Social Determinants of Health and COVID-19 in Worker Populations

Yale Occupational and Environmental Medicine Program
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March 16, 2021
Outline

• Challenges:
  – COVID-19 and Health Disparities

• **Opportunities:**
  – New Haven: Union Collaborations to Tackle Social Determinants of COVID-19
Viruses don’t discriminate, and neither should we.
coronavirus.dc.gov

VIRUSES DON’T DISCRIMINATE

Viruses don’t discriminate. And neither should we.
STPAUL.GOV/HREEO

Yale SCHOOL OF MEDICINE
Public Health Disasters Reinforce Disparities

- **Hurricane Katrina**: Mortality rate among black residents up to 4 times higher than among white residents
  - Brunkard et al, Hurricane Katrina Deaths, Louisiana, 2005

- **Hurricane Maria**: 6 months after the storm- 2,975 excess deaths. 60% higher risk of death in people living in poorest municipalities.
  - GWU, Ascertainment of the estimated excess mortality from Hurricane María in PR, 2018
COVID-19 by Age and Medical Conditions

**CDC Has Information For Older Adults at Higher Risk**

8 out of 10 COVID-19 deaths reported in the U.S. have been in adults 65 years old and older. Visit CDC.gov/coronavirus for steps to reduce your risk of getting sick.

**COVID-19 hospitalizations with pre-existing conditions**

- Any underlying condition: 89.3%
- Hypertension: 49.7%
- Obesity: 48.3%
- Diabetes mellitus: 28.3%
- Cardiovascular disease: 27.8%
- Asthma: 17.0%
- Neurologic disease: 14.0%
- Renal disease: 13.1%
- COPD: 10.7%


Garg, S., et al, CDC MMWR Hospitalization Rates and Characteristics of Patients Hospitalized with Lab-Confirmed COVID-19
## COVID-19 by Race/Ethnicity

### Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity

<table>
<thead>
<tr>
<th>Rate ratios compared to White, Non-Hispanic persons</th>
<th>American Indian or Alaska Native, Non-Hispanic persons</th>
<th>Asian, Non-Hispanic persons</th>
<th>Black or African American, Non-Hispanic persons</th>
<th>Hispanic or Latino persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases(^1)</td>
<td>1.7x</td>
<td>0.7x</td>
<td>1.1x</td>
<td>1.3x</td>
</tr>
<tr>
<td>Hospitalization(^2)</td>
<td>3.7x</td>
<td>1.0x</td>
<td>2.9x</td>
<td>3.1x</td>
</tr>
<tr>
<td>Death(^3)</td>
<td>2.4x</td>
<td>1.0x</td>
<td>1.9x</td>
<td>2.3x</td>
</tr>
</tbody>
</table>

Race and ethnicity are risk markers for other underlying conditions that affect health, including socioeconomic status, access to health care, and exposure to the virus related to occupation, e.g., among frontline, essential, and critical infrastructure workers.

CDC: Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity, March 12, 2021
HIGH income with LOW risk for COVID-19

LOW income with HIGH risk for COVID-19
Percent employment by essential industries, occupations with frequent exposure to infection and proximity to others, according to race/ethnicity, 2019

<table>
<thead>
<tr>
<th>Variable</th>
<th>White (%)</th>
<th>Black or African American (%)</th>
<th>Asian (%)</th>
<th>Hispanic (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Likely employed in essential industry</td>
<td>26.89</td>
<td><strong>37.75</strong></td>
<td>26.16</td>
<td>27.20</td>
</tr>
<tr>
<td>Healthcare and social assistance</td>
<td>12.76</td>
<td>19.82</td>
<td>14.62</td>
<td>11.11</td>
</tr>
<tr>
<td>Hospital</td>
<td>4.36</td>
<td>6.13</td>
<td>6.45</td>
<td>2.89</td>
</tr>
<tr>
<td>Animal slaughtering and processing</td>
<td>0.32</td>
<td>0.66</td>
<td>0.32</td>
<td>0.75</td>
</tr>
<tr>
<td>Likely and possibly employed in essential industry</td>
<td>35.41</td>
<td><strong>44.64</strong></td>
<td>35.16</td>
<td>33.00</td>
</tr>
<tr>
<td>Employed in occupations with frequent exposure to infections</td>
<td>11.28</td>
<td><strong>14.73</strong></td>
<td>13.02</td>
<td>11.37</td>
</tr>
<tr>
<td>Respiratory therapist</td>
<td>0.08</td>
<td>0.17</td>
<td>0.13</td>
<td>0.04</td>
</tr>
<tr>
<td>Registered nurse</td>
<td>2.60</td>
<td>2.60</td>
<td>3.98</td>
<td>1.06</td>
</tr>
<tr>
<td>Licensed practical and vocational nurse</td>
<td>0.49</td>
<td>1.20</td>
<td>0.30</td>
<td>0.43</td>
</tr>
<tr>
<td>Employed in occupations with frequent close proximity to others</td>
<td>25.10</td>
<td><strong>29.03</strong></td>
<td>24.26</td>
<td>25.81</td>
</tr>
<tr>
<td>Physical therapists</td>
<td>0.25</td>
<td>0.12</td>
<td>0.57</td>
<td>0.06</td>
</tr>
<tr>
<td>Personal care aids</td>
<td>0.93</td>
<td>2.37</td>
<td>1.63</td>
<td>1.44</td>
</tr>
<tr>
<td>Medical assistants</td>
<td>0.47</td>
<td>0.59</td>
<td>0.38</td>
<td>0.79</td>
</tr>
<tr>
<td>Employed in occupations with frequent exposure to infections and close proximity to others</td>
<td>8.12</td>
<td><strong>10.75</strong></td>
<td>9.95</td>
<td>6.23</td>
</tr>
<tr>
<td>Bus drivers</td>
<td>0.39</td>
<td>0.96</td>
<td>0.23</td>
<td>0.37</td>
</tr>
</tbody>
</table>

Hawkins D. Differential occupational risk for COVID-19 and other infection exposure according to race and ethnicity. *Am J Ind Med.* 08
Beneath the Numbers

COVID-19

- Employment in high risk occupation
- Ability to work from home
- Access to paid leave
- Access to health insurance
- Healthcare access
- Access to social services
- Immigration status
- Existing chronic medical conditions
- Access to public health information in own language
- Air pollution
- Food and housing security
- Racism
Coronavirus Public Health Messaging

HOW TO DO SOCIAL DISTANCING

- NO HANDSHAKES OR HUGS
- KEEP YOUR DISTANCE (about 6 feet)
- WORK REMOTELY
- AVOID CROWDS
- STAY AT HOME
- WASH YOUR HANDS

www.elon.edu/coronavirus

TO ENSURE SAFETY & STOP SPREAD OF COVID-19

WORK FROM HOME

Stay HOME and Stay SAFE

COVID-19 Response

“WE’LL GET THROUGH THIS TOGETHER”

SBCovid19.com
Labor Unions

• **Organized** group of workers whose goal is to **advocate** for policies/legislation that improve work conditions

  ❖ Building workplace power

  ❖ Legislative advocacy
    
    Raise wages, reduce wage inequality
    
    Paid leave
    
    Paid family medical leave
    
    Health benefits
Union Organizing in New Haven

- UNITE HERE!
  - Local 33- Yale graduate employees
  - Local 34- Yale Clerical and Technical Workers
  - Local 35- Electrical workers, workers who clean dorms, cook/serve food
  - Local 217- Hospitality Workers (Hotel, Food Service, Gaming)
Framing the Issue and Identifying Goals

• Issue:
  – **Confront** challenge of defining health and safety standards in variety of workplaces with different degrees of exposure to COVID-19

• Worker populations:
  – Members staffing hotels for healthcare workers and hotels hosting homeless population
  – Members staffing cafeterias, in food distribution, cooking food for field hospitals

• Goals:
  – Develop best practice health/safety protocols to recommend to service-industry workplaces
  – Create training workshops on COVID-19 specific health/safety
  – Advocating for workers in non-union hotels
Hierarchy of controls: Examples for COVID-19

**Elimination**: Physically remove the hazard
**Substitution**: Replace the hazard
**Engineering Controls**: Isolate people from the hazard
**Administrative Controls**: Change the way people work
**PPE**: Protect the worker with Personal Protective Equipment

**CAN NOT YET DO**

**Engineering**: Plexiglass, ventilation

**Administrative**: Training, signage, staggering shifts

**PPE**: Masks, gloves, gowns
Collaborations

• COVID-19 Health and Safety Workshops
  ❖ Hotel workers- Omni, Hilton
  ❖ Cafeteria workers- K-12 New Haven Public Schools, Meriden Public Schools
  ❖ Food distribution workers

• Review and edit draft guidelines for workers in the Hotel and Gaming Industry

• Memo to accompany health/safety recommendations
Example: Hotels/Gaming

**Guest Arrival and Departure**

- Organize lobby areas to permit orderly queuing so that guests maintain six feet of separation from each other and from employees, including markers indicating six feet increments in any areas in which guests or employees queue. Appoint a service agent trained in security protocols to ensure compliance with physical distancing procedures. Guests should be asked to keep six feet of separation from anyone who is not travelling with them in all times.
- Guests should not touch doors entering the facility. Doors should either be propped open, should open automatically, or should be opened by a doorman.
- Clean shuttle buses thoroughly cleaned after each trip. Guests should not be allowed in the front passenger seat, and plastic barriers should be installed to protect drivers where practical. If any guest is found to be under quarantine or isolation orders, or to exhibit symptoms associated with COVID-19, the vehicle should be immediately cleaned in accordance with the CDC’s “Cleaning and Disinfection for Non-emergency Transport Vehicles” guidance.
- Install plexiglass sneeze/cough guards at front desk counters.
- Guests should not return, and facilities should not reuse, key cards at the end of the stay.
- Introduce contactless finance systems for timed guest service reminders.

**Guest Rooms**

- **Daily room cleaning:**
  - Cleaners should wash hands with soap and water or hand sanitizer before entering and after leaving each guest room.
  - Disposable paper towels and wipes should be used for cleaning.
  - Rooms should not be vacuumed.
  - Linens should be changed daily and should be washed at high temperatures. Ensure all dirty linen and towels are bagged. Wear disposable gloves when handling dirty linen and discard after each use. Wash hands immediately after gloves are removed. Do not allow dirty linens to come into contact with clean ones.
  - Separate carts should be used to carry cleaning supplies and to remove used items. Carts should be clearly labeled "clean" or "dirty.
  - Guests should not be incentivized to forego daily housekeeping services.
- **Room service:**
  - Employees should not bring food carts into guest rooms, or transport food on carts that have used dishes on them.
- **Upon checkout:**
  - Guest rooms should be thoroughly cleaned and disinfected after use.
  - Carpets should be cleaned using a steam cleaner which reaches a minimum temperature of 212°F, unless the floor coverings are not heat tolerant.
  - Ensure an adequate supply of hand soap and hand sanitizer is available in the guest room. If individual bars of soap are provided in guest bathrooms, all remants must be thrown out when the guests vacate their rooms.
  - Remove and clean all glassware and dishes from the room. Alternatively, provide disposable glassware, dishes and utensils in rooms.
- To ensure thorough cleaning and disinfecting, no employee should be required to clean more than 4,000 square feet of floor space in one eight-hour day. The maximum amount of floor space should be pro-rated for work days less than eight hours, and for times during which the employee is assigned tasks other than cleaning guest rooms.

**Hotel Restaurants and Food Service**

- **Front of House:**
  - Reconfigure tables to create maximum space practical between parties, in conformance with public health guidelines.
  - Organize public areas in cafes to ensure orderly queuing to maintain physical distancing.
  - Install plexiglass sneeze/cough guards in front of line servers and cashiers.
  - Replace high-touch items (frames, seat/bumper shakers, etc.) with disposable items.
  - Discard any foods that may have been contaminated from coughs or sneezes.
  - Buffets and other self-service options (including self-service water, soda, and coffee dispensers) should be suspended.
  - Make soap and water or alcohol-based hand sanitizer available, with adequate stock of soap and hand sanitizer available.
  - Regularly clean and disinfect carts used for transporting food and picking up dirty dishes.
  - Regularly clean and disinfect equipment used for handling payments.
  - Implement contactless topping systems.
- **Kitchen:**
  - Kitchens should be reconfigured wherever practical to create six foot spacing between stations. Where six foot spacing between stations is not possible, staggered shifts should be considered for physically distancing work.
  - Clean and sanitize utensils and surfaces in the kitchen regularly using standard sanitizing solutions (e.g., QUATs or chlorine). Follow the instructions on the product label.
  - Use/sanitize used dishes using regular procedures (e.g., sanitizing dishwasher).
  - Used dishware from guests under quarantine or isolation orders, or otherwise
June 4, 2020

Re: Public Health Protections for Re-Opening of Hospitality Establishments.

This memo addresses COVID-19-related public health issues relevant to the hotel and hospitality industry, a vital industry essential to the successful re-opening of the economy in the US and worldwide, with a particular focus on individual hotel rooms.

These comments reflect our expertise in Occupational and Environmental Medicine including: the risks of SARS-CoV-2 in different work settings, the medical literature regarding transmission of SARS-CoV-2, workplace policy development, personal experience with the hotel industry, and review of relevant workplace health and safety best practices. These include documents from the Occupational Safety and Health Administration (OSHA), the Center for Disease Control (CDC), National Institute for Occupational Safety and Health (NIOSH), World Health Organization (WHO), the Center for Disease Control (CDC), the American Conference of Governmental industrial Hygienists (ACGIH), the hotel and hospitality Industry, and from several other states and countries.
Support of HB 6478: COVID-19 and Workers’ Comp

- Connecticut legislation re: Workers’ Compensation for essential workers who contracted COVID-19
- Hearing held 3/11/21
  - Testimony from essential workers on how COVID-19 has impacted them
  - Effect on paid time off, sick leave, long-haulers, loss income
  - Difficulty in navigating workers’ comp system
Reflections: One Year Into the COVID-19 Pandemic

- Relationship building, trust
- Clarifying the ask
- Flexibility during “COVID time”
- Evidence based guidelines to support health and workplace safety
- Precautionary principle