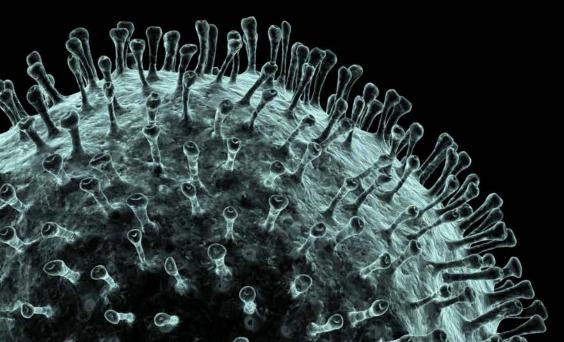
COVID-19 Conversations



Michael Osterholm

Director, Center for Infectious Disease Research and Policy University of Minnesota



COVID19Conversations.org #COVID19Conversations





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COVID-19 Surveillance

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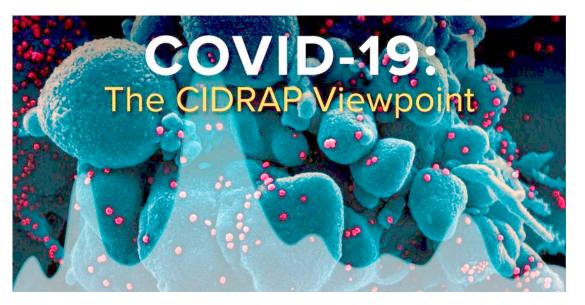
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Part 1: The future of the COVID-19 pandemic: lessons learned from pandemic influenza (Apr 30, 2020)

- Part 2: Effective COVID-19 crisis communication (May 6, 2020)
- Part 3: Smart testing for COVID-19 virus and antibodies (May 20, 2020)

Part 4: Contact tracing for COVID-19: Assessing needs, using a tailored approach (Jun 2, 2020)

Part 5: SARS-CoV-2 infection and COVID-19 surveillance: a national framework (Jul 9, 2020)

https://www.cidrap.umn.edu/covid-19/covid-19-cidrap-viewpoint

Fundamentals of Surveillance for COVID-19

Disease Surveillance

- Monitor disease activity at the local, state, and national levels
- Conduct disease control interventions
- Define the epidemiology and burden of COVID-19

Enhanced Surveillance during Pandemic Response

- Monitor and predict the impact on the healthcare system
- Monitor changes in antibody prevalence over time
- Inform modeling activities
- Monitor viral changes over time



Pressing Issues for COVID-19 Surveillance

- Limited COVID-19 testing, especially early on
- Incomplete reporting of critical information
- Mildly symptomatic and asymptomatic exposed people
- Inconsistent data collection and reporting
- Non-specific case definition
- Clustering of cases detected in outbreaks
- Difficulties in assessing exposures
- Lack of timeliness and regularity of reporting
- Lack of integrated reporting infrastructure



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Amid spotty response, COVID silently stalked US for weeks

Filed Under: COVID-19

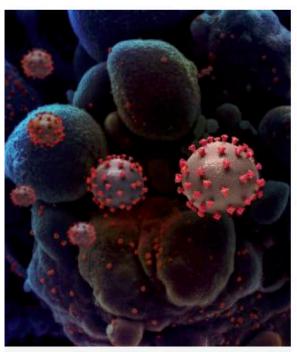
Mary Van Beusekom | News Writer | CIDRAP News | Sep 14, 2020 🦸 Share 🔰 Tweet in LinkedIn 🌄 Email 🧧 Print & PDF

Two new studies involving evolutionary genomics, computer simulations, and travel records from the COVID-19 pandemic suggest that inadequate travel monitoring, contact tracing, and community surveillance allowed the novel coronavirus to spread unchecked to and throughout North America and Europe in late January or early February.

The studies, published late last week in *Science*, traced the United States' COVID-19 outbreak to a traveler who flew from China to Seattle in late January or early February, seeding the nation's first outbreak, which then went undetected for 3 to 6 weeks.

Undetected, unchecked

The first study, led by University of Washington researchers in Seattle, involved genomic analysis of 453 SARS-CoV-2 viruses, which cause COVID-19, collected from the Washington state outbreak from Feb 20 to Mar 15 and coronavirus testing of more than 10,000 respiratory specimens collected as part of the Seattle Flu Study from Jan 1 to Mar 15.





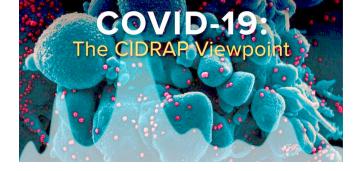
Frustrations grow over incomplete racial data on COVID-19 cases, deaths

BY JESSIE HELLMANN - 05/18/20 05:33 PM EDT

Multiple states and U.S. territories are not fully reporting the racial makeup of COVID-19 cases and deaths, frustrating lawmakers and advocates who argue the missing data will hamper the coronavirus response.

Nearly three months after the first COVID-19 case was confirmed in the U.S., 10 states, including New Mexico and Nevada, and five territories have not released racial data on coronavirus deaths, according to the COVID Tracking Project and the Antiracist Research & Policy Center.

While most states have released some data on the racial makeup of confirmed COVID-19 cases, the figures are often incomplete. Of the 1.1 million cases reported to the Centers for Disease Control and Prevention (CDC), the race is unknown in more than half.



Timeliness and regularity of reporting are essential components of an effective surveillance system.

CIDRAP SARS-CoV-2 smart Testing

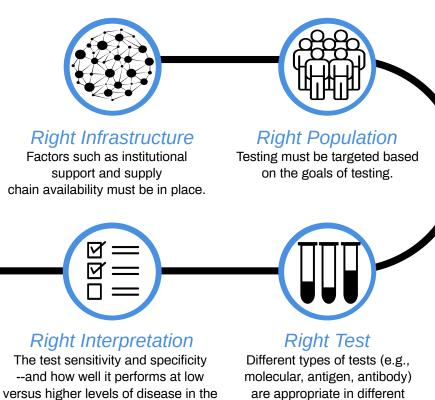
Right Action

Based on test results, what

actions are needed to

minimize illness, deaths,

and disease spread?



population--must be considered.

are appropriate in different settings.

Challenges to COVID-19 Surveillance

- Adequate resources to test the population
- Willingness to test
- Use of technology
- Trust in the public health system
 - Compliance with contact tracing

Detection of mild cases of infection is important for monitoring disease in the community and for contact tracing. This may mean encouraging all those who are mildly symptomatic to seek testing, especially if there is evidence of community transmission.



Health

As coronavirus testing expands, a new problem arises: Not enough people to test

By Steve Thompson, Juliet Eilperin and Brady Dennis

May 17, 2020 at 3:19 p.m. CDT

Why aren't more people showing up? "Well, that's the million-dollar question," said Utah Health Department spokesman Tom Hudachko. "It could be simply that people don't want to be tested. It could be that people feel like they don't need to be tested. It could be that people are so mildly symptomatic that they're just not concerned that having a positive lab result would actually change their course in any meaningful way."

Experts say several factors may be preventing more people from seeking tests, including a lingering sense of scarcity, a lack of access in rural and underserved communities, concerns about cost, and skepticism about testing operations.



CENTERS FOR DISEASE CONTROL AND PREVENTION

CASES, DATA & SURVEILLANCE

Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET)

Updated Aug. 28, 2020

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Purpose and Methods

Print

About COVID-NET

Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET) is a population-based surveillance system that collects data on laboratory-confirmed COVID-19-associated hospitalizations among children and adults through a network of over 250 acute-care hospitals in 14 states.

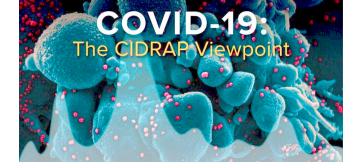
Why COVID-NET Data Is Important

COVID-NET is CDC's source for important data on hospitalization rates associated with COVID-19. Hospitalization rates are updated weekly.

COVID-NET also provides important clinical information on COVID-19-associated hospitalizations, including age group, sex, race/ethnicity and underlying health conditions.

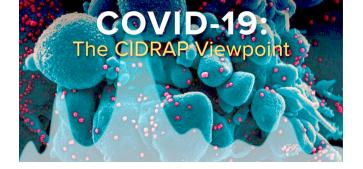
Population-based surveillance is the collection, analysis, and interpretation of data on a population in a specified area.

COVID-NET is a population-based surveillance system.



Recommendations

- A state-by-state assessment of COVID-19 surveillance practices needs to be conducted to identify inconsistencies in timely case detection and reporting and to determine resource needs. Since the Council of State and Territorial Epidemiologists (CSTE) establishes and implements the use of national case definitions, it should conduct this review in collaboration with the Centers for Disease Control and Prevention (CDC).
- Information from this assessment can then be used to develop a national standardized approach to COVID-19 surveillance by states. The approach needs to adapt to the changing epidemiology of the pandemic and as new data on the nature of the disease are published.
- Automated electronic reporting should be incorporated into surveillance whenever possible, and the federal government needs to provide the additional resources needed to develop such systems.
- States should publish on their COVID-19 dashboards standardized and detailed data for demographic subgroups defined by combinations of age, gender, race/ethnicity, and location. These should be publicly available (if data privacy can be maintained) for different periods so that temporal trends can be analyzed.



- A coordinated campaign at the federal, state, or territorial level with consistent guidance from the CDC regarding key messages is needed to inform and educate applicable facilities (e.g., commercial and clinical laboratories, healthcare providers and facilities) on what information is required and why it is important.
- State and local health departments need to have the data systems, informatics expertise, and trained epidemiologists necessary to conduct effective COVID-19 surveillance. This includes upgrading data surveillance infrastructure and ensuring federal support to provide resources needed to accomplish this goal.
- 7. The CDC should implement the agency's serosurveillance program as quickly as possible.
- The CDC should continue to promote consistency for COVID-19 surveillance across the country and ensure that a cohesive national surveillance system emerges by the end of 2020.
- With the fall influenza season approaching, federal, state, local, tribal and territorial health officials need to begin now to determine strategies for coordinating surveillance for both COVID-19 and influenza.