NATIONAL HEALTH CARE for the HOMELESS COUNCIL

COVID-19 "COFFEE CHAT" SERIES

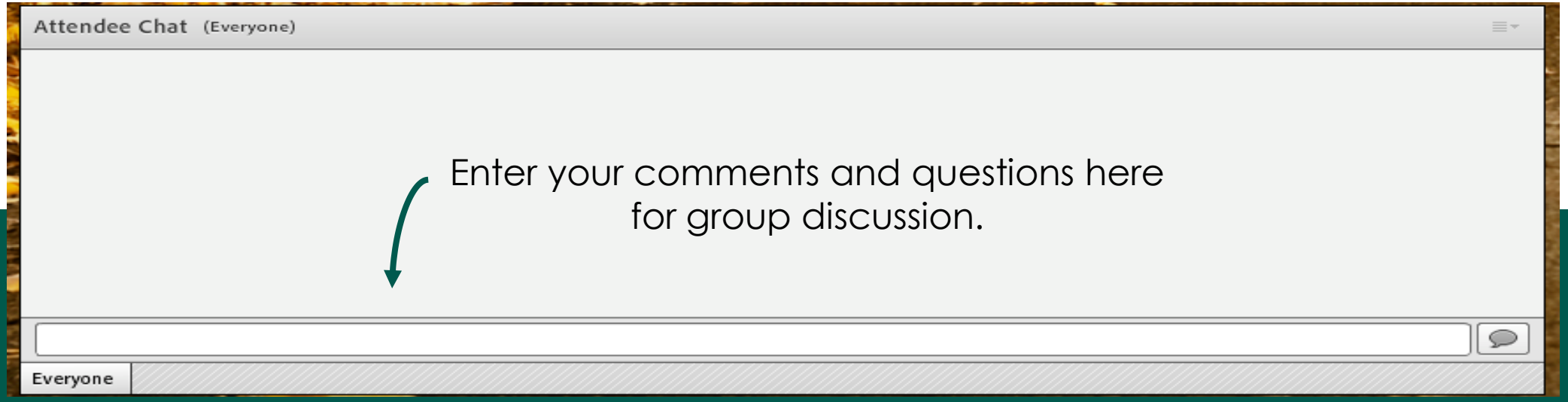
Testing for COVID-19 in Homeless Shelters

May 1, 2020

NATIONAL HEALTH CARE for the HOMELESS COUNCIL

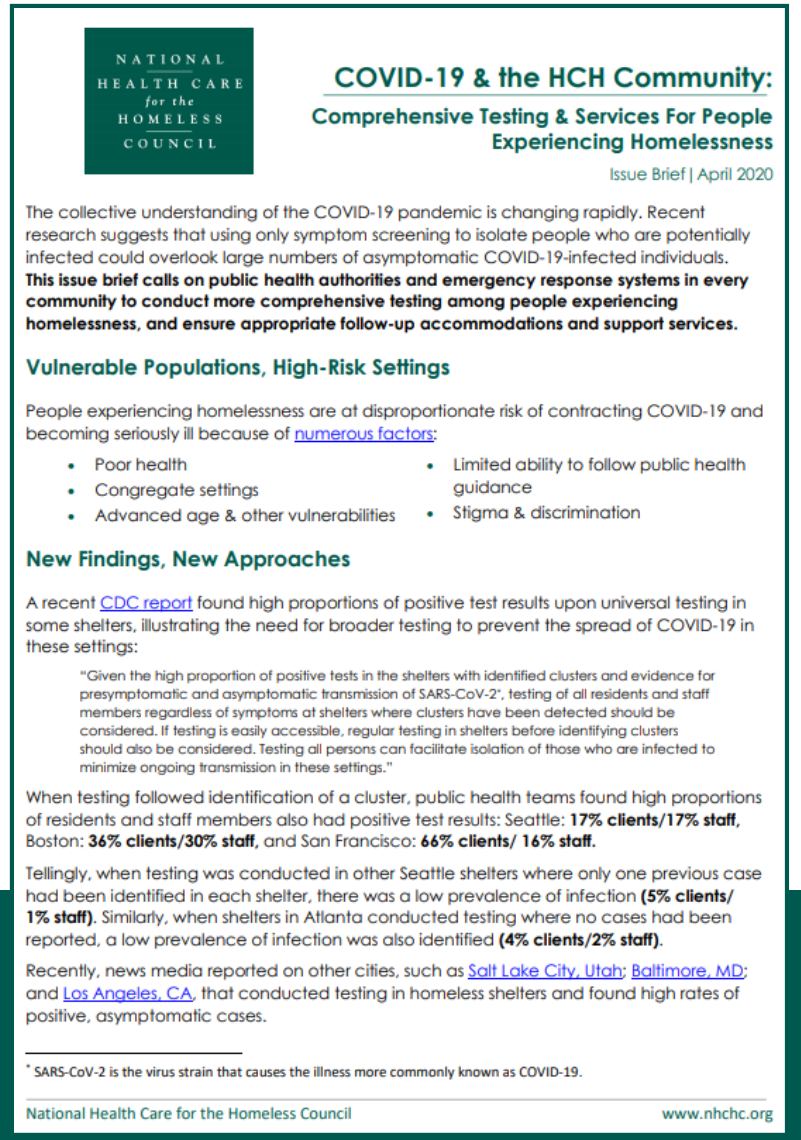
GOALS FOR TODAY'S DISCUSSION

- Hear about CDC's new MMWR reports on testing in shelters
- Learn about the testing experiences in four cities
- Go deeper on pro-active testing in Atlanta & responsive testing in Boston—and the implications of those approaches
- Address as many of your questions as possible



NEW ISSUE BRIEF:
COMPREHENSIVE TESTING & SERVICES

- Addresses public health authorities and emergency response systems
- Re-iterates why this population is vulnerable & high-risk
- Highlights CDC reports & other city examples



NATIONAL HEALTH CARE for the HOMELESS COUNCIL

COVID-19 & the HCH Community:

Comprehensive Testing & Services For People Experiencing Homelessness

Issue Brief | April 2020

The collective understanding of the COVID-19 pandemic is changing rapidly. Recent research suggests that using only symptom screening to isolate people who are potentially infected could overlook large numbers of asymptomatic COVID-19-infected individuals. **This issue brief calls on public health authorities and emergency response systems in every community to conduct more comprehensive testing among people experiencing homelessness, and ensure appropriate follow-up accommodations and support services.**

Vulnerable Populations, High-Risk Settings

People experiencing homelessness are at disproportionate risk of contracting COVID-19 and becoming seriously ill because of numerous factors:

- Poor health
- Congregate settings
- Advanced age & other vulnerabilities
- Limited ability to follow public health guidance
- Stigma & discrimination

New Findings, New Approaches

A recent CDC report found high proportions of positive test results upon universal testing in some shelters, illustrating the need for broader testing to prevent the spread of COVID-19 in these settings:

> "Given the high proportion of positive tests in the shelters with identified clusters and evidence for presymptomatic and asymptomatic transmission of SARS-CoV-2*, testing of all residents and staff members regardless of symptoms at shelters where clusters have been detected should be considered. If testing is easily accessible, regular testing in shelters before identifying clusters should also be considered. Testing all persons can facilitate isolation of those who are infected to minimize ongoing transmission in these settings."

When testing followed identification of a cluster, public health teams found high proportions of residents and staff members also had positive test results: Seattle: **17% clients/17% staff**, Boston: **36% clients/30% staff**, and San Francisco: **66% clients/ 16% staff.**

Tellingly, when testing was conducted in other Seattle shelters where only one previous case had been identified in each shelter, there was a low prevalence of infection **(5% clients/ 1% staff)**. Similarly, when shelters in Atlanta conducted testing where no cases had been reported, a low prevalence of infection was also identified **(4% clients/2% staff)**.

Recently, news media reported on other cities, such as Salt Lake City, Utah; Baltimore, MD; and Los Angeles, CA, that conducted testing in homeless shelters and found high rates of positive, asymptomatic cases.

* SARS-CoV-2 is the virus strain that causes the illness more commonly known as COVID-19.

National Health Care for the Homeless Council www.nhchc.org

NATIONAL HEALTH CARE for the HOMELESS COUNCIL

NEW ISSUE BRIEF:
COMPREHENSIVE TESTING & SERVICES

ADVISES FIVE ACTIONS

1. Prioritize testing in homeless populations
2. Conduct comprehensive testing
3. Expand both congregate and non-congregate programs
4. Arrange appropriate staffing at all programs
5. Expedite permanent housing placements

TODAY'S DISCUSSION PANEL

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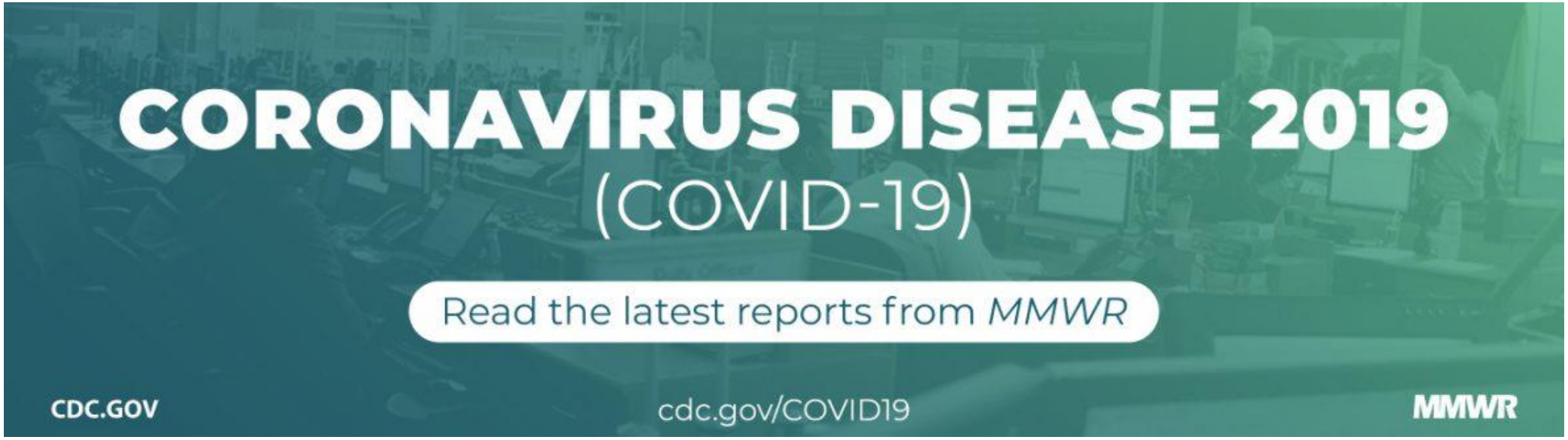
Morbidity Mortality Weekly Report



Assessment of SARS-CoV-2 Infection Prevalence in Homeless Shelters — Four U.S. Cities, March 27–April 15, 2020

COVID-19 Outbreak Among Three Affiliated Homeless Service Sites — King County, Washington, 2020

Testing in Atlanta

MASSACHUSETTS GENERAL HOSPITAL
MEDICAL PRACTICE EVALUATION CENTER

BOSTON HEALTH CARE for the HOMELESS PROGRAM
SINCE 1985

Testing and Management Strategies for People Experiencing Sheltered Homelessness during the COVID-19 Pandemic

Travis P. Baggett, MD, MPH & Kenneth A. Freedberg, MD, MSc

May 1, 2020

National Health Care for the Homeless Council Webinar

Partially funded by NIAID

Research Letter

ONLINE FIRST FREE

April 27, 2020

Prevalence of SARS-CoV-2 Infection in Residents of a Large Homeless Shelter in Boston

Travis P. Baggett, MD, MPH[1]; Harrison Keyes, MPAS, PA-C[1]; Nora Sporn, MA, MPH[2]; Jessie M. Gaeta, MD[1]

» Author Affiliations | Article Information

JAMA. Published online April 27, 2020. doi:10.1001/jama.2020.6887

- Late March: BHCHP identified an emerging COVID-19 cluster from single shelter
- April 2-3: Universal PCR testing of all remaining shelter guests (n=408)
  - 147 (36.0%) were positive for SARS-CoV-2
  - Cough (7.5%), shortness of breath (1.4%), and fever (0.7%) were uncommon among those infected
  - 87.8% of infected individuals reported no symptoms
  - None would have been picked up by the BHCHP COVID-19 symptom screener (cough OR shortness of breath, AND fever ≥ 100°F)

Problems

COVID-19 among people experiencing sheltered homelessness

- Testing
  - Who to test?
    - People with symptoms?
    - Everyone?
  - How often to test?
    - Once? Weekly? Every 2 weeks? As needed?
- Management
  - Optimal care site?
    - Severely ill → hospital
    - What about more mildly ill or asymptomatic?
  - Role of alternate care sites?
  - Role of temporary housing?
- We built a computer model to try to figure some of these things out

The CE-COV Model

- A microsimulation state-transition model of COVID-19 that includes natural history of infection and transmission dynamics
- We used a daily cycle for infections, disease progression, and mortality
- We assessed multiple intervention strategies, including combinations of testing approaches (symptom-triggered vs universal PCR), use of alternate care sites (ACSs) for isolation, and temporary housing for shelter guests
- Outcomes of the model included number of infected individuals and mortality, utilization of hospital inpatient and ICU beds, total costs, and cost-effectiveness of the interventions
- “Cost-effectiveness” defined as additional $/case prevented

Intervention Strategies

- Status quo (shelter infection control measures only)
- Symptom screen + PCR testing symptomatic patients + ACS
- Universal PCR testing + ACS
- Universal PCR testing + temporary housing

PCR, polymerase chain reaction; **ACS**, alternate care site

Preliminary Results

Model Outcomes at Month 4

Strategy	Cumulative infections, n	Total costs, 2020 USD	Incr. cost per infection prevented, 2020 USD
Universal PCR testing + ACS	117	2,790,000	--
Symptom screen + PCR testing + ACS	1,011	15,060,000	Not effective
Status quo	1,239	19,990,000	Not effective
Universal PCR testing + temp. housing	98	47,880,000	2,327,000

N = 2,258

ACS, alternate care site for mild/moderate COVID-confirmed

Conclusions

- Specific interventions now could prevent many COVID-19 infections among people experiencing sheltered homelessness
- Symptom screening is not an effective strategy
- Universal PCR testing, followed by use of alternative care sites, will decrease infections and mortality and cost less than other strategies
  - Every other week testing is likely sufficient
  - More frequent testing may be slightly more effective but at much greater cost
- Temporary housing would be effective, but is very costly
- Routine PCR testing of sheltered adults, with development and use of alternative care sites, should begin immediately

Q&A & DISCUSSION

If you haven't already, please send us questions using the chat box at the bottom of your screen

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NEXT "COFFEE CHAT" WEBINARS

- **Tuesday, May 5, 1:00 EST:** Structuring I/Q Sites for People Experiencing Homelessness: Examples and Guidance from Alameda County's Project Roomkey

- **Friday, May 8, 1:00 EST:** Using Telehealth Services for Patient Care

Registration links in the Resources Box below!

OTHER RESOURCES

- Dedicated COVID-19 webpage:
  - → www.nhchc.org/coronavirus
  - → HUD, CDC, & HRSA materials, local policies & guidance, consumer-specific materials
- **Request:** Please send us your local guidance and protocols!
  - → Send to Michael Durham, TA Manager, at mdurham@nhchc.org
- Weekly editions of *Solidarity* *(Wednesdays)*