Social Determinants of Health and COVID-19 in Worker Populations

Yale Occupational and Environmental Medicine Program
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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

VIRUSES
DON'T
DISCRIMINATE

Viruses don't discriminate,
and neither should we.
coronavirus.dc.gov
DC HEALTH

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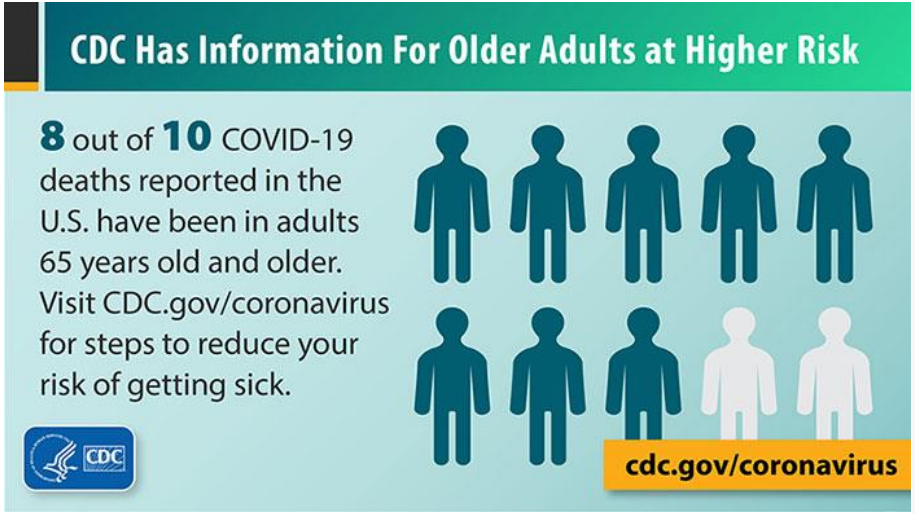
Viruses don't discriminate.
And neither should we.
STPAUL.GOV/HREEO

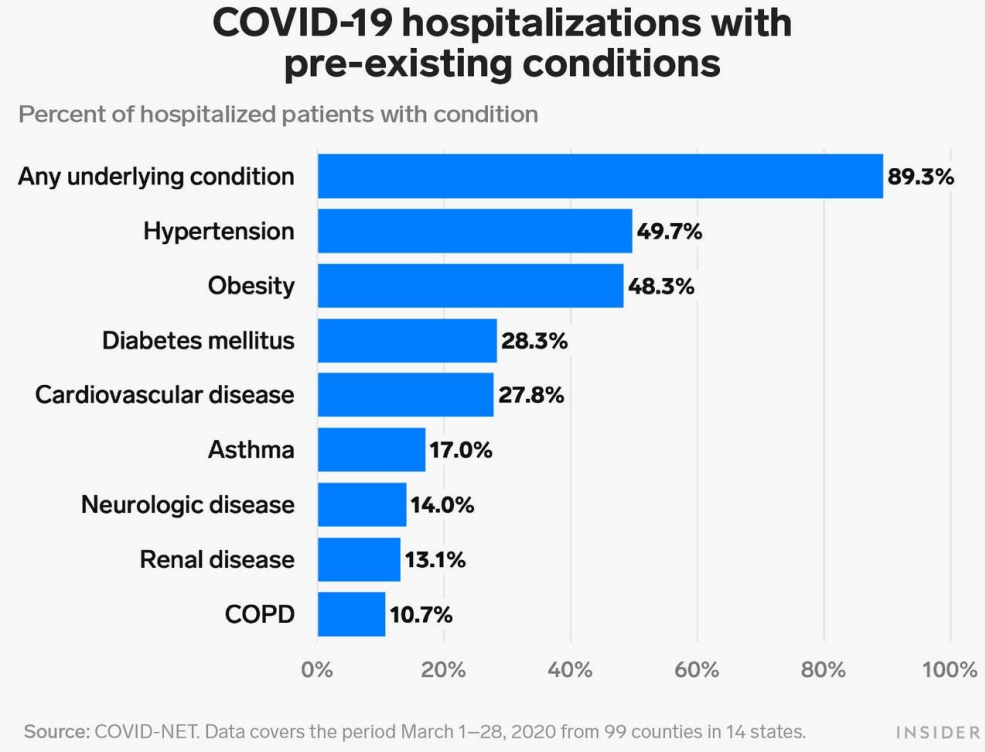
Public Health Disasters Reinforce Disparities

- **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





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

COVID-19 by Race/Ethnicity

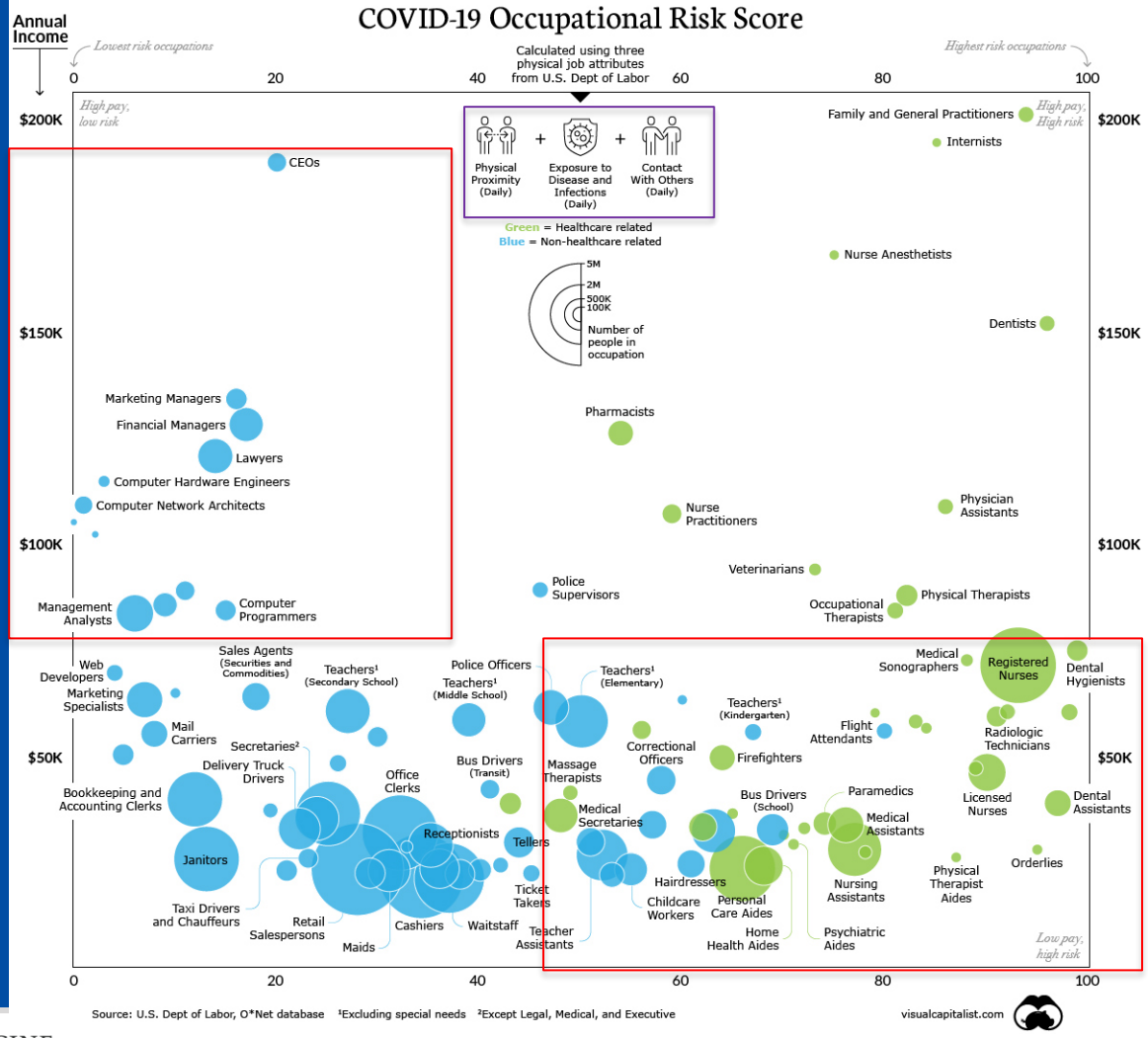
Risk for COVID-19 Infection, Hospitalization, and Death By Race/Ethnicity

Rate ratios compared to White, Non-Hispanic persons	American Indian or Alaska Native, Non-Hispanic persons	Asian, Non-Hispanic persons	Black or African American, Non-Hispanic persons	Hispanic or Latino persons
Cases[1]	1.7x	0.7x	1.1x	1.3x
Hospitalization[2]	3.7x	1.0x	2.9x	3.1x
Death[3]	2.4x	1.0x	1.9x	2.3x

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



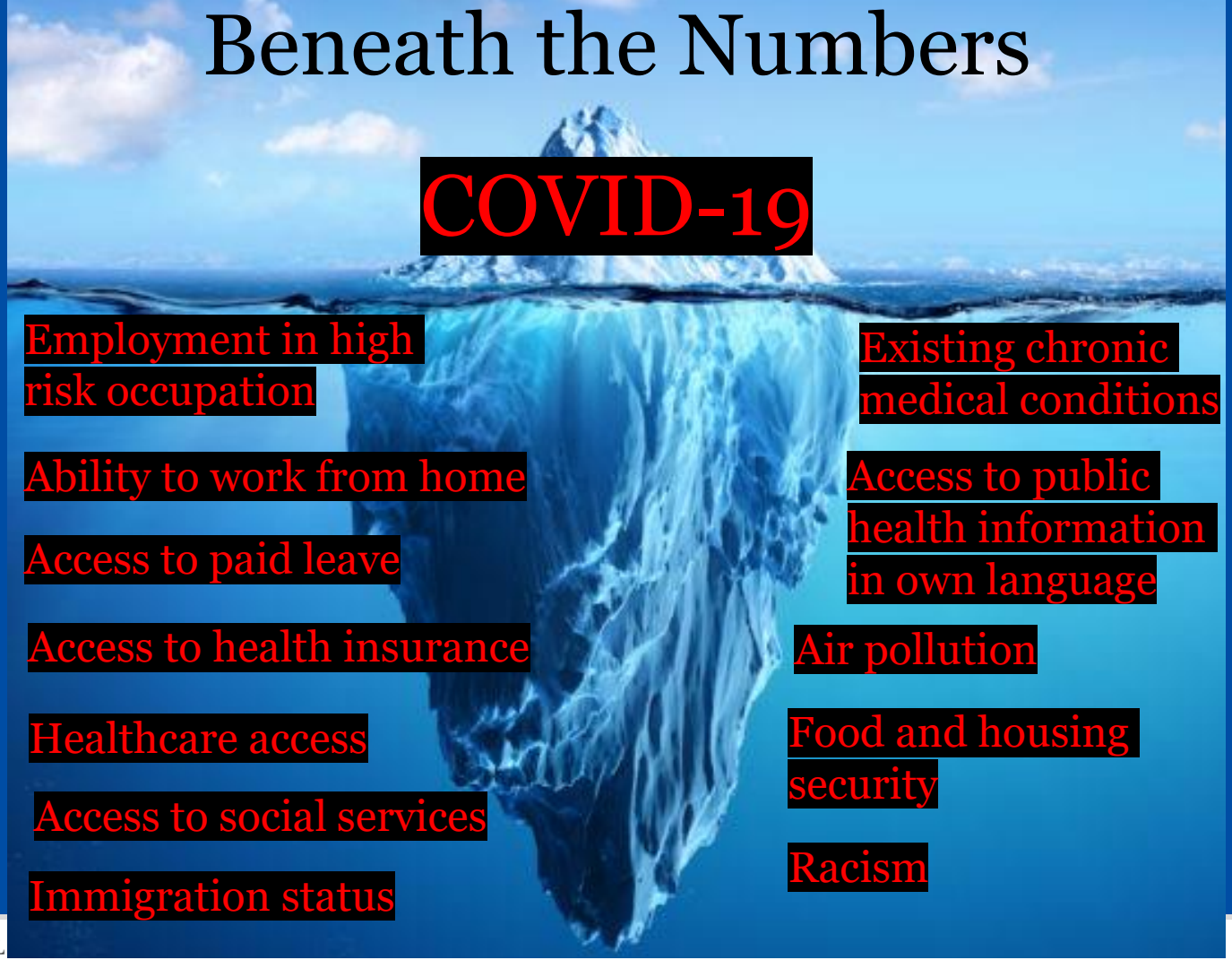
LOW income with **HIGH** risk for COVID-19

Percent employment by essential industries, occupations with frequent exposure to infection and proximity to others, according to race/ethnicity, 2019

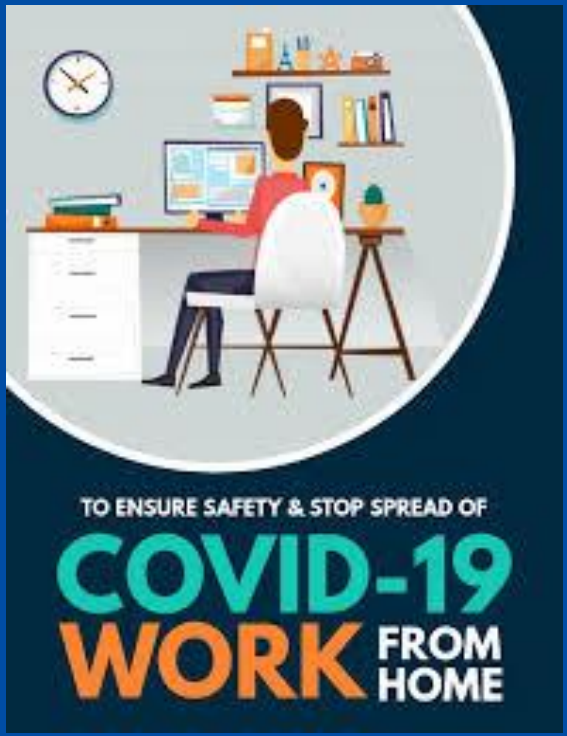
Variable	White (%)	Black or African American (%)	Asian (%)	Hispanic (%)
Likely employed in essential industry	26.89	37.75	26.16	27.20
Healthcare and social assistance	12.76	19.82	14.62	11.11
Hospital	4.36	6.13	6.45	2.89
Animal slaughtering and processing ★	0.32	0.66	0.32	0.75 ★
Likely and possibly employed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

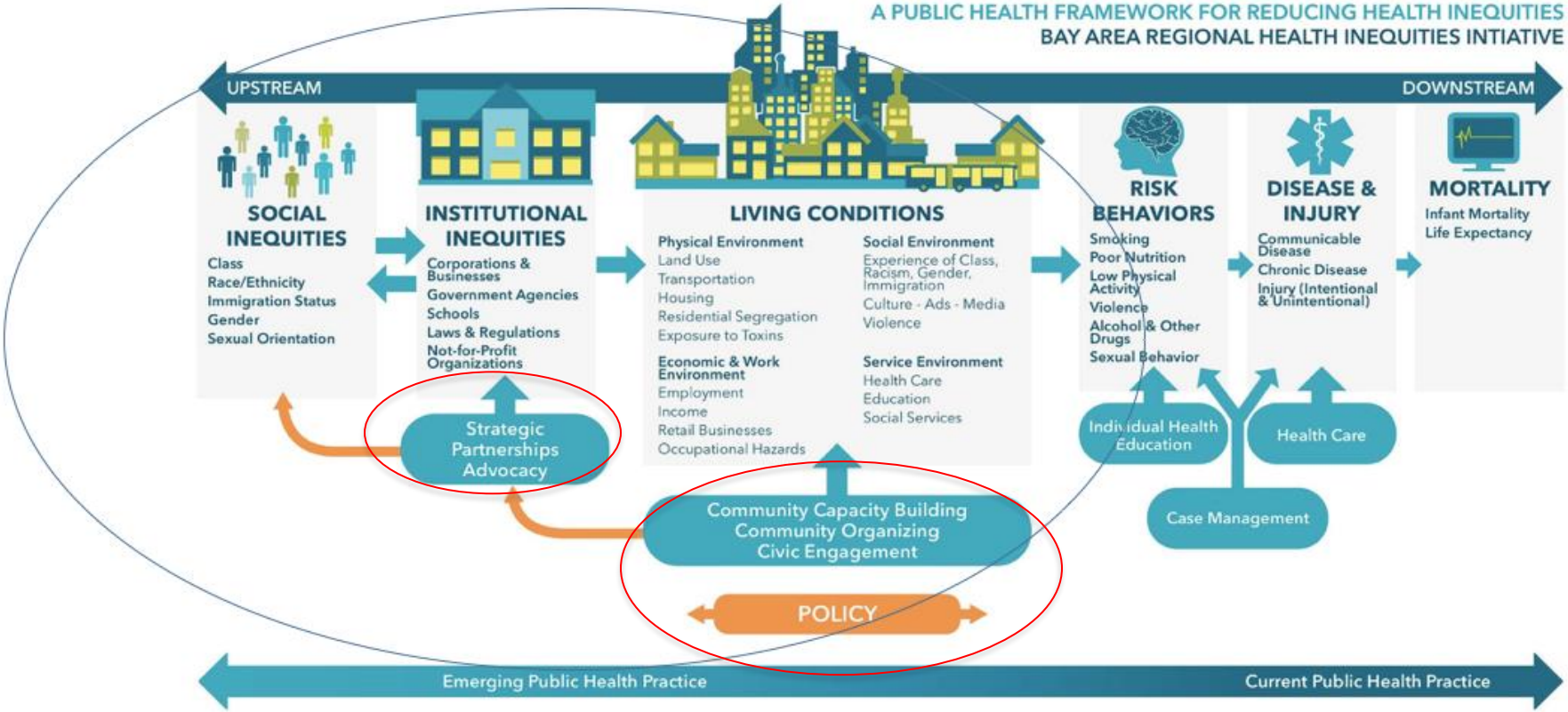
Hawkins D. Differential occupational risk for COVID-19 and other infection exposure according to race and ethnicity. *Am J Ind Med*.

Beneath the Numbers



Coronavirus Public Health Messaging





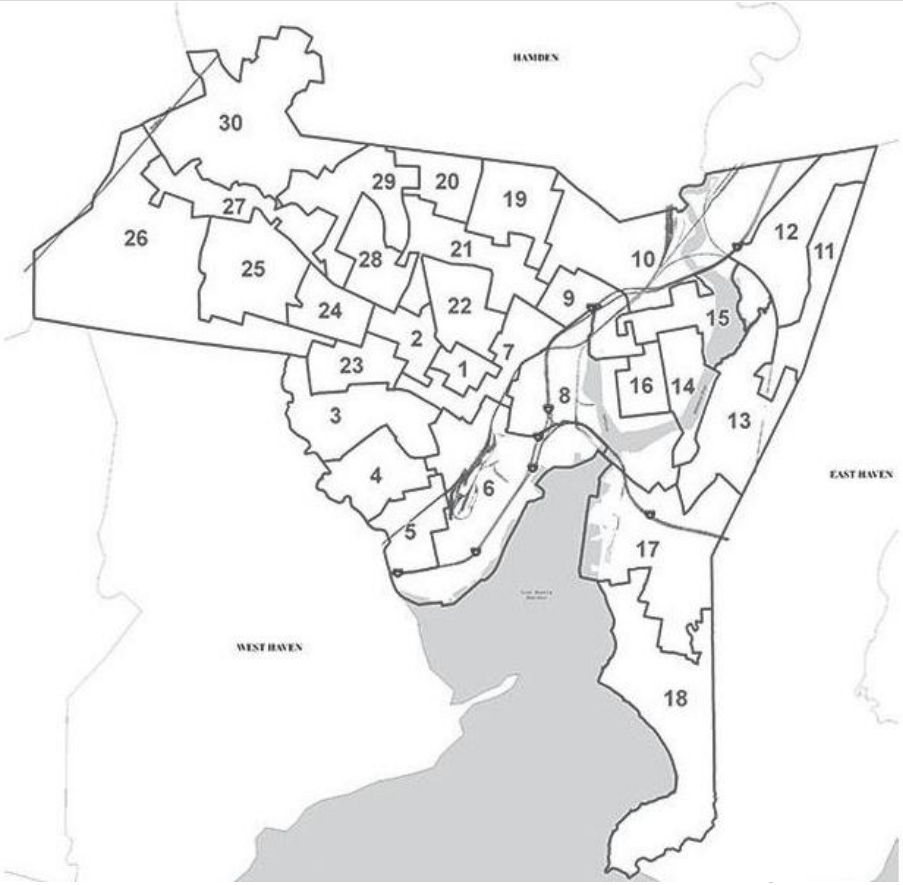
BARHII Conceptual Framework for Public Health. http://barhii.org/framework/.

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

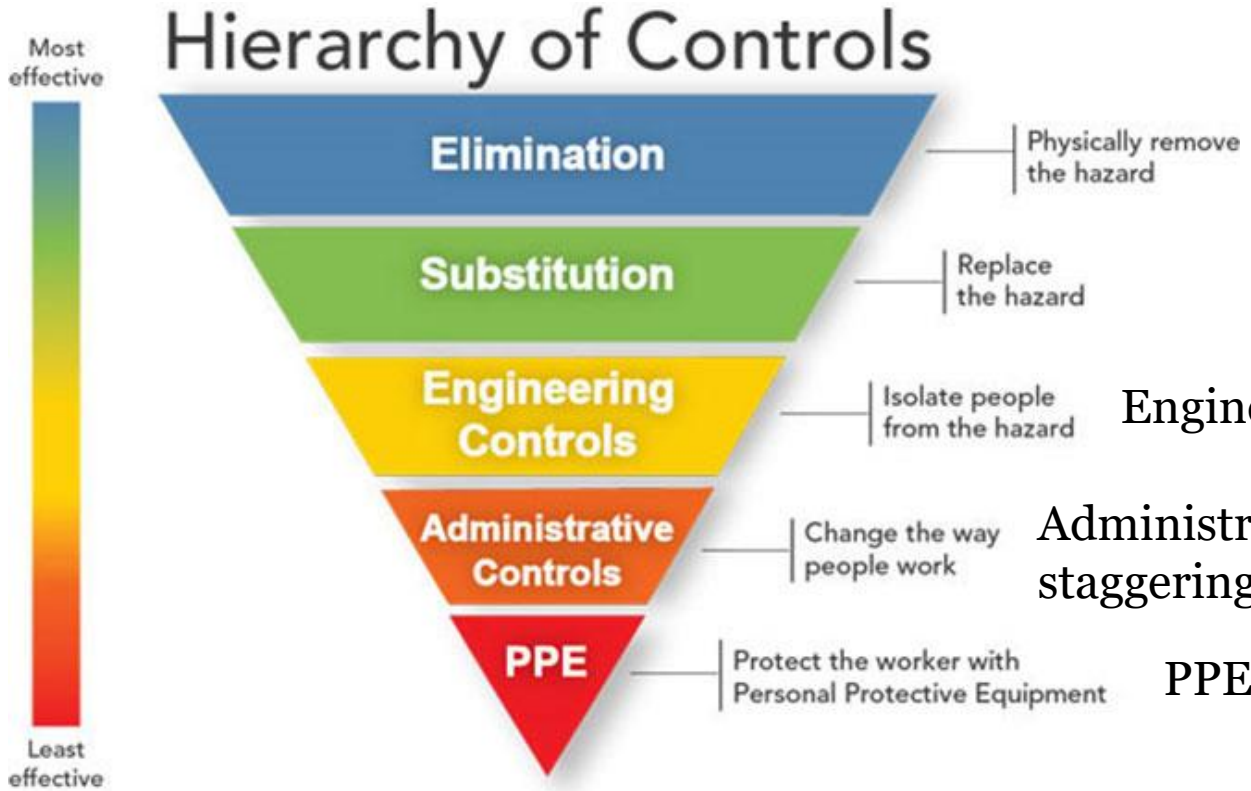
- UNITE HERE!
  - Local 33- Yale graduate employees
  - Local 34- Yale Clerical and Technical Workers
  - Local 35- Electrical workers, workers who clean dorms, cook/serve food
  - Local 217- Hospitality Workers (Hotel, Food Service, Gaming)



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



CAN NOT YET DO

Engineering: Plexiglass, ventilation

Administrative: Training, signage, staggering shifts

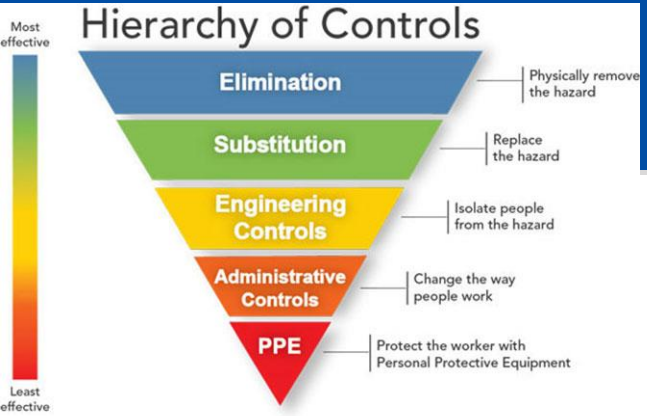
PPE: Masks, gloves, gowns

CDC.gov

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



Personal Protective Equipment

- Guests should be offered surgical masks and asked to wear them while in public areas.
- PPE should be provided at no cost to employees prior to each shift, and as equipment is soiled.
- For employees working in areas known to have been occupied by individuals under quarantine or isolation orders, or otherwise exhibiting symptoms associated with COVID-19, PPE should be provided so as to conform with CDC Prevention and Control Recommendations for Patients with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19) in Healthcare Settings.
- For all other employees, the following PPE should be provided: surgical masks, disposable gloves, disposable gowns and/or aprons, hair caps, biohazard disposal bags.
- Provide additional PPE necessary to ensure safe usage of all chemicals and equipment.

General Disinfecting and Cleaning

- All common areas and surfaces should be cleaned and disinfected at least daily.
- An inventory of all high-touch surfaces should be created (e.g. doorknobs and handles, telephones, light switches, tables, chairs and work surfaces, desktops, washrooms, point of sale devices and menus). Cleaning of such surfaces should occur at least every hour.
- Elevator surfaces and buttons should be disinfected multiple times per hour.
- Clean visibly dirty surfaces before disinfecting, unless stated otherwise on the product instructions. Cleaning refers to the removal of visible dirt, grime and impurities.
- Use disinfectants from the Environmental Protection Agency's List N Follow the instructions on the product label.
- Floors and walls should be kept visibly clean and free of spills, dust and debris.
- Empty and clean garbage cans in public areas regularly.
- Items that cannot be easily cleaned and disinfected should be removed (e.g., newspapers, writing pads, tabletop ornaments).
- All cleaning personnel should be given ample time to complete their tasks fully and safely.
- Uniforms should be laundered at no cost to employees daily.

Guest Arrival and Departure

- Organize lobby areas to permit for 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 at 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 th front passenger seat, and plastic barriers should be installed to protect drivers wherever 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 re-use, key cards at the end of the stay.
- Introduce contactless tipping systems for tipped guest service providers.

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 linens and towels are bagged. Wear disposable gloves when handling dirty laundry 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 clean supplies and to remove used ones. 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 71°C, 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 remnants 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 cafeterias to ensure orderly queuing to maintain physical distancing.
  - Install plexiglass sneeze/cough guards in front of line servers and cashiers.
  - Replace high-touch items (menus, salt/pepper 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 tipping systems.
- Kitchens:
  - 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.
  - Wash/sanitize used dishes using regular procedures (e.g., sanitizing dishwasher).
  - Used dishware from guests under quarantine or isolation orders, or otherwise

Yale SCHOOL OF MEDICINE

Occupational and Environmental Medicine

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 (CDC), 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