Race-Ethnic Disparities and COVID-19

Alicia Fernandez, MD
Professor of Medicine
University of California San Francisco
Zuckerberg San Francisco General Hospital
Alicia.Fernandez@ucsf.edu
Outline

• Magnitude of COVID-19 Disparities
  • California & New York City
  • Mission neighborhood, San Francisco

• Why excess cases and deaths?

• Other COVID related disparities

• Policy solutions
COVID-19 is affecting every community differently. Some areas are much harder-hit than others. What is happening where you live?

Click on a state below to drill down to your county data.

COVID-19 Mortality

Low

High

https://covid19.emory.edu/
COVID19 Mortality By County African American %

A Snapshot of Health Disparities in Georgia
Counties with higher proportions of African American residents tend to have higher COVID-19 mortality.
Click on the map to explore your state and county.

https://covid19.emory.edu
Case, Hospitalization and Death Rates

View by: 〇 Age 〇 Sex 〇 Race/ethnicity 〇 Poverty 〇 Borough

Rate per 100,000 people (age-adjusted)

Cases  Hospitalizations  Deaths

Asian/Pacific-Islander  White  Black/African-American  Hispanic/Latino

Data on people identified as other categories, including Native American/Alaska Native or multiracial, are not provided here. The Hispanic/Latino category includes people of any race. Race and ethnicity information is most complete for people who are hospitalized or have died. There are much less demographic data currently available for non-hospitalized cases.

https://www1.nyc.gov/site/doh/covid/covid-19-data.page
Case, Hospitalization and Death Rates

View by: 🗓 Age ⌨️ Sex 🏛️ Race/ethnicity 🔍 Poverty ⭕ Borough

Rate per 100,000 people (age-adjusted)

<table>
<thead>
<tr>
<th></th>
<th>Cases</th>
<th>Hospitalizations</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low poverty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium poverty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>High poverty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very high poverty</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Neighborhood poverty is the percent of a ZIP code's population living below the Federal Poverty Level, per the **2013-2017 American Community Survey**. Low poverty: under 10%; Medium poverty: 10% to 19.9%; High poverty: 20% to 29.9%; Very high poverty: 30% and over.
Case, Hospitalization and Death Rates

View by: Age, Sex, Race/ethnicity, Poverty, Borough

Rate per 100,000 people

<table>
<thead>
<tr>
<th>Cases</th>
<th>Hospitalizations</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Got the data • Created with Datawrapper

https://www1.nyc.gov/site/doh/covid/covid-19-data.page
# California Cases and Deaths 10/12/20

## All Cases and Deaths associated with COVID-19 by Race and Ethnicity

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>No. Cases</th>
<th>Percent Cases</th>
<th>No. Deaths</th>
<th>Percent Deaths</th>
<th>Percent CA population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latino</td>
<td>364,483</td>
<td>61.1</td>
<td>7,916</td>
<td>48.5</td>
<td>38.9</td>
</tr>
<tr>
<td>White</td>
<td>103,531</td>
<td>17.3</td>
<td>4,903</td>
<td>30.1</td>
<td>36.6</td>
</tr>
<tr>
<td>Asian</td>
<td>33,167</td>
<td>5.6</td>
<td>1,908</td>
<td>11.7</td>
<td>15.4</td>
</tr>
<tr>
<td>African American</td>
<td>25,414</td>
<td>4.3</td>
<td>1,237</td>
<td>7.6</td>
<td>6.0</td>
</tr>
<tr>
<td>Multi-Race</td>
<td>6,549</td>
<td>1.1</td>
<td>118</td>
<td>0.7</td>
<td>2.2</td>
</tr>
<tr>
<td>American Indian or Alaska Native</td>
<td>1,661</td>
<td>0.3</td>
<td>51</td>
<td>0.3</td>
<td>0.5</td>
</tr>
<tr>
<td>Native Hawaiian and other Pacific Islander</td>
<td>3,210</td>
<td>0.5</td>
<td>78</td>
<td>0.5</td>
<td>0.3</td>
</tr>
<tr>
<td>Other</td>
<td>59,006</td>
<td>9.9</td>
<td>105</td>
<td>0.6</td>
<td>0.0</td>
</tr>
<tr>
<td>Total with data</td>
<td>597,021</td>
<td>100.0</td>
<td>16,316</td>
<td>100.0</td>
<td>100.0</td>
</tr>
</tbody>
</table>
California Deaths from COVID-19

Disparities found in COVID-19 death rates

In California, black and Latino patients ages 18 to 49 are dying of COVID-19 more often relative to their share of the population than other racial groups and their older counterparts.

![Bar chart showing disparities in COVID-19 death rates by race/ethnicity](chart.png)

**NOTE:** Figures as of April 23.

California Department of Health
Striking report compares coronavirus response in San Francisco, New York City

By Eric Ting, SFGATE

<table>
<thead>
<tr>
<th>New York City</th>
<th>San Francisco</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>Deaths</td>
</tr>
<tr>
<td>255,000</td>
<td>23,890</td>
</tr>
<tr>
<td>11,669</td>
<td>123</td>
</tr>
</tbody>
</table>

10/12/2020
Unidos en Salud
Preliminary Report

UCSF and UC Berkeley in collaboration with Latino Task Force on COVID-19, Ward 86 and ZSFG, the San Francisco Department of Public Health, Office of Hillary Ronen and the Chan-Zuckerberg Biohub.
What did we do to overcome these barriers?
Setting: Mission District
April 25-28 – 6 weeks into shelter in place

This census tract in the Mission is the second most dense in San Francisco of all census districts >5,000 persons (and the highest with a significant Latinx population).

*Census Tract 022901*
- 4,087 adults (>20 years)
- 58% Latinx
- 34% HH Income < $50K

*2018 American Community Survey (U.S. Census Bureau)*

*The Mission, San Francisco*
Who did we reach for COVID-19 testing?

Total tested: 4,160

Residents + Workers: 2,959

- Expanded Community Residents: 800
- Others: 401

55% male
45% female

Latino: 44%
White: 38%
Asian: 11%
Other: 4%
Black: 3%
Overall testing coverage of the population

2,271 residents represent 55% of the total estimated population of census tract 022901.

Preliminary estimates suggest the study reached 57% of the households of census tract 022901.

The above population coverage statistics include residents only.
Testing Results: PCR+ for COVID-19

<table>
<thead>
<tr>
<th>Tract 022901</th>
<th>PCR+ Prevalence Among tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Total (residents/workers)</td>
<td>2.1% 62/2,959</td>
</tr>
<tr>
<td>Tract workers</td>
<td>6.1% 26/426</td>
</tr>
<tr>
<td>Tract residents</td>
<td>1.4% 36/2,533</td>
</tr>
</tbody>
</table>

Other groups included in study:
- Expanded Area Residents: 1.4% $n = 11/800$
- Other (Volunteers, Teachers, Unclassified): <0.1% $n = 1/401$
## PCR positive vs. negative: Work Impact

<table>
<thead>
<tr>
<th></th>
<th>PCR+ (n=61)</th>
<th>Overall Tested Residents + Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can work from home</td>
<td>10%</td>
<td>43%</td>
</tr>
<tr>
<td>Cannot work from home</td>
<td>90%</td>
<td>57%</td>
</tr>
</tbody>
</table>

(still working outside of home, furloughed, unemployed)

People who cannot sustain their income while sheltering in place are disproportionately represented in the PCR+ cases.
# PCR+s versus overall tested population

## Sex

<table>
<thead>
<tr>
<th></th>
<th>PCR+ (n=61)</th>
<th>Overall Tested Residents + Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Male</td>
<td>75.4%</td>
<td>54.8%</td>
</tr>
<tr>
<td>Female</td>
<td>24.6%</td>
<td>45.2%</td>
</tr>
</tbody>
</table>

## Ethnicity

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>PCR+ (n=61)</th>
<th>Overall Tested Residents + Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>White or Caucasian</td>
<td>0.0%</td>
<td>37.8%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>0.0%</td>
<td>2.9%</td>
</tr>
<tr>
<td>Hispanic or Latino/Latinx</td>
<td>95.1%</td>
<td>44.1%</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>4.9%</td>
<td>11.4%</td>
</tr>
<tr>
<td>Native American</td>
<td>0.0%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Other</td>
<td>0.0%</td>
<td>3.5%</td>
</tr>
</tbody>
</table>
PCR and Antibody Results

<table>
<thead>
<tr>
<th>Group</th>
<th>PCR Positive</th>
<th>Antibody Positive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>0.3%</td>
<td></td>
</tr>
<tr>
<td>Latinx</td>
<td>5.2%</td>
<td>4%*</td>
</tr>
<tr>
<td>Mayan</td>
<td>8.1%</td>
<td>8.0%*</td>
</tr>
<tr>
<td>*Values updated 10-2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
COVID-19 PCR(-) | N = 1052

COVID-19 PCR+ | N = 39

Household Size

- 1-2: 46%
- 3-5: 41%
- 6-10: 42%
- 10+: 4%

N = 39
Drivers of COVID19 Excess Case Risk

- Work outside the home
- Congregate housing
- Excess Death Risk:
  - Comorbid conditions
  - Access to Care
Economic Repercussions

Economic Injury
Hispanic and black Americans have been hardest hit in COVID-19 wage, job losses; most do not have rainy day funds

% saying they or someone in their household has lost a job or taken a pay cut due to the coronavirus outbreak

**HISPANIC** | **BLACK** | **WHITE**
---|---|---
March | April | March | April | March | April
49 | 61 | 36 | 44 | 29 | 38

% who said in April they do not have rainy day funds to cover expenses for three months in case of emergency

White 47% | Black 73% | Hispanic 70% | 90%

Note: Whites and blacks include those who report being only one race and are non-Hispanic. Hispanics are of any race. Share of respondents who didn’t provide an answer not shown.


PEW RESEARCH CENTER
Immigrant Latinx specific issues

• Immigration fear and Public Charge.

• CARES Act: excludes anyone who lives in a household where anyone uses ITIN number to file taxes. 8M US citizens

• Concentration in low wage and informal sectors
  • 27% of SF Latinx households under 200% poverty
Addressing Policy Challenges

• Workplace safety
  • Failure of OSHA and California
  • Nursing home study: Union representation associated with more PPE access, fewer deaths

• Sick leave/Wage Replacement
  • SF Right to Recover Funds

• COVID19 Workforce
  • Bilingual case investigators and contact tracers
Summary

• COVID19 as great revealer of disparities
• COVID19 as great enforcer of disparities
• COVID19 as opportunity
  • public health
  • health systems
  • social policies
  • professionalism