience
Addressing Vaccine Hesitancy: Begin with the 3 Cs Model

Confidence:
• Refers to trust in the effectiveness and safety of vaccines, the system that delivers them and/or the motivations of policy-makers who make determinations about vaccines.

Complacency
• Refers to a low perceived risk of vaccine-preventable diseases and therefore it is assumed vaccines are not needed.
• Other issues are considered more important.

Convenience
• Refers to the degree to which the comfort, convenience, time, place, and quality of a vaccine affects uptake of the vaccine.
Count on Trusted Voices and Trusted Messengers in the Community

• Doctors, nurses, pharmacists, and other health professionals in the community

• Clergy and other faith-based organization leadership.

• Trusted voluntary organizations and institutions.
Effective Communication:

- Share accurate information from trustworthy sources.
- Use clear, concise, plain language.
- Deliver trustworthy messaging using different modes—print, video, infographics, in-person, social media.
- Provide information in multiple languages.
- Develop FAQs, update based on feedback and new questions.
- Use visuals with diverse representation.

Engender Trust:

- Acknowledge fears, concerns, and historical injustices.
- Be transparent about side effects & unknowns.
- Use messengers experienced in effectively communicating with diverse audiences.
- Dispel myths with facts, without being critical of individual or group beliefs.
- Partner with trusted leaders to share info.
- Allow people to see themselves—“someone like me”

Modified from Consuelo H. Wilkins, Vanderbilt University Medical Center
Addressing COVID-19 Vaccine Hesitancy: NIH Community Engagement Alliance (CEAL) Against COVID-19 Disparities

A trans-NIH initiative leading outreach, engagement and inclusive participation efforts in ethnic and racial minority communities disproportionately affected by the COVID-19 pandemic

11 CEAL state teams partnering with national & local organizations

- Academic Partners
- Community-Based Organizations
- Healthcare Centers & Providers
- Faith-Based Organizations
- State & Local Government Agencies
- Pharmacy Networks
Community Engagement Alliance (CEAL) Against COVID-19 Disparities

https://covid19community.nih.gov/
Takeaway Message

Vaccine hesitancy can change, but it requires community engagement, building trust, understanding the vaccine process, and sharing truthful information.