RADx Underserved Populations (RADx-UP)

Advisory Committee to the Director, National Institutes of Health

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Speakers

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RADx-Underserved Populations (RADx-UP)

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

Early 2021 – Summer/Fall 2021

Phase I: $300M	Phase II: $200M

Build infrastructure

Rapidly implement testing, other capabilities

Integrate new advances

Expand studies/ populations

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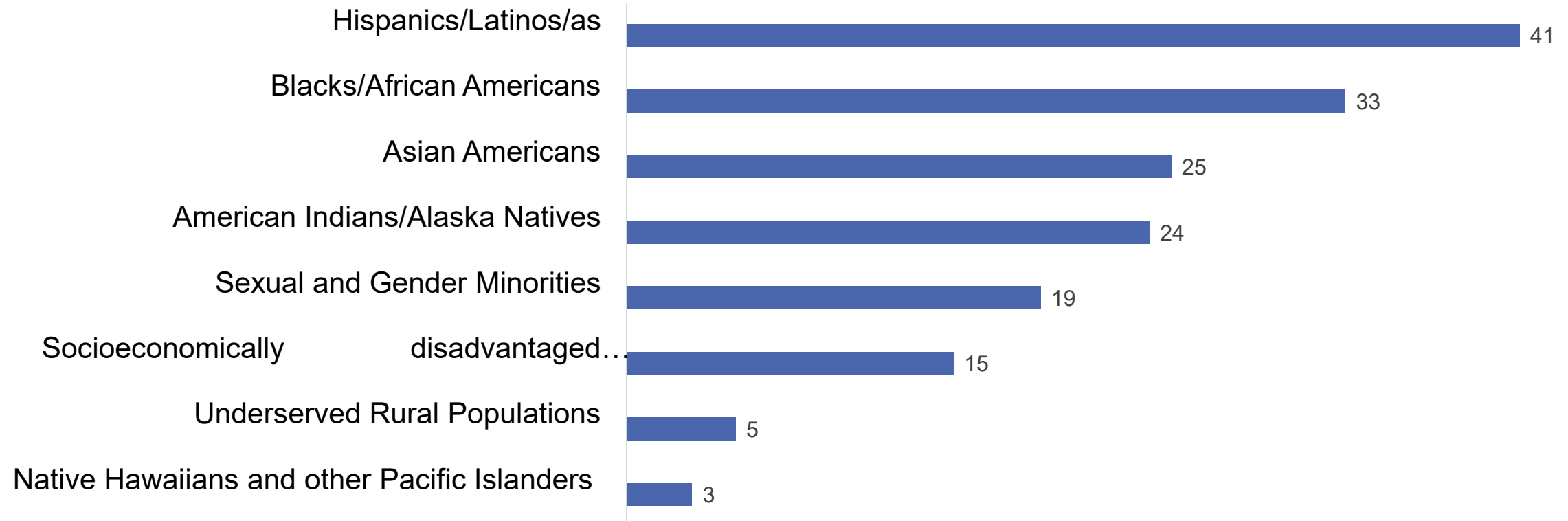
RADx-UP Strategies

- **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.

RADx-UP Phase I Snapshot: Populations with Health Disparities

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 Hispanic/Latino and African American populations, as well as Asian Americans and American Indians/Alaska Natives.

Target Health Disparity Population Projects

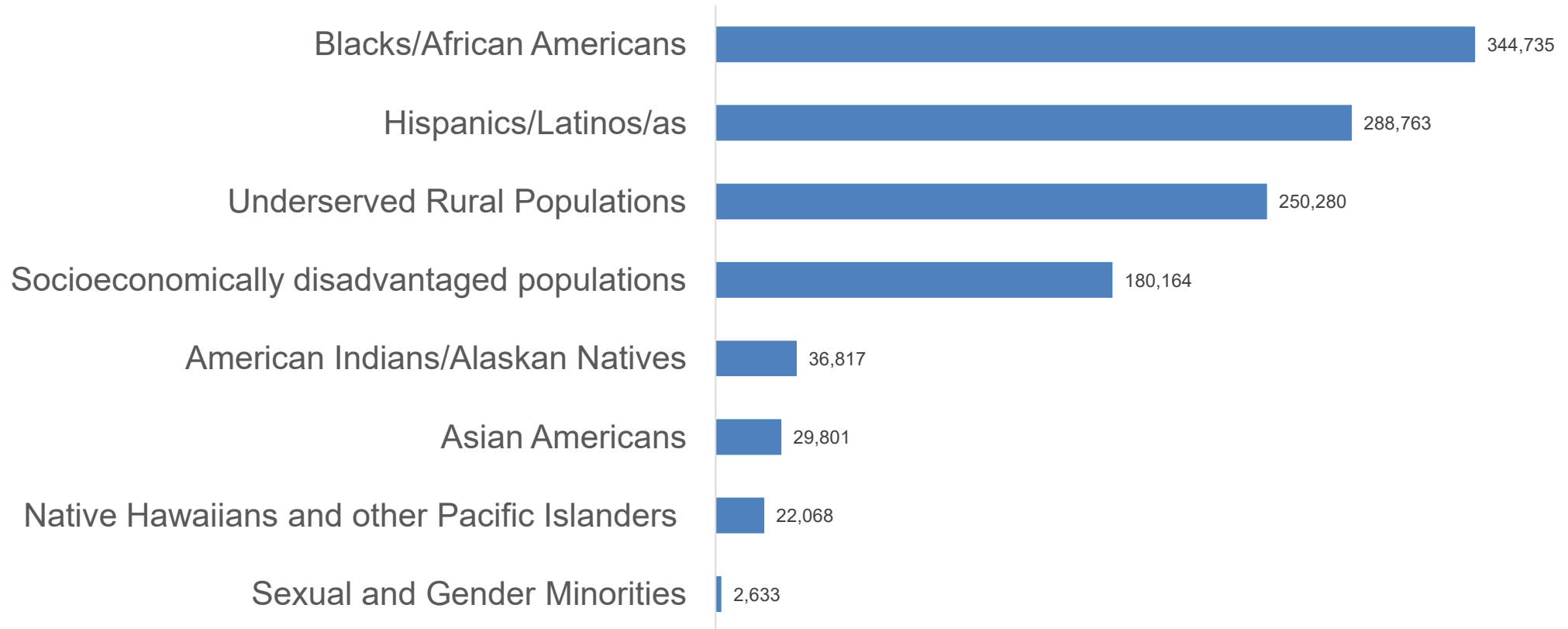| Population	Projects
Hispanics/Latinos/as	41
Blacks/African Americans	33
Asian Americans	25
American Indians/Alaska Natives	24
Sexual and Gender Minorities	19
Socioeconomically disadvantaged…	15
Underserved Rural Populations	5
Native Hawaiians and other Pacific Islanders	3

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

Health Disparity Populations

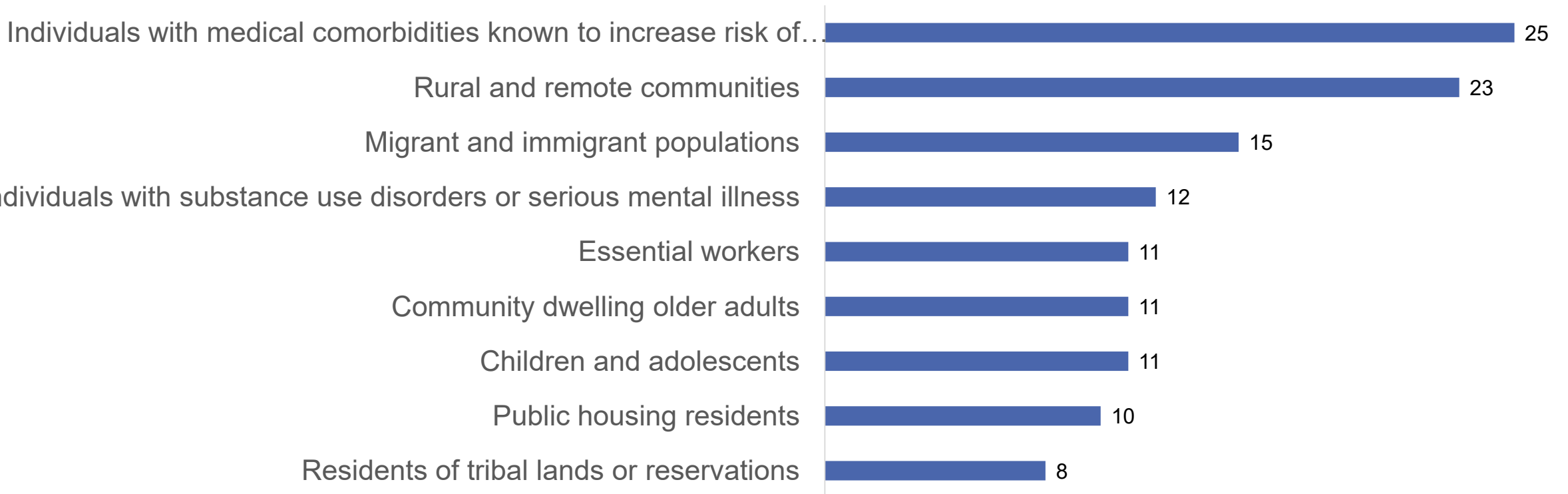| Population	Sample Size
Blacks/African Americans	344,735
Hispanics/Latinos/as	288,763
Underserved Rural Populations	250,280
Socioeconomically disadvantaged populations	180,164
American Indians/Alaskan Natives	36,817
Asian Americans	29,801
Native Hawaiians and other Pacific Islanders	22,068
Sexual and Gender Minorities	2,633

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)

Population	Count
Individuals with medical comorbidities known to increase risk of…	25
Rural and remote communities	23
Migrant and immigrant populations	15
Individuals with substance use disorders or serious mental illness	12
Essential workers	11
Community dwelling older adults	11
Children and adolescents	11
Public housing residents	10
Residents of tribal lands or reservations	8

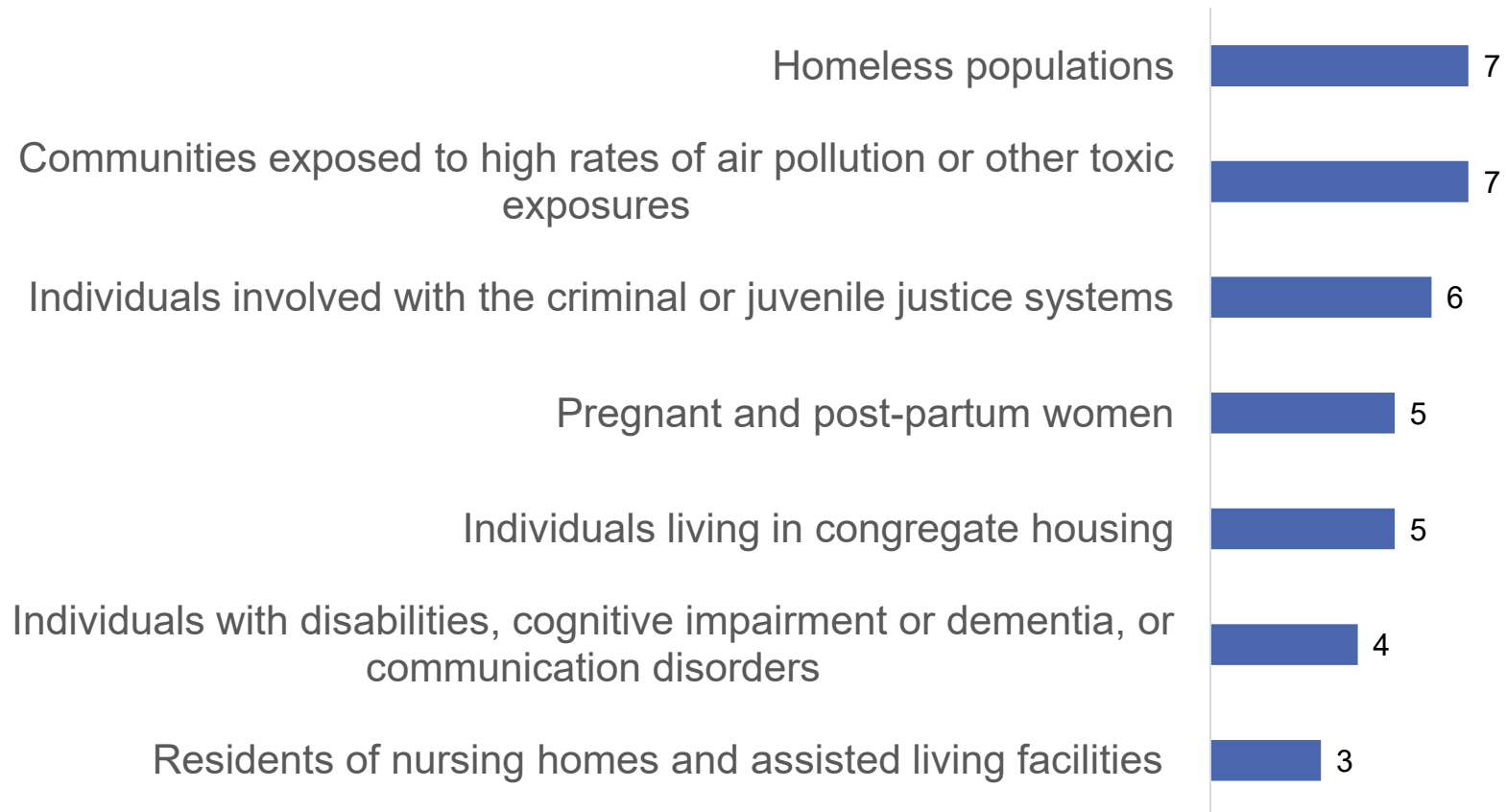**Note**: Some projects/sites address multiple target populations.

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

Funded sites and research projects also propose to serve the following additional vulnerable populations.
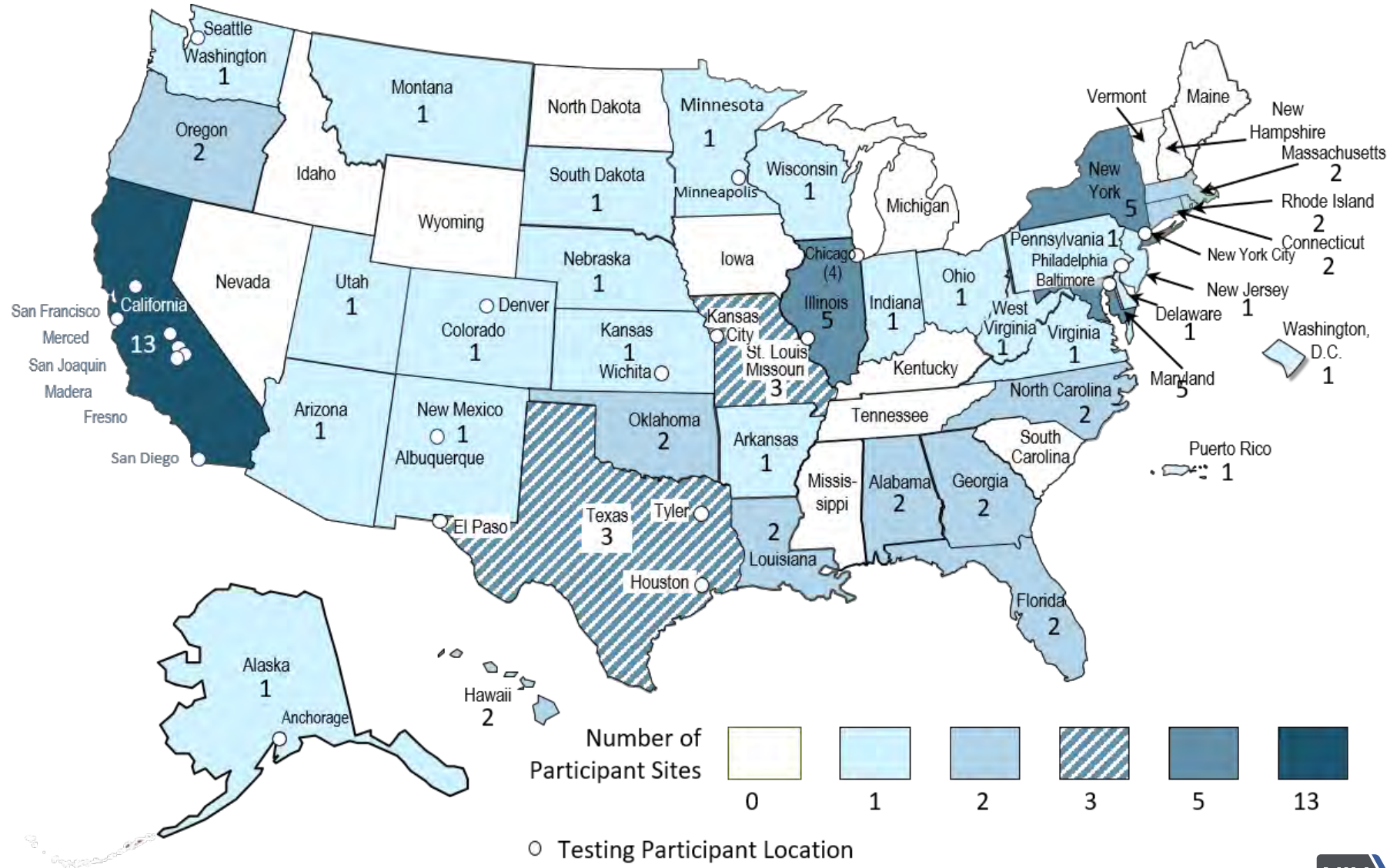
Target Vulnerable Population Projects (2/2)

Population	Count
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.

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RADx-UP Phase I Awards

Testing Participant Locations

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

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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

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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

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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

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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

ENGAGEMENT IMPACT TEAMS

THANKS!