

# COVID-19 Risks, Behaviors, and Experiences Reported by Latinx Residents in Rural Washington

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## Background

Yakima County, Washington reported the highest COVID-19 infection rate among counties on the west coast in May 2020. Half of the county's residents identify as Latinx and the majority (60%) represent essential workers, predominantly working in agriculture and food production industries. This accumulation of risk factors elevates the importance of investigating the risk and prevention behaviors of Latinx residents in Yakima County which continues to experience compounded vulnerability to COVID-19 disease.

The purpose of this study by CWU in partnership with the American Lung Association is to examine both population-level and individual risk factors & prevention behaviors related to community transmission of COVID-19 disease in Yakima County, Washington.

This two-year survey effort investigates Yakima County residents' knowledge, attitudes, and experiences with COVID-19 prevention behaviors including masking, hand hygiene, and staying home when feeling symptomatic. In addition, the survey also explores key environmental vulnerabilities like air quality events that can constrain a person's ability to practice prevention behaviors and increase the risk of poor respiratory outcomes (Firebaugh et al., 2020).

Using the Health Belief Model (Rosenstock, 1974), the survey identifies key patterns in respondents' appraisal of susceptibility and severity of COVID-19 disease, as well as their self-efficacy to perform certain behaviors that may serve as protective factors against COVID-19 risks. We also examine self-reported behaviors and related outcomes, including mental health and related stressors that may be associated with disproportionate risks of COVID-19 exposure.

## Research Aim

Identify COVID-19 related attitudes, behaviors and practices among Latinx populations residing in rural communities.

Discuss strategies for mitigating disparities in COVID-19 risks and outcomes among Latinx populations.

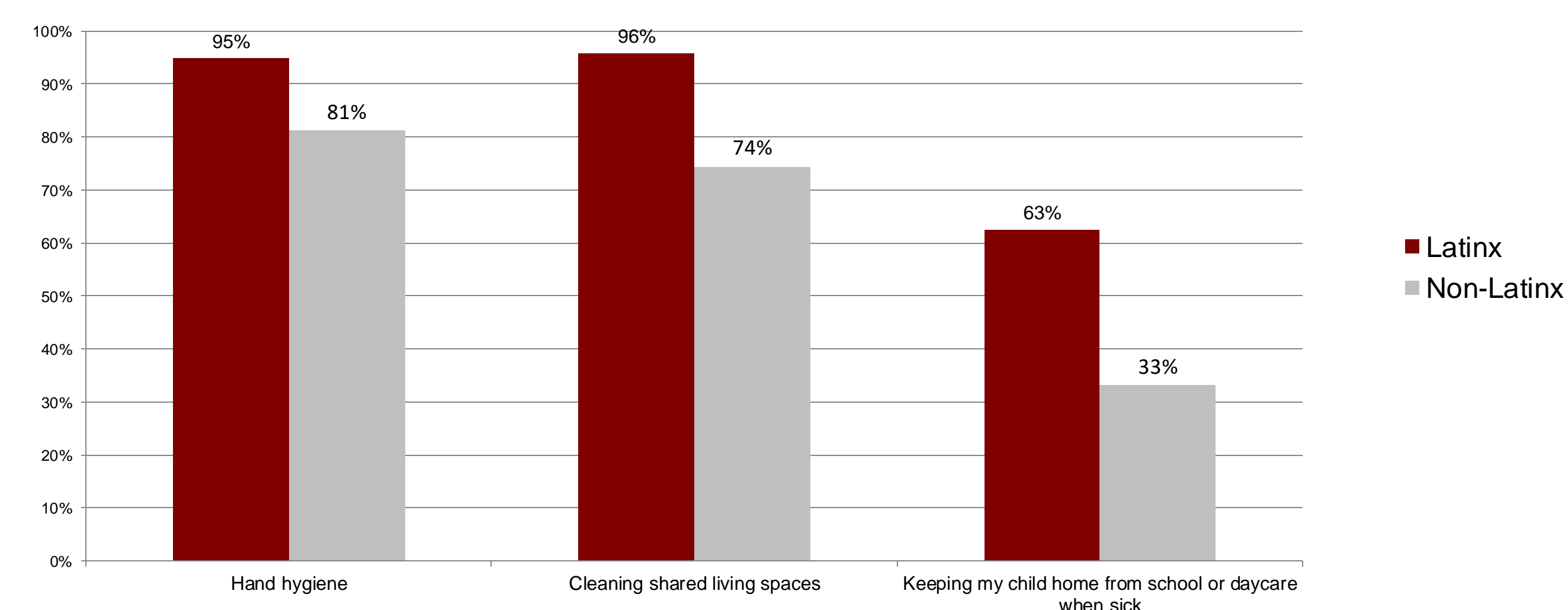
## Study Methods

- Dual-frame random digit dial (DFRDD) household phone-based survey of residents in December 2020-January 2021 to examine attitudes, experiences, and prevention behaviors among Latinx respondents.
- Original survey instrument included items on sociodemographic factors, self-reported behaviors & attitudes, and a measure of COVID-19 related distress (Firebaugh et al., 2020).
- 13,000 outbound calls made, final sample of complete, eligible residents  $n=232$
- Frequencies, unpaired t-tests, and Fisher's exact tests were performed.

## Key Findings

Latinx respondents were more likely than non-Latinx respondents to be in an occupation at high-risk for COVID-19 exposure (53% vs. 24%,  $p$ -value $<0.001$ ). Latinx ethnicity was associated with higher self-reported exposure to COVID-19 (26% vs. 10%,  $p$ -value=0.002) higher burden of COVID-19 related distress ( $p$ -value $<0.001$ ), and overall higher perceived threat of COVID-19 in their community ( $p$ -value  $<0.001$ ). Latinx respondents reported high utilization of prevention behaviors including handwashing, masking, and staying home when symptomatic, but a higher proportion of Latinx respondents reported barriers to using these strategies compared with non-Latinx respondents (31% vs. 18%,  $p$ -value=0.029). No difference in COVID-19 vaccine intention was reported between Latinx and non-Latinx respondents (72% vs 76%,  $p$ -value=0.493).

Which of the following will you continue to do in the future to protect yourself or others from COVID-19 disease?



## Discussion & Recommendations

Latinx residents face persistent and disproportionate risk for COVID-19 infection and related outcomes:

- More likely to be employed in an essential industry with higher occupational exposures
- Higher self-reported mental health burden
- Higher general concerns and perceived threat of COVID-19

Latinx residents report high utilization of and behavioral intention toward continued prevention behaviors; yet they also report more barriers such as limited access to masking or handwashing stations, fear of social repercussions, or an inability to take time off work. These structural and socialization barriers to implementing prevention behaviors should be the focus of future health education & promotion efforts among populations who face disproportionate risk to COVID-19 or other infection. Vaccine intentions and utilization appeared to match general population trends in Yakima County with no statistically significant differences across subgroups. By understanding the patterns of self-reported behavioral intentions and utilization of non-pharmaceutical interventions (NPIs) during a major infectious disease pandemic like COVID-19, this study's findings may help policymakers and local health jurisdictions implement evidence-informed strategies to meet the needs of Latinx residents who experience high vulnerability to COVID-19 outcomes in rural communities.

## References

- Rosenstock, I. M. (1974). The Health Belief Model and Preventive Health Behavior. *Health Education Monographs*, 2(4), 354-386.
- Firebaugh, C. M., Beeson, T., Wojtyna, A., Bravo, L., Everson, T., Johnson, J., & Saldana, A. (2020). A Community Case Study on Geographic, Environmental, and Social Health Disparities in COVID-19 Disease: Yakima, Washington. *Open Journal of Preventive Medicine*, 10(11), 288-297.



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