Characterizing Grocery Store COVID-19 Controls in the Pacific Northwest

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RESEARCH QUESTION

What are the controls that grocery stores are implementing in response to the COVID-19 pandemic, and do they vary across different stores and settings?

CONTEXT

• Grocery store workers provided an essential service during the pandemic and were at increased risk of COVID-19 exposure
• Stores implemented controls to reduce the risk of exposure, but the types of controls and extent they were implemented remains unknown
• Characterizing the health and safety controls used is important for understanding determinants of risk, and areas to improve health and safety in grocery stores

METHODOLOGY

• Observational approach to identify controls implemented in a purposive sample of grocery stores
• Sample selection:
  o Stores in Seattle, WA (n=9) and Portland, OR (n=7)
  o Median income of the area it serves (above or below $90,000)
  o Association with a national chain
• Standardized checklist developed in REDCap to collect data on observable controls at the stores
• Stores were visited monthly by the same observer from May 2020 to January 2021

RESULTS

Graphs showing the proportions of stores with mask requirements and enforcement between cities (top), chain (middle), and SES (bottom)

DISCUSSION

• Certain controls (e.g., plexiglass screens at checkout) were quickly adopted and common. Similar engineered controls may be useful for consistent adoption across stores
• Specific regulations could help ensure quick and consistent adoption of controls (e.g., mask mandate)
• A larger sample of stores and geographic region could provide clearer conclusions and more information on stores in rural communities
• Inclusion of other controls (e.g., ventilation) may highlight pandemic related vulnerabilities not captured by the study

Summary of Results

• Common controls were mask requirements, plexiglass screens and social distancing markers at the front of checkout stands, and COVID related signage at the entrance
• Controls tended to stay in place (once in place) over time, though the presence of some controls (e.g., cleanings) declined
• Non-chain stores seemed to have less controls overall compared to chain stores (e.g., enforcement of mask requirement)
• Aside from some controls, (e.g., basket/cart cleaning), similar proportions of stores in each city had the controls of interest
• Also, there were similar proportions of stores in each SES group with the controls of interest aside from certain ones (e.g., enforcement of mask requirement)