COVID-19 Update:
San Francisco Re-opening Plan
San Francisco Interfaith Council
June 18, 2020

Tomás J. Aragón, MD, DrPH
Health Officer, City & County of San Francisco
Director, Population Health Division
San Francisco Department of Public Health
COVID-19 Data and Reports, June 17, 2020

<table>
<thead>
<tr>
<th>Total COVID-19 Test Results Reported</th>
<th>Total COVID-19 Positive Cases Reported</th>
<th>Total Deaths</th>
<th>Gender Distribution of Positive Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>104,983</td>
<td>2,982</td>
<td>47</td>
<td>Female: 40% Male: 59% Unknown: 1%</td>
</tr>
</tbody>
</table>

Data updated on 6/16/2020

COVID-19 Epidemic Curve, San Francisco, CA

June 17, 2020
COVID-19 Hospitalization Census, SF, CA

June 17, 2020
Effective Reproductive Number, California

Where

- Bay Area
- Other

https://ca-covid-r.info/

June 17, 2020
## County Jurisdiction Comparisons

<table>
<thead>
<tr>
<th>City</th>
<th>County</th>
<th>State</th>
<th>Cases/1000</th>
<th>Deaths/100,000</th>
<th>Tests/1000</th>
</tr>
</thead>
<tbody>
<tr>
<td>San Francisco</td>
<td>San Francisco</td>
<td>CA</td>
<td>3.2</td>
<td>5.1</td>
<td>2.49</td>
</tr>
<tr>
<td>Los Angeles</td>
<td>Los Angeles</td>
<td>CA</td>
<td>6.3</td>
<td>26.1</td>
<td>0.96</td>
</tr>
<tr>
<td>Seattle</td>
<td>King</td>
<td>WA</td>
<td>3.8</td>
<td>25.7</td>
<td></td>
</tr>
<tr>
<td>Denver</td>
<td>Denver</td>
<td>CO</td>
<td>10.0</td>
<td>56.6</td>
<td></td>
</tr>
<tr>
<td>Atlanta</td>
<td>Fulton</td>
<td>GA</td>
<td>4.6</td>
<td>25.6</td>
<td></td>
</tr>
<tr>
<td>Miami</td>
<td>Miami-dade</td>
<td>FL</td>
<td>7.4</td>
<td>28.5</td>
<td></td>
</tr>
<tr>
<td>Boston</td>
<td>Suffolk</td>
<td>MA</td>
<td>23.7</td>
<td>116.3</td>
<td></td>
</tr>
<tr>
<td>DC</td>
<td>DC</td>
<td>DC</td>
<td>13.5</td>
<td>70.5</td>
<td></td>
</tr>
<tr>
<td>Baltimore</td>
<td>Baltimore City</td>
<td>MD</td>
<td>7.7</td>
<td>34.7</td>
<td></td>
</tr>
<tr>
<td>Philadelphia</td>
<td>Philadelphia</td>
<td>PA</td>
<td>15.0</td>
<td>90.7</td>
<td>1.07</td>
</tr>
<tr>
<td>New York City</td>
<td>New York City</td>
<td>NY</td>
<td>24.7</td>
<td>261.0</td>
<td>1.61</td>
</tr>
</tbody>
</table>

As of June 9, 2020
Where might we be going? (if Rt increases *moderately* with phased re-opening)

- Not a lot of room for error: assumes as we lift Shelter in Place, we are able to keep Rt lower than it was during early March
- Hospitalization data are **not** a good basis for course correction- too much delay

Presented June 2, 2020 to SF Health Commission
San Francisco’s Approach to Reopening

• State Resilience Roadmap as a building block
• Economic Recovery Task Force (ERTF)
• Incremental opening gated with health indicators
• Time increments between “gates” (2-4 weeks)
• Considers risks and mitigations
• Preference for regional coordination
• Time intervals (waiting) enables monitoring and benefits of $R_e < 1$
• Balancing values (e.g., equity, equality) and trade-offs
California Resilience Roadmap

STAGE 1: Safety and preparedness

STAGE 2: Lower-risk workplaces

STAGE 3: Higher-risk workplaces

STAGE 4: End of Stay Home Order
## Sample view of risk scoring by the Economic Recovery Task Force

<table>
<thead>
<tr>
<th>Category (San Francisco specific)</th>
<th>Contact Risk</th>
<th>Modification: Ability to mitigate risk</th>
<th>Total Risk Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Contact Proximity</td>
<td>How close will the contact be?</td>
<td>Contact Length</td>
</tr>
<tr>
<td>Offices</td>
<td>1.0</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Pet Services</td>
<td>2.0</td>
<td>1.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Botanical gardens &amp; outdoor historical sites</td>
<td>2.0</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Nature, parks, beaches, and other outdoor spaces</td>
<td>1.0</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Non-essential manufacturing</td>
<td>1.0</td>
<td>2.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Wholesale trade, leasing, &amp; logistics</td>
<td>2.0</td>
<td>2.0</td>
<td>1.0</td>
</tr>
<tr>
<td>Retailers</td>
<td>2.0</td>
<td>1.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Restaurants</td>
<td>2.0</td>
<td>2.0</td>
<td>2.0</td>
</tr>
</tbody>
</table>
Summary of San Francisco Re-opening Plan

• Stage 2 gating, and attestation for variance
• Per event risk vs cumulative risk of infection
• Risk factors for infection (without intervention):
  • contact rate,
  • distance,
  • duration, and
  • ventilation
• Risk factors for complications: age and chronic medical conditions
• Transmission risks of gatherings (including religious, etc.)
How to re-open San Francisco

• Community, including businesses
  • Face coverings
  • Physical distancing
  • Hand washing
  • Testing (role of asymptomatics)

• City and partners
  • Universal testing access
  • Early detection systems (cases)
  • Case and contact investigations
  • Orders, directives, best practices