

Mitigation Practices in a Rural Agricultural Community: Comparison of Hispanic and Non-Hispanic Populations — Washington, 2020

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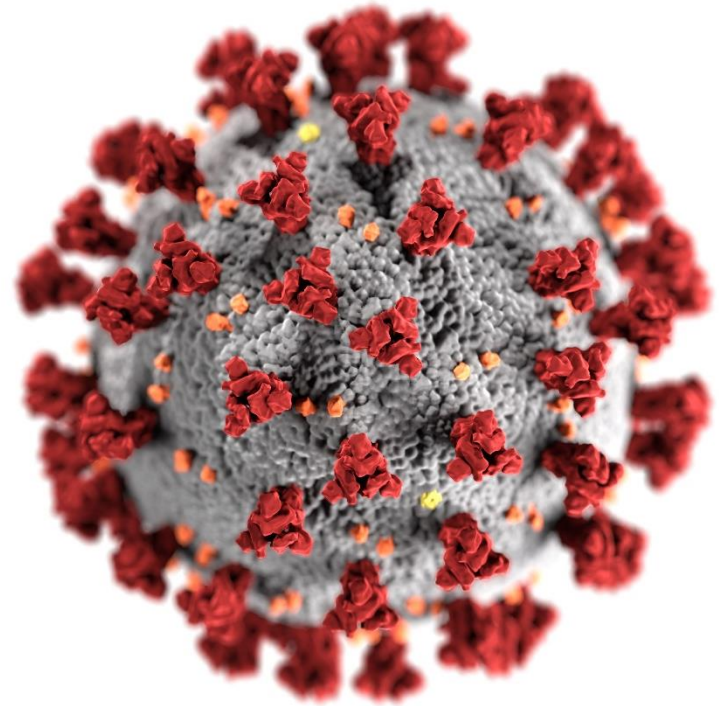
Epidemic Intelligence Service Officer

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CSTE Disaster Epidemiology Workshop

May 17, 2021

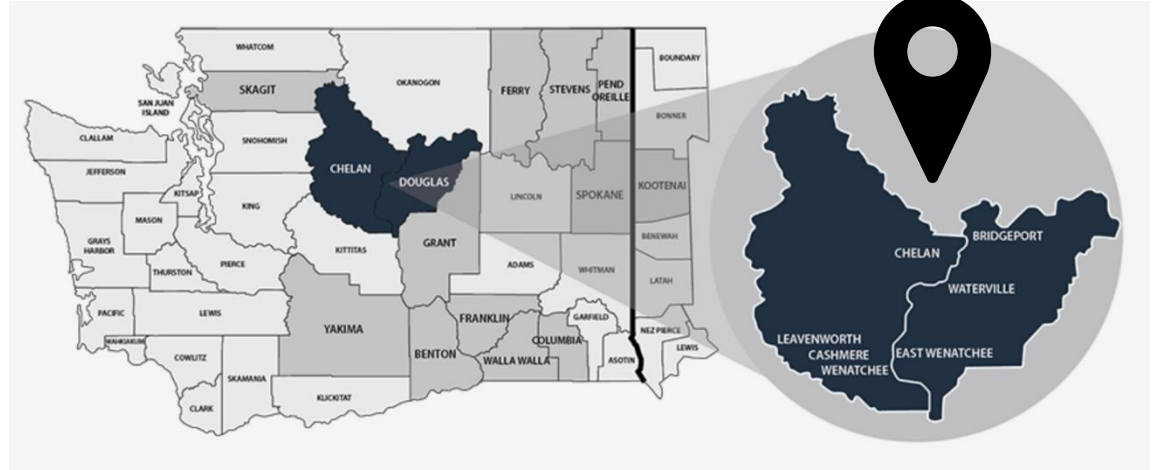


cdc.gov/coronavirus

CDC invited to support COVID-19 outbreak disproportionately affecting Hispanic/Latino (H/L) communities



August 24, 2020



September 13, 2020

Rapid Needs Assessment Objectives

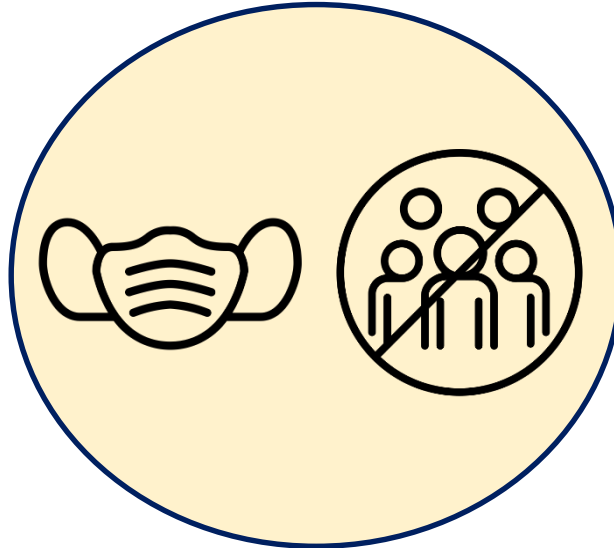


1

Employment sector/
ability to telework

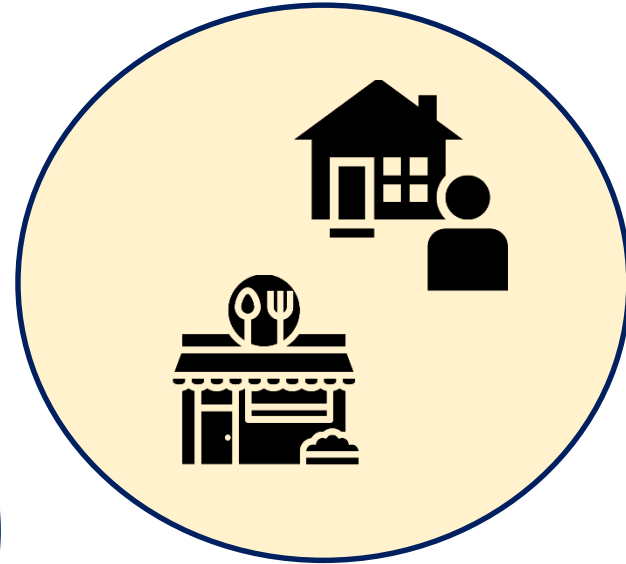
Adoption of
prevention strategies

2



3

Practicing behaviors
that increase risk



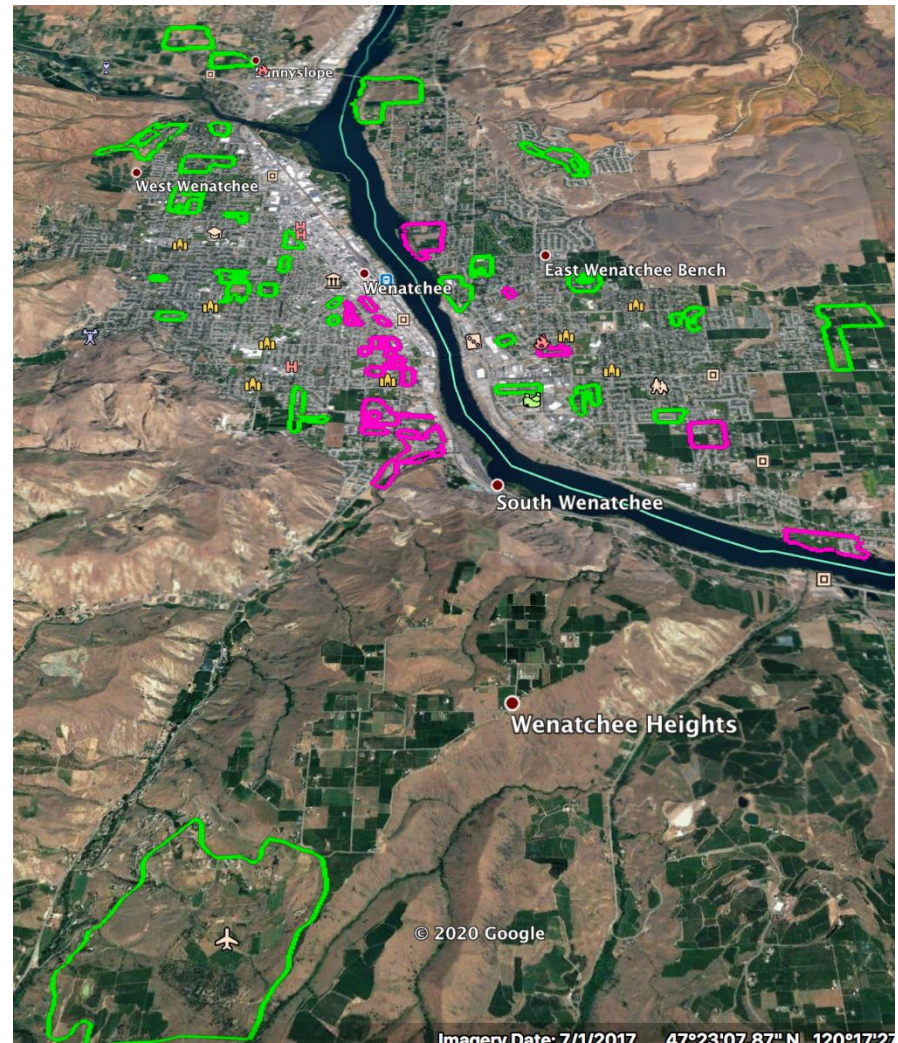
Community Assessment for Public Health Emergency Response (CASPER)

- Provides household-based information
- Disaster response
- Quick and reliable
- Two-stage probability sampling
 - 1st: Select 30 census blocks (CBs)
 - 2nd: Select 7 households in each CB



Sampling frames for 2 CASPERs and selected CBs in Wenatchee and East Wenatchee

- H/L CASPER:
 - CBs with $\geq 50\%$ of households having ≥ 1 H/L house member
- Non-H/L CASPER:
 - CBs with $< 50\%$ of households having ≥ 1 H/L house member



Just-in-Time (JIT) Training

- First day of data collection
 - September 25, 2020
- Reviewed all methodology and material
 - Households & respondent selection
 - Forms: questionnaire, tracking, referral
 - Public health materials
- Discussed team safety and logistics



Data was collected over 4 days (September 25-28, 2020)

- H/L CASPER:
 - Day 1: 5 teams
 - Day 2: 6 teams
 - Day 3: 6 teams
 - Day 4: 5 teams
- Non-H/L CASPER:
 - Day 1: 5 teams
 - Day 2: 6 teams
 - Day 3: 7 teams
 - Day 4: 5 teams



Data Collection

- Informed Consent
- Questionnaire
 - Paper-based
 - 2 pages
 - English or Spanish
 - Anonymous
 - Verbal administration



Data Analysis

- Applied sampling weights
- Calculated weighted frequencies, percentages and 95% CIs
- Weighted estimates without overlapping CIs are statistically significant*
- Epi Info

$$\text{Weight} = \frac{\text{Total Number of Households in the Sampling Frame}}{(\text{number of households interviewed within the cluster}) * (\text{number of clusters selected})}$$

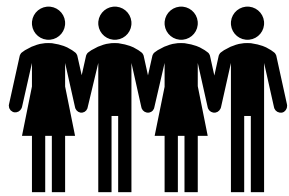
Response Rates

	Hispanic/Latino		Non-Hispanic/Latino		Description
	Percent	Rate	Percent	Rate	
Contact	57%	206/363	48%	189/395	$\frac{\text{\# of completed interviews}}{\text{All HHs where contact was attempted}}$
Cooperation	77%	206/268	73%	189/258	$\frac{\text{\# of completed interviews}}{\text{All HHs where contact was made}}$
Completion	98%	206/210	90%	189/210	$\frac{\text{\# of completed interviews}}{\text{\# of interviews intended to complete}}$

Results

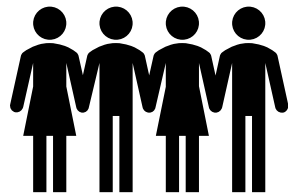


Differences in ethnicity and language indicate sampling was successful



72% vs. 20%

Households that identified as H/L*



27% vs. 79%

Households that identified as non-H/L*

N = 206  H/L

N = 189  non-H/L

Differences in ethnicity and language indicate sampling was successful



66% vs. 7%

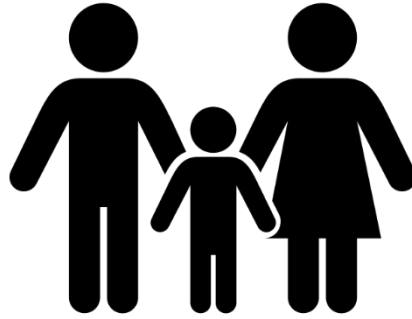
Households that speak *Spanish* at home*



33% vs. 93%

Households that speak *English* at home*

H/L households were slightly larger in size



3.6 vs. 2.7

Mean number of persons in
the household*



H/L



non-H/L

H/L households had lower incomes and owned homes at lower frequencies than non-H/L households



60% vs. 30%

Households with
income <50k/year*



38% vs. 72%

Households who own
their homes*

 H/L  non-H/L

More H/L households employed in essential work and were less able to telework vs. non-H/L



88% vs. 69%

Households with essential workers*

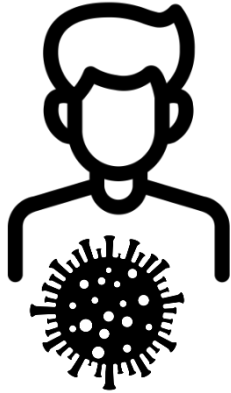


70% vs. 46%

Households where no members could telework*

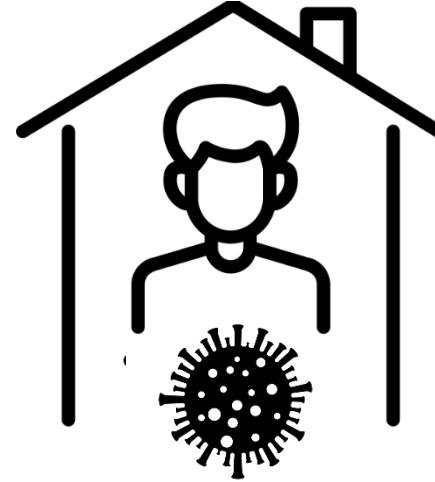
 H/L  non-H/L

More H/L households had COVID-19 cases in the home



63% vs. 68%

**Knew someone tested
positive for COVID-19**



19% vs. 4%

**Households with
COVID-19 in the home***

 H/L

 non-H/L

Behaviors



Self-reported COVID-19 preventive behavior



92% vs. 90%

**Always wear a mask in
public**



81% vs. 61%

**Always avoid
gatherings***

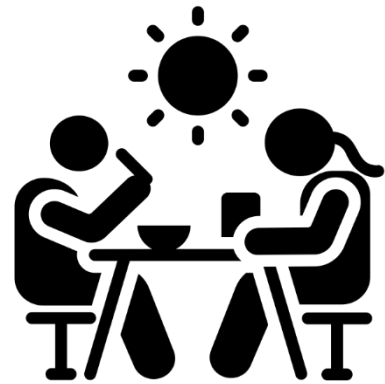
 H/L  non-H/L

Self-reported behavior in the past 30 days



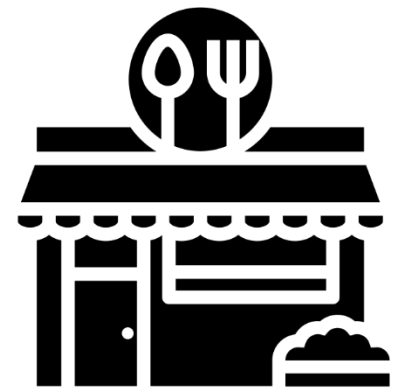
43% vs. 72%

Visited friends/family*



17% vs. 40%

Went to an outdoor restaurant*



24% vs. 39%

Went to an indoor restaurant

 H/L  non-H/L

Conclusions



Limitations

- Crossover exists between groups
- Limited analysis; need for secondary analysis by socioeconomic status
- 2010 Census data used for sampling
- Results represent Wenatchee and East Wenatchee only
- Potential recall and/or social desirability bias
- Potential comprehension challenges for some questions

Key Findings

- Sampling methodology was successful
- Stark economic differences between groups
- H/L households had greater representation of essential workers & less telework ability
 - Predominately worked in agriculture
- H/L households practiced prevention behaviors more frequently than non-H/L
- Transmission dynamics differ between the populations
 - H/L households had more COVID-19 cases at home

Public Health Implications

- COVID-19 public health messaging should aim to improve COVID-19 prevention practices for all community members to ensure persons who cannot telework are protected.
- All essential-worker industries should ensure proper prevention strategies implementation at the workplace.
- CASPER methodology can be used to conduct community rapid assessments for COVID-19 response.

Acknowledgements

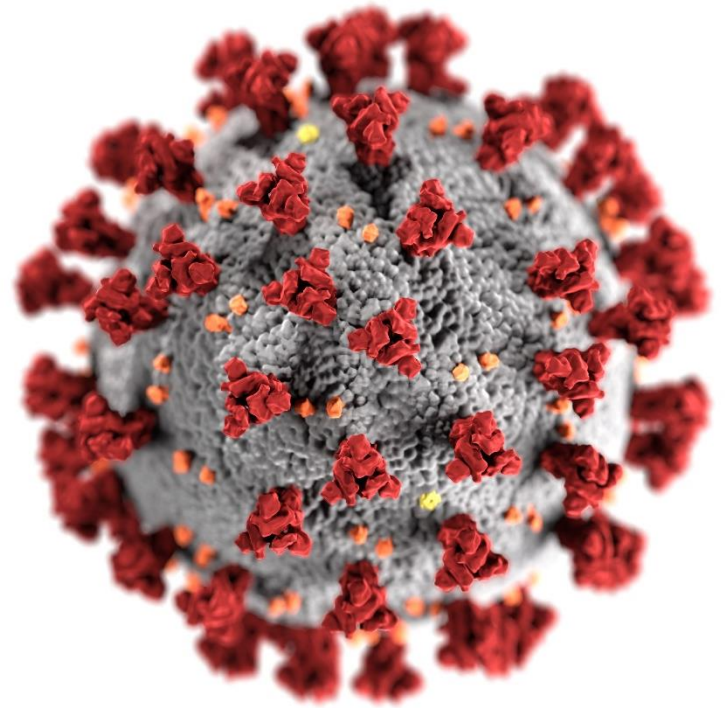
- Chelan-Douglas Health District
- Incident Management Teams
- U.S. Centers for Disease Control and Prevention, Headquarters
- Interview Teams
- WA-10 Field Deployment Team





Thank You





For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

