Rapid Acceleration of Diagnostics for Underserved Populations

June 11, 2020

Eliseo J. Pérez-Stable, M.D.
Director, National Institute on Minority Health and Health Disparities

eliseo.perez-stable@nih.gov
RADx Projects

RADx Tech – $500M
Highly competitive, rapid three-phase challenge to identify the best candidates for at-home or point-of-care tests for COVID-19

RADx Underserved Populations (RADx-UP) – $500M
Interlinked community-based demonstration projects focused on implementation strategies to enable and enhance testing of COVID-19 in vulnerable populations

RADx Radical (RADx-Rad) – $200M
Develop and advance novel, non-traditional approaches or new applications of existing approaches for testing

RADx Advanced Testing Program (RADx-ATP) – $230M
Rapid scale-up of advanced technologies to increase rapidity and enhance and validate throughput – create ultra-high throughput machines and facilities

Data Management Support – $70M
Build an infrastructure for and support coordination of the various data management needs of many of the COVID-19 efforts
COVID-19 and Racial/Ethnic Disparities

• Numerous reports of disproportionate burden of COVID-19 on racial and ethnic minority populations have emerged
• Possible underlying causes of this burden related to long-standing disparities and disadvantage, higher rates of co-morbid conditions, higher proportions of public facing jobs, and crowding in housing and communities
• Imperative need for implementing prevention and healthcare strategies aligned with the needs of these communities to address effects of pandemic and mitigation efforts as well as underlying inequities
COVID-19 Cases Across the U.S.
RADx-UP Strategies

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

• Expand capacity to test broadly for viral nucleic acids in the population that is most affected including asymptomatic persons

• Implement mitigation strategies based on isolation and contact tracing to limit community transmission

• Anticipate opportunity to evaluate and distribute vaccines and potential therapeutic candidates

• Opportunity to deploy validated point of care tests as these are available including self-test methods and use of saliva samples
COVID-19 Testing Across the U.S.

United States Laboratory Testing
Commercial and Reference, Public Health, and Hospital Laboratories

USA
13,627,379
TESTS REPORTED
(CDC | Updated May 22 2020 7:03PM)

USA
1,771,749
POSITIVE TESTS
(CDC | Updated May 22 2020 7:03PM)

USA
13%
OVERALL % POSITIVE
(CDC | Updated May 22 2020 7:03PM)

Preliminary data: Reported by U.S. Laboratories including Commercial and Reference, Public Health, and Hospital
Totals may include antibody data from some states

For Native Americans, COVID-19 is ‘the worst of both worlds at the same time’

Homes with a significant number of black and Latino residents have been twice as likely to be hit by the coronavirus as those where the population is overwhelmingly white.

Rural America Could Be the Region Hardest Hit by the COVID-19 Outbreak

Data on race and the coronavirus is too limited to draw sweeping conclusions, experts say, but disparate rates of sickness — and death — have emerged in some places.

Many Who Need Testing For COVID-19 Fail To Get Access

COVID-19 in Prisons and Jails in the United States

Laura Hawks, MD1,2; Steffie Woolhandler, MD, MPH2,3; Danny McCormick, MD, MPH1,2

COVID-NET is a surveillance system that tracks COVID-19 hospitalizations in selected counties in 14 states. Data from March 1-April 18, 2020.

*Note: Data are currently insufficient to draw conclusions about race in hospitalized patients that are < 18 years old.
RADx-Underserved Populations (RADx-UP) Project – $500M

**Goal:** Leverage existing community partnerships to implement culturally relevant testing strategies in underserved and vulnerable populations

**Phase I (FY20-21, $250M):**

*Phase Ia:*
- Coordination and Data Collection Center (CDCC) – $15M per year, 1 site for 4 y; new U24 cooperative agreement managed in NIMHD
- Collaborative network of research centers and large networks with established community-engagement experience in underserved populations – up to $5M/site, ~25 sites; supplements

*Phase Ib:*
- Collaborative network of clinical research grants across the country – $1M/site, up to 30 sites; competitive revisions or new R01s
- Social, Ethical, and Behavioral Implications (SEBI) program – $5M total, 5-8 sites at $400,000 each; competitive revisions/new R01s
RADx-Underserved Populations (RADx-UP) Project – $500M

Phase II (FY22-24, $250M):
• Continue SEBI program – up to $5M, 5-8 sites; competitive revisions/new R01s
• Renewal or expansion of Phase I components + new awards for synthetic network of clinical research sites and centers – up to $245M; competitive revisions/new awards

Anticipated Timeline:
• Phase I FOAs published week of June 8
• Phase I awards made by end of FY20: September
• Phase II awards made in FY21/22
Connect with NIMHD

Visit us online www.nimhd.nih.gov

Connect with us on Facebook www.facebook.com/NIMHD

Follow us on Twitter @NIMHD

Join us on linkedin.com/company/nimhd-nih/

Sign up for news https://public.govdelivery.com/accounts/US-NIHNIMHD/subscriber/new