Socioeconomic disparities in COVID-19 outcomes

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Background and Objectives

Across the United States, there have been major racial/ethnic and socioeconomic disparities in COVID-19 testing, positivity, hospitalizations, and deaths

**Goal:** Improve health equity in COVID response by

- Examining differences in COVID-19 outcomes by race/ethnicity, socioeconomic status, and geography
- Ensure response efforts and resources are focused on communities that may be made more at risk to COVID-19 due to social or economic conditions
Data Sources

WA Department of Health/Public Health-Seattle and King County COVID surveillance
  - COVID testing, positivity, hospitalizations, and deaths at the census tract-level

2014-2018 American Community Survey: census tract-level measures of demographics, socioeconomic status, and occupation

- Race/ethnicity
- Country of birth
- Limited English-speaking households
- Household size
- Rental crowding
- Income/poverty
- Employment
- Occupation type
- Education
- GINI index
- Area Deprivation Index
- Index of concentration at the extremes (race & income)
Data Sources

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Essential healthcare worker:
- Healthcare practitioners and technical operators
- Healthcare support occupation
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Essential non-healthcare worker:
- Construction and extraction
- Farming, fishing, forestry
- Installation, maintenance, and repair
- Material moving
- Production
- Transportation
- Office and administrative support
- Sales and related
- Building and grounds cleaning and maintenance
- Food preparation and service related
- Personal care and service
- Protective

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COVID-19 Social & Economic Risk Index

CREATING A COMPOSITE MEASURE OF SOCIAL AND ECONOMIC RISK FACTORS
Social and Economic Risk Index

Racial/Cultural Diversity
- People of color
- Limited English-speaking households
- People born outside the US

Income/Employment
- Household income below 200% of federal poverty limit
- Unemployment, 25 or older

Socioeconomic Position
- Less than a bachelor’s degree
- Less than a high school education
- Employed in essential non-healthcare occupation
- Unemployment, 25 or older
- Rental crowding
- Uninsured (18-64 yo)

Essential Healthcare Worker
- Employed in healthcare-related occupation

Scores range from 0 to 4
Higher score = greater COVID-19 risk

Housing Characteristics
- Number of occupants in household
Scores range from 0 to 4
Higher score = greater COVID-19 risk
PHSKC Socioeconomic Disparities Dashboard
Socioeconomic disparities in COVID-19 outcomes among King County, WA residents, by census tract

Updated: 6/24/2020 10:00PM

The Social and Economic Risk Index is a composite measure comprised of 5 subscores: race/ethnicity an diversity, socioeconomic position, income/employment, percent health care worker, and occupants per household. Areas with higher scores have more disadvantage, and areas with lower scores have less disadvantage.
Most at risk, Lowest Testing
Communities with high SERI, high test positivity, and low testing rates
Next Steps

Change over time: are disparities getting better or worse over time?

Public-facing dashboard & outreach

SERI refinements