

STAY SAFE MN

Lessons Learned from Modified CASPER in Minnesota

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Objectives

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1. Determine the extent of infection in communities: overall SARS-CoV-2 seroprevalence
2. Determine factors associated with SARS-CoV-2 seropositivity
3. Explore differences in SARS-CoV-2 seroprevalence in different regions
4. Assess community prevalence of asymptomatic carriers of SARS-CoV-2
5. Identify areas for improved health messaging regarding modifiable health behaviors

MDH Modified CASPER

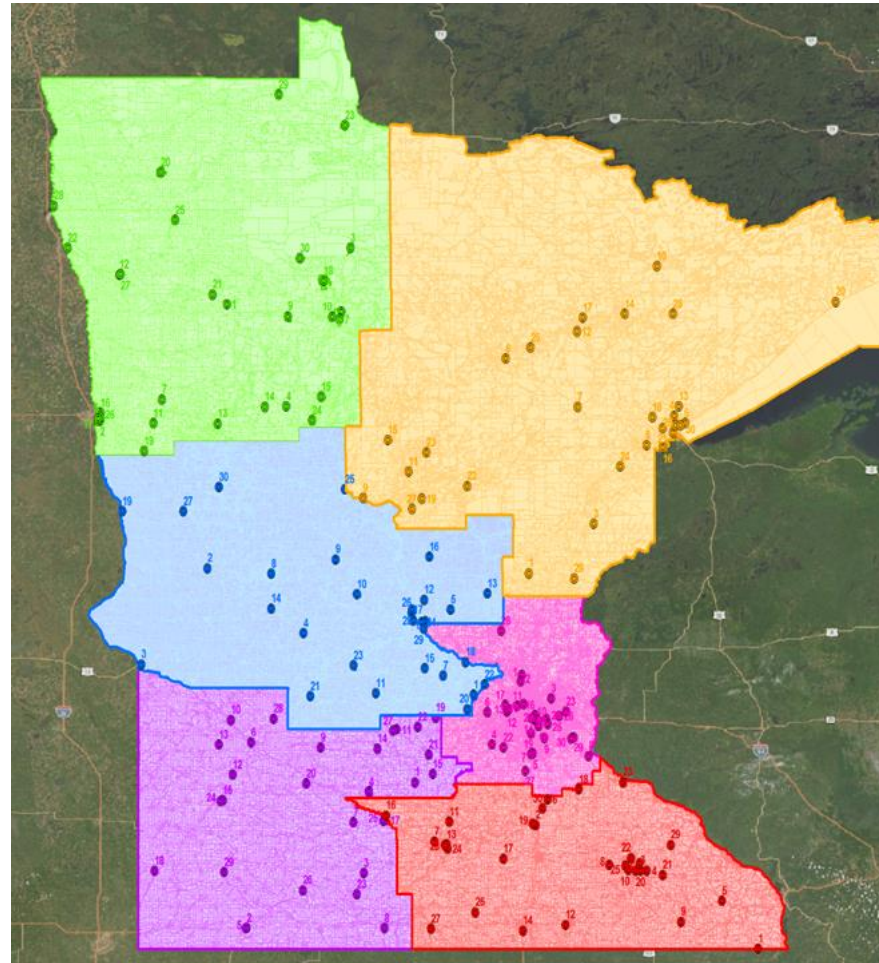
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- Conducted 1 CASPER in each of 6 Minnesota Preparedness Regions
 - 30 clusters, 7 households per cluster = 1,260 interviews!
 - One survey per household
- Modified CASPER design
 - Includes some individual level questions
 - Specimen collection



MDH Modified CASPER

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Specimen Collection

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- Collect specimens for SARS-CoV-2 antibody and PCR testing
 - Capillary blood specimen for antibody testing
 - Swab for PCR testing (anterior nares preferred specimen type)
- All interested individuals in household were tested



- Two people per field team:
 - 1 sample collector = nurse contractor
 - 1 interviewer = CDC PHAP, LPH, or MDH
- MDH PHL and existing ICS Logistics provided support and supplies
- Communications sub-team from COVID response provided support on:
 - Communications planning
 - Translations
 - Paid and promoted social media
 - Press release and partner communications
 - Website



Key differences

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- Scale
 - Statewide
 - Six simultaneous CASPER's
- Sample collection
 - Collected specimens for both SARS-CoV-2 antibody and PCR
- External factors
 - COVID-19 had become politicized
 - Election year (September dates for study)



Challenges and Lessons Learned

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- Ended early due to hostility staff faced in the field
- About 100 of 180 clusters started or completed

MPR News

COVID-19 fact-finding leads to threats against health workers in Minnesota

According to leaders with the Minnesota Department of Health, the ... Stephanie Yendell, a senior epidemiology supervisor with the Health Department. ... The project is called CASPER, or Community Assessment for
Sep 25, 2020



Star Tribune

COVID-19 surveys halted in Minnesota amid racism, intimidation

The CDC pulled its federal surveyors out of Minnesota this week following ... sides of the streets, said Stephanie Yendell, a state senior epidemiology supervisor. "We had hoped through the CASPER survey to have a better ...
In-Depth · Sep 25, 2020



Pioneer Press

CDC coronavirus testers pulled from MN after hostile and racist encounters

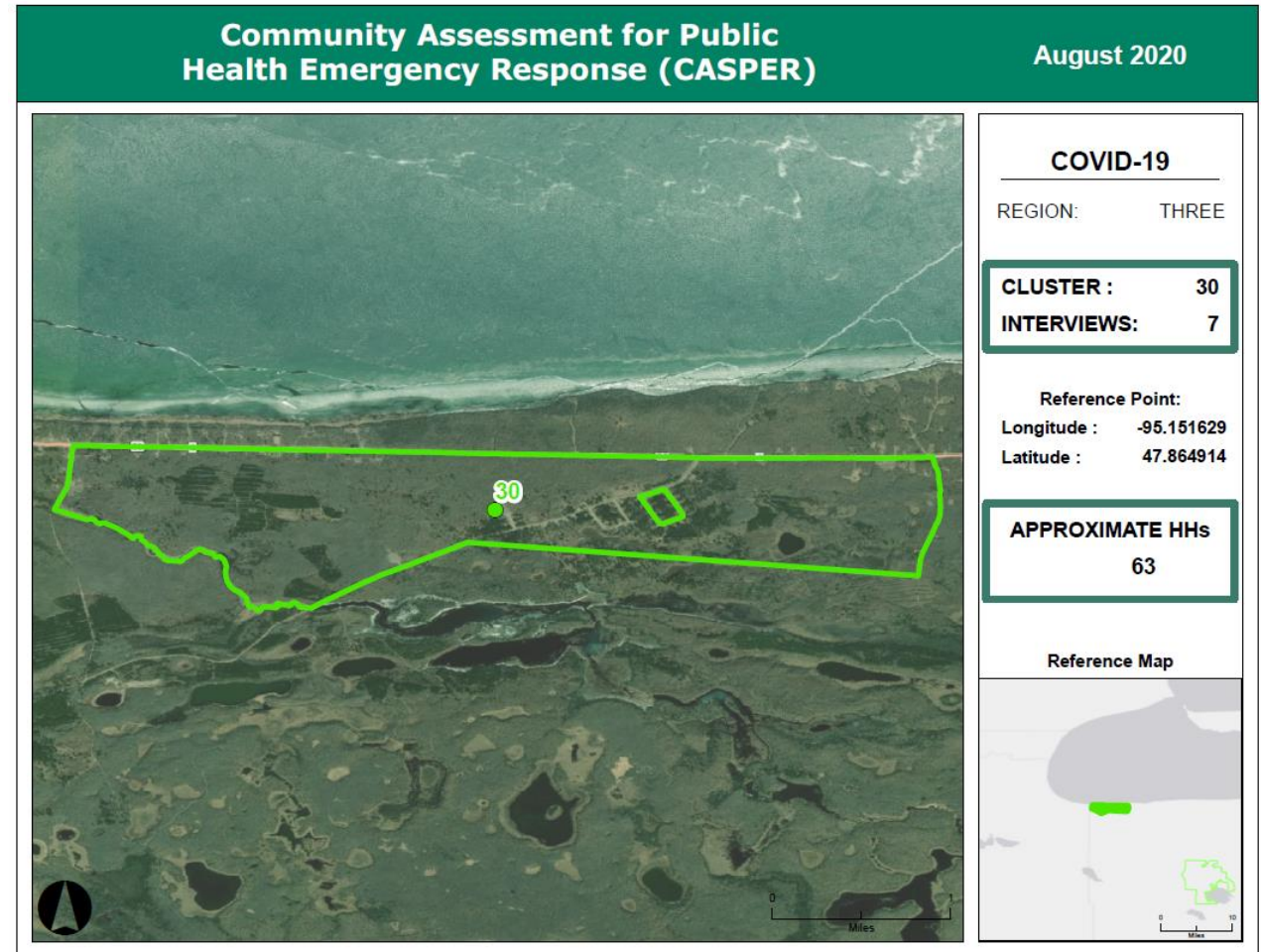
Federal health workers have been pulled out of Minnesota after what officials ... than the teams that had only Caucasian people," Yendell said.



Methodology: Census tract selection

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- Tribal area was selected
- Check your tracts carefully!



Logistics: Laboratory Samples

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- Lots of supplies for blood and nasal swab sample collection
- Labeling and transporting samples
- Samples had to get back to the lab nightly



- Chose contract nurses for sample collection
 - Other staffing options (local public health, Medical Reserve Corps) unavailable
 - Contract nurses presented unique challenges
 - Not all nurses were clear about what the project involved
 - Driving long distances, mobility, capillary blood draws
 - JUST in time training
 - New nurses had to be trained every 3 days
 - Long days, unpredictable number of hours to complete block
 - More difficult for contractors to be flexible

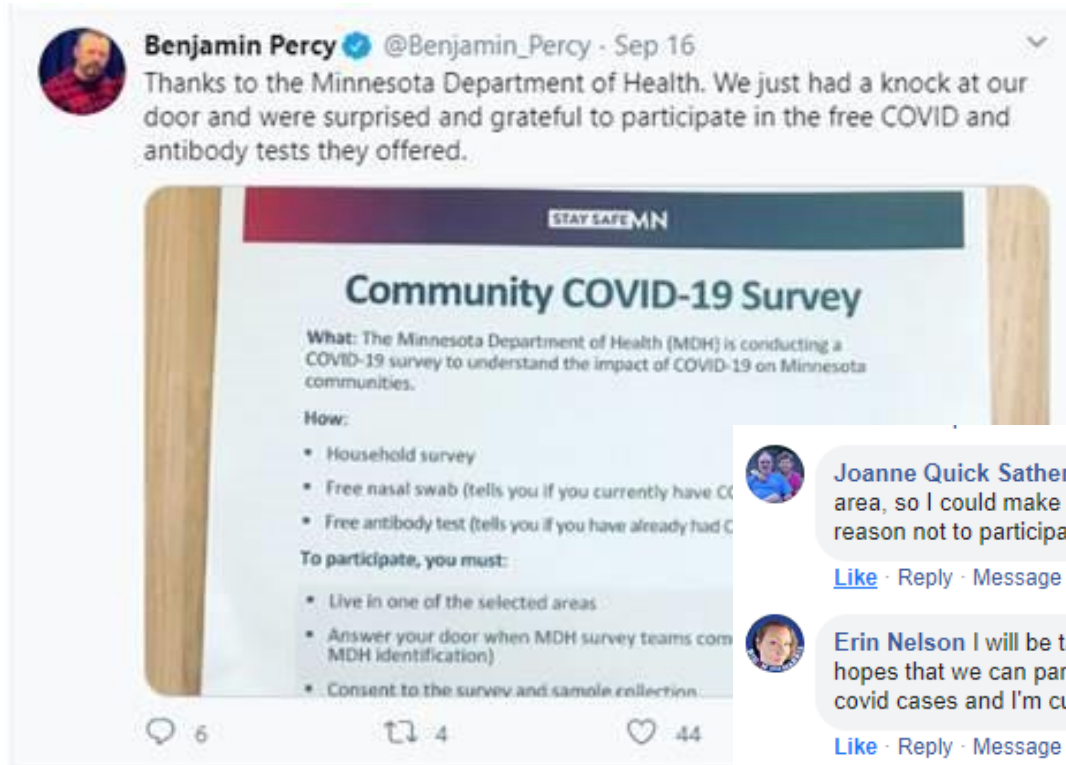
Was CASPER the Right Model?

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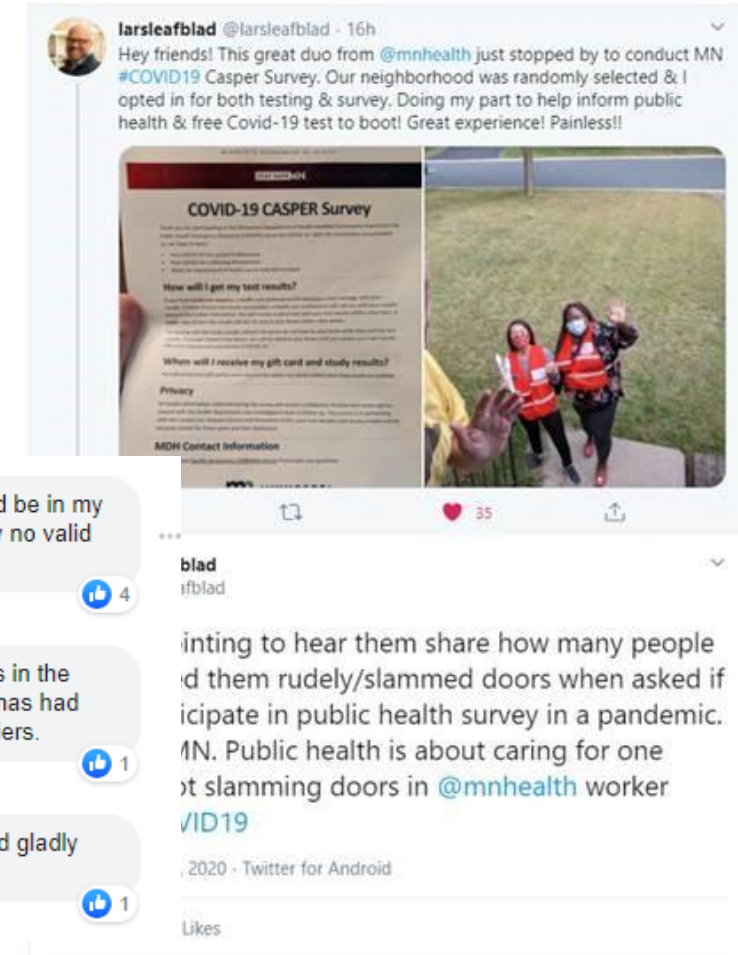
- No amount of preparation/communication would have prevented racism
- Consider whether CASPER is the right model for your circumstances
 - CASPER's are valid but not if you can't complete the study
- Alternative Models
 - Self-collection (UMN/NORC study)
 - Centralized site (Nobles County)
 - Authentic community engagement led to a convenience sample that represented community by race/ethnicity
 - Hostility towards some staff still present, but situation was more supportive for staff

Positive Feedback

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- Joanne Quick Sather** Wish I knew if/when a team would be in my area, so I could make I sure to be home. I see absolutely no valid reason not to participate in this public health survey.
[Like](#) · [Reply](#) · [Message](#) · 10h
- Erin Nelson** I will be taking down my "no soliciting" signs in the hopes that we can participate. My husband's workplace has had covid cases and I'm curious to know if any of us are carriers.
[Like](#) · [Reply](#) · [Message](#) · 6h
- Allen Weeks** Thank you for doing this difficult work. We'd gladly take part.
[Like](#) · [Reply](#) · [Message](#) · 9h



Thank you!

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