COVID-19
RAPID NEEDS ASSESSMENT:
VACCINE HESITANCY AND MOTIVATORS

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April 20, 2022
BACKGROUND

- COVID-19 disproportionately affected American Indians/Alaskan Natives (AI/AN) populations\(^1\)
  - Montana AI/ANs (2020): 19% of COVID-19 cases, 32% deaths
  - Wyoming AI/ANs (2020): 30% of COVID-19 cases

- COVID-19 vaccinations reduce complications and hospitalization\(^2\)
  - Montana (2022): 1.57 million doses distributed
  - Wyoming (2022): 0.75 million doses distributed

- Montana and Wyoming Tribal communities COVID-19 vaccination rates remains low.

1. Indian Health Service: [https://www.ihs.gov/coronavirus/](https://www.ihs.gov/coronavirus/)
Fully Vaccinated* Eligible Populations by Contract Health Service Delivery Area (CHSDA)\(^1\), All Races\(^2\)

<table>
<thead>
<tr>
<th>Area</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort Peck</td>
<td>50%</td>
</tr>
<tr>
<td>Wind River</td>
<td>61%</td>
</tr>
<tr>
<td>Rocky Boy's</td>
<td>55%</td>
</tr>
<tr>
<td>Little Shell</td>
<td>50%</td>
</tr>
<tr>
<td>Fort Belknap</td>
<td>53%</td>
</tr>
<tr>
<td>CSKT</td>
<td>56%</td>
</tr>
<tr>
<td>Crow</td>
<td>55%</td>
</tr>
<tr>
<td>Blackfeet</td>
<td>62%</td>
</tr>
</tbody>
</table>

Source: Montana Vaccine Production View and COVID-19 Vaccine Data-Wyoming Department of Health. Updated: April 19, 2022

\(^*\) Fully vaccinated status: those who received (2) doses of Federally approved vaccines of Pfizer/BioNTech or Moderna and (1) dose of Janssen vaccine.

\(^1\) Contract Health Service Delivery Area (CHSDA) defined as individuals with any mention of American Indian race and residence in the following counties of Montana (Glacier, Pondera, Big Horn, Yellowstone, Flathead, Lake, Missoula, Sanders, Blaine, Phillips, Daniels, Roosevelt, Sheridan, Valley, Cascade, Rosebud, Chouteau, Hill) and Wyoming (Fremont, Hot Springs).

\(^2\) Estimates include the following racial/ethnic groups: Non-Hispanic Whites, Blacks, American Indian/Alaskan Native, and Asians.
OBJECTIVE

- Rocky Mountain region AI Tribal communities:
  - Examine perceptions towards the COVID-19 vaccine
  - Intentions to be vaccinated

Goal: increase COVID-19 vaccination rates by 5% among Rocky Mountain regional AI Tribal communities.
- Culturally tailor messaging
- Strategies to increase vaccinations
METHODS

Setting: AIs in Tribal communities: MT, WY (IHS-Rocky Mountain region)

Recruitment
- Participants (Inclusion Criteria):
  - self-identified as AI/AN
  - resided in 1 of 10 Tribal communities
  - ≥ 18 years and older

• Questionnaire design:
  • RMTEC Data Management Team (DMT) working group (February 2022)
  • Reviewed existing tools from CDC, UIHI
  • 2 questionnaires: Motivators + Hesitancy

• Data Collection:
  • Convenience sampling approach
  • Facebook, emails
  • 32 questions
METHODS

Vaccination Status Inclusion Questions:

1. Have you received your **first dose** of any Federally approved COVID-19 vaccines? (Federally approved vaccines are Pfizer/BioNTech, Moderna, and/or Janssen vaccine)
2. Have you received your **second dose** of any Federally approved COVID-19 vaccines?
3. Have you received your COVID-19 **booster**?

Completed Surveys
N=105

- Motivators (n=66)
- No COVID-19 vaccine (n=6)
- Dose 1 only (n=5)
- Doses 1 + 2 only (n=6)
FULLY VACCINATED

After receiving any of the COVID-19 vaccine(s), did you experience any vaccine side effects? Commonly reported COVID-19 vaccine side effects are injection site pain, redness or swelling, fever, chills, headache, fatigue, muscle pain and/or tiredness.

- Yes, severe side effects: 1.5%
- Yes, light to mild side effects: 9.2%
- No: 21.5%
- I don’t know/Not Sure: 67.7%
FULLY VACCINATED

After receiving any of the COVID-19 vaccine(s), did you get COVID-19 (tested positive or suspected)?

- Yes: 46.2%
- No: 50.8%
- I don’t know/Not Sure: 3.1%

Do you believe the information you received about COVID-19 pandemic and vaccine was correct?

- Yes: 81.3%
- No: 15.6%
- I don’t know/Not Sure: 3.1%

Missing=1
Missing=2
FULLY VACCINATED

Who are your most trusted source(s) for COVID-19 information? (Select all that apply)

- CDC Webpage/WebMD: 69.7%
- Indian Health Service (IHS, Doctors/Nurses): 48.5%
- RMLTC Tribal Epidemiology Center: 18.2%
- Social Media (Facebook, Instagram, TikTok): 1.5%
- Traditional Media (Television, Newspapers, Journals, etc.): 21.2%
- Tribal Health Departments: 31.8%
- Other (please specify): 19.7%
## FULLY VACCINATED

**What motivated you to be vaccinated? (Select all that apply)**

<table>
<thead>
<tr>
<th>Reason</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because it is my community responsibility</td>
<td>47.0%</td>
</tr>
<tr>
<td>To protect my family and friends</td>
<td>74.2%</td>
</tr>
<tr>
<td>Because of work requirements</td>
<td>40.9%</td>
</tr>
<tr>
<td>I believe the vaccine could help me stay protected</td>
<td>54.5%</td>
</tr>
<tr>
<td>For my health</td>
<td>53.0%</td>
</tr>
<tr>
<td>My tribe was offering money to be vaccinated</td>
<td>9.1%</td>
</tr>
<tr>
<td>I take the vaccine to protect my family and friends</td>
<td>4.5%</td>
</tr>
<tr>
<td>A medicine man/woman recommended</td>
<td>21.2%</td>
</tr>
<tr>
<td>I knew the vaccine would provide additional protection with traditional medicines (i.e., teas, sacred plants/herbs, consumption of sacred foods)</td>
<td>6.1%</td>
</tr>
<tr>
<td>I felt social pressure to be vaccinated</td>
<td>10.6%</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
</tr>
</tbody>
</table>

Vaccination Reasons
FULLY VACCINATED

What motivated you to be vaccinated? (Select all that apply)

- Because it is my community responsibility: 47.0%
- To protect my family and friends: 74.2%
- Because of work requirements: 40.9%
- I believe the vaccine could help me stay protected: 54.5%
- For my health: 33.0%
- My tribe was offering money to be vaccinated: 9.1%
- A medicine man/woman recommended I take the vaccine to protect my family and friends: 4.5%
- I knew the vaccine would provide additional protection with traditional medicines (i.e., teas, sacred plants/herbs, consumption of sacred foods): 21.2%
- I felt social pressure to be vaccinated: 6.1%
- Other (please specify): 10.6%

Vaccination Reasons
FULLY VACCINATED

Have your thoughts changed after you have received COVID-19 vaccine doses 1, 2, or booster?

- No: 83.1%
- I Don't Know/Not Sure: 3.1%
- Yes: 13.8%
LIMITED VACCINATIONS

Have you had COVID-19? Reported COVID-19 symptoms are fever or chills, cough, difficulty breathing, fatigue, muscle or body aches, new loss of taste or smell, sore throat.
LIMITED VACCINATIONS

What makes it difficult for you get a COVID-19 vaccine? (Select all that apply)

[Bar chart showing percentages of vaccine group for various reasons such as: I can't go out on my own (have physical limitations), It's too far away, I don't know where to go to get vaccinated, I'm not eligible to get a COVID-19 vaccine, I have a medical reason that makes me ineligible to... The hours of operation are inconvenient, It is difficult to find or make an appointment, I don't have time off work, It was difficult to arrange for childcare, I was worried about the side effects, I was worried that the COVID-19 vaccine didn't pass tests... I used my traditional medicines and activities to... My risk to COVID-19 is low, I am against vaccines in general.]
LIMITED VACCINATIONS

Which of the following vaccines have you gotten in the past? (Select all that apply)
LIMITED VACCINATIONS

You may have heard that federally recognized tribes were providing tribal members a cash incentive ($100.00--$700.00)... If your Tribe was to offer you more money, would you be motivated to get the any of the COVID-19 vaccine(s)?

If a Tribal Leaders were to release a public service announcement (PSA) about their experience receiving the vaccine, would you be more motivated to get the vaccine?
LIMITED VACCINATIONS

Instead of taking the COVID-19 vaccine, are you using traditional medicines (e.g., teas, plants/herbs, sacred foods)?

Have you participated in any traditional/sacred protection ceremonies to protect you from COVID-19?
LIMITED VACCINATIONS

Trusted sources of COVID-19 information
NEXT STEPS

- Impacts of miscommunications: Uncertainty of information and access
- Identify ways to effectively communicate the science rather than presenting facts
- Present story narratives
- Information prescriptions: providing links to reliable sources, specific to populations
- Webinars: Trainings
- Alternative sources: religious leaders, local health directors, individuals universally trusted, elders, Subject Matter Expert(s)

Sources: Digital literacy (Paakan, et al (2019), Walters et al 2020); Telehealth (Thomas et al, 2020); Misinformation (Damian & Gallo, 2020); Equity (Jackson et al, 2020); Contact Tracing (Vamos & Yeung, 2017)