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## Overarching Goals

- Enhance COVID-19 testing among **underserved and vulnerable populations** across the US.
- Develop/create a **consortium of community-engaged research projects** designed to rapidly implement testing interventions.
- **Strengthen the available data** on disparities in infection rates, disease progression and outcomes, and **identify strategies to reduce these disparities** in COVID-19 diagnostics.

### September – November 2020

**Phase I: $300M**

- **Build infrastructure**
- **Rapidly implement testing, other capabilities**

### Early 2021 – Summer/Fall 2021

**Phase II: $200M**

- **Integrate new advances**
- **Expand studies/populations**
RADx-UP Strategies

• **Expand capacity to test broadly** for SARS-CoV-2 in highly affected populations, including asymptomatic persons.

• **Deploy validated point of care tests** as available, including self-test and saliva-based methods.

• **Inform implementation of mitigation strategies** based on isolation and contact tracing to limit community transmission.

• **Understand factors** that contribute to COVID-19 disparities and **implement interventions** to reduce these disparities.

• **Establish infrastructure** that could facilitate evaluation and distribution of vaccines and therapeutics.
Together, funded sites and research projects propose to serve a diverse population set, with many projects serving Hispanic/Latino and African American populations, as well as Asian Americans and American Indians/Alaska Natives.

**Target Health Disparity Population Projects**

- Hispanics/Latinos/as: 41
- Blacks/African Americans: 33
- Asian Americans: 25
- American Indians/Alaska Natives: 24
- Sexual and Gender Minorities: 19
- Socioeconomically disadvantaged...: 15
- Underserved Rural Populations: 5
- Native Hawaiians and other Pacific Islanders: 3

*Note: Some projects/sites address multiple target populations.*
### RADx-UP Phase I Sample Size Estimates

**NOT-OD-20-121, NOT-OD-20-120 & NOT-OD-20-119**

<table>
<thead>
<tr>
<th>Health Disparity Populations</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Blacks/African Americans</td>
<td>344,735</td>
</tr>
<tr>
<td>Hispanics/Latinos/as</td>
<td>288,763</td>
</tr>
<tr>
<td>Underserved Rural Populations</td>
<td>250,280</td>
</tr>
<tr>
<td>Socioeconomically disadvantaged populations</td>
<td>180,164</td>
</tr>
<tr>
<td>American Indians/Alaskan Natives</td>
<td>36,817</td>
</tr>
<tr>
<td>Asian Americans</td>
<td>29,801</td>
</tr>
<tr>
<td>Native Hawaiians and other Pacific Islanders</td>
<td>22,068</td>
</tr>
<tr>
<td>Sexual and Gender Minorities</td>
<td>2,633</td>
</tr>
</tbody>
</table>

**Note:** The sample sizes are estimates and may vary based on specific research requirements.
RADx-UP Phase I: Populations with Medical or Social Vulnerabilities

**NOT-OD-20-121, NOT-OD-20-120, NOT-OD-20-119 & RFA-OD-20-013**

Together, funded sites and research projects propose to serve a diverse population set, with many projects serving individuals with medical comorbidities known to increase risk of severe COVID-19, rural and remote communities, and migrant and immigrant populations.

### Target Vulnerable Population Projects (1/2)

<table>
<thead>
<tr>
<th>Population</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals with medical comorbidities known to increase risk of severe COVID-19</td>
<td>25</td>
</tr>
<tr>
<td>Rural and remote communities</td>
<td>23</td>
</tr>
<tr>
<td>Migrant and immigrant populations</td>
<td>15</td>
</tr>
<tr>
<td>Individuals with substance use disorders or serious mental illness</td>
<td>12</td>
</tr>
<tr>
<td>Essential workers</td>
<td>11</td>
</tr>
<tr>
<td>Community dwelling older adults</td>
<td>11</td>
</tr>
<tr>
<td>Children and adolescents</td>
<td>11</td>
</tr>
<tr>
<td>Public housing residents</td>
<td>10</td>
</tr>
<tr>
<td>Residents of tribal lands or reservations</td>
<td>8</td>
</tr>
</tbody>
</table>

**Note:** Some projects/sites address multiple target populations.
Target Vulnerable Population Projects (2/2)

- Homeless populations: 7
- Communities exposed to high rates of air pollution or other toxic exposures: 7
- Individuals involved with the criminal or juvenile justice systems: 6
- Pregnant and post-partum women: 5
- Individuals living in congregate housing: 5
- Individuals with disabilities, cognitive impairment or dementia, or communication disorders: 4
- Residents of nursing homes and assisted living facilities: 3

**Note:** Some projects/sites address multiple target populations.
Note: Cities listed are not exhaustive, as some projects only provided state-level information.
Testing Research Projects: Large Networks, Consortia & Research Centers

NOT-OD-20-121

Program Information: $5M per site over 2 years; 30 sites

- Understand the factors associated with COVID-19 morbidity and mortality disparities and to lay the foundation to reduce disparities for those underserved and vulnerable populations
- Closely partner with communities to develop and implement interventions to increase access and uptake of testing
- Provide large-scale testing and collaborate across the consortium of projects to serve as a resource for future studies and outreach

- Awarded 29 sites in FY20, 1 site in FY21
  - Approximately 500,000 participants/tests
- Testing methods include a range of POC, pooled, & lab-based; PCR, antigen, and Ab:
  - Abbott ID NOW, Roche cabas, Cepheid GeneXpert, Hologic Aptima/Panther Fusion, ThermoFisher, and custom tests
- Testing at prisons, mental health programs, in public housing & community centers
  - Focus on rural and urban, Tribal, and aging communities
Testing Research Projects: Agile Community Collaborations & Partnerships

NOT-OD-20-120

Program Information: $2M per site over 2 years; 23 sites

- Strengthen available data on disparities in infection rates and disease progression and outcomes among underserved and vulnerable populations across the US
- Understand differences in testing access and uptake patterns
- Partner with communities to build the evidence-base of approaches to identify and address disparities in diagnostic testing uptake and effectiveness

- Awarded 4 sites in FY20, 19 in FY21
- Testing methods include a range of POC, pooled, & lab-based; PCR, antigen, and Ab:
  - Abbott ID NOW, KorvaLabs Curative SARS-Cov-2 Assay, Cepheid GeneXpert, Cellex Rapid Test, Quidel Sofia SARS antigen test, ThermoFisher, and custom tests
- Testing at mobile-sites, community health centers, in public housing & at home
  - Focus on individuals with medical comorbidities, substance use disorders or mental illness, and community dwelling older adults
Social, Ethical and Behavioral Implications

NOT-OD-20-119

Program Information: $1.2M per site over 2 years; 16 sites

- Assess ethical, historical, healthcare, social, economic, and contextual factors surrounding COVID-19 testing
- Investigate influence of cultural beliefs and attitudes, perceived expectations, and preferences
- Inform development of interventions and tools to increase access to and acceptability of testing

- Awarded 5 projects in FY20, 11 in FY21
- Research conducted through community health centers, online surveys, public housing developments, and Tribal communities
  - Focus on individuals with medical comorbidities, migrant and immigrant populations, Tribal populations, and rural and remote communities
RADx-UP Coordinating and Data Collection Center (CDCC)

Program Information: $80M over 4 years

- Serve as a national resource to coordinate across the RADx Consortium
- Provide overarching support and guidance in: (1) Administrative Operations and Logistics, (2) COVID-19 Testing Technology, (3) Community and Health System Engagement and (4) Data Collection, Integration and Sharing
- Support the pilot project programs: (1) Rapid pilot studies, (2) Community collaboration grants

- Awarded to Duke Clinical Research Institute (DCRI), the Center for Health Equity Research at UNC-Chapel Hill and Community-Campus Partnerships for Health
- Innovative ideas for data management, hub and spoke models of networked testing, and outreach to underserved communities
- Experience in developing new SARS-CoV-2 testing technologies
  - Provide strong technical assistance to testing protocols and adoption/distribution of new, emerging technologies
### RADx-UP Coordinating and Data Collection Center Cores

#### Administration & Coordination
- Communication
- Committee oversight
- Processes, policies, procedures
- Partnerships
- Evaluation

*NIH Program Officers*

#### Community Engagement
- Best practices
- Engagement Resource Library
- COVID-19 Equity Evidence Academy
- Community of Practice
- Community Collaboration Grants

*NIH Project Scientist*

#### COVID-19 Testing
- Technical support
- Repository of emerging technologies
- Testing selection & implementation
- Research pilot studies

*NIH Project Scientist*

#### Data Science & Statistics
- Data harmonization
- Security, privacy, and protections
- Data exchange
- Data representation and visualization

*NIH Project Scientist*

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**ENGAGEMENT IMPACT TEAMS**

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THANKS!