Containment Versus Mitigation

Containment
- The goal of containment is to stop the spread from very specific areas and avoid a larger outbreak
- Accomplished by quick identification (testing), contact tracing, isolation and quarantining
- Plus social distancing, hygiene and other measures

Mitigation
- Increased social distancing,
- Limiting large gatherings
- Closing schools
- Lock downs
- Travel restrictions
- Protecting the healthcare system
Containment Versus Mitigation

S Korea Testing Versus cases

USA Testing Versus Cases

- 3-day rolling average of new tests per thousand
- Daily confirmed cases (cases)
But for How Long?
Mitigation Back to Containment

- Re-open plan
  - 14(+) day fall in new cases
  - Hospitalization and death rates
  - Healthcare system that can cope
  - Testing and contact tracing
  - Gradual re-opening of businesses based on essentiality
# NYS Re-Open Dashboard

<table>
<thead>
<tr>
<th>Region</th>
<th>14-Day Decline in Hospitalizations OR Under 15 new Hospitalizations (3-day avg)</th>
<th>14-Day Decline in Hospital Deaths OR Fewer than 5 deaths (3-day avg)</th>
<th>New Hospitalizations (Under 2 per 100K residents—3 day rolling avg)</th>
<th>Share of total beds available (threshold of 30%)</th>
<th>Share of ICU beds available (threshold of 30%)</th>
<th>30 per 1k residents tested monthly (7-day average of new tests per day)</th>
<th>At least 30 contact tracers per 100K residents</th>
<th>Metrics Met</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital Region</td>
<td>N</td>
<td>Y</td>
<td>0.58</td>
<td>41%</td>
<td>44%</td>
<td>N</td>
<td>325</td>
<td>4/7</td>
</tr>
<tr>
<td>Central New York</td>
<td>Y</td>
<td>Y</td>
<td>0.47</td>
<td>49%</td>
<td>51%</td>
<td>N</td>
<td>233</td>
<td>5/7</td>
</tr>
<tr>
<td>Finger Lakes</td>
<td>Y</td>
<td>Y</td>
<td>1.19</td>
<td>53%</td>
<td>64%</td>
<td>N</td>
<td>361</td>
<td>5/7</td>
</tr>
<tr>
<td>Long Island</td>
<td>Y</td>
<td>N</td>
<td>5.76</td>
<td>28%</td>
<td>26%</td>
<td>Y</td>
<td>852</td>
<td>2/7</td>
</tr>
<tr>
<td>Mid-Hudson</td>
<td>Y</td>
<td>N</td>
<td>4.74</td>
<td>31%</td>
<td>35%</td>
<td>Y</td>
<td>697</td>
<td>4/7</td>
</tr>
<tr>
<td>Mohawk Valley</td>
<td>Y</td>
<td>Y</td>
<td>1.17</td>
<td>58%</td>
<td>64%</td>
<td>N</td>
<td>146</td>
<td>5/7</td>
</tr>
<tr>
<td>New York City</td>
<td>Y</td>
<td>Y</td>
<td>5.41</td>
<td>26%</td>
<td>21%</td>
<td>Y</td>
<td>2520</td>
<td>3/7</td>
</tr>
<tr>
<td>North Country</td>
<td>Y</td>
<td>Y</td>
<td>0.08</td>
<td>53%</td>
<td>64%</td>
<td>N</td>
<td>126</td>
<td>5/7</td>
</tr>
<tr>
<td>Southern Tier</td>
<td>Y</td>
<td>Y</td>
<td>0.11</td>
<td>58%</td>
<td>52%</td>
<td>N</td>
<td>190</td>
<td>5/7</td>
</tr>
<tr>
<td>Western New York</td>
<td>N</td>
<td>Y</td>
<td>2.20</td>
<td>46%</td>
<td>40%</td>
<td>N</td>
<td>414</td>
<td>3/7</td>
</tr>
</tbody>
</table>
The Road to a New Normalcy

Diffusing Density
- Social distancing
- Restricting gatherings
- Mask usage

Testing Is Critical
- Diagnostic – PCR (or antigen)
- Serology – community immunity
- Herd immunity starts to be effective at 50-66%
- Test → Isolate and quarantine

Addressing Vulnerable Populations
- Elderly and those with pre-existing conditions
- Social Determinants of Health and Health disparities

Investing in public health
- Testing and contact tracing
- Investment in therapeutics and vaccines
- Research
States Planning to Reopen

States Planning to reopen

Alaska

States Failing to Meet Criteria

Alaska

Hawaii
Texas
Fla.
States Planning to reopen - number of Cases not falling
Testing and Re-opening

**States** where the rate of positive tests is more than 10% (dashed line)

Daily share of tests that are positive, 7-day average

**States** where testing is below the recommended level (dashed line)

Daily new tests per 100,000 people, 7-day average
Possible Pandemic Scenarios

Scenario 1
Ideal Restart

- Good control with social distancing
- Few ongoing peaks with testing and isolation of new cases
- Limited seasonal impact

Virus is seasonal with significant resurgence in winter

Scenario 2
Restart with normal variance

- Potential Vaccine

Community Testing & Contact Tracing

Thousands of cases

Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar Apr May
Scenario 3
Premature restart

Scenario 4
“Rolling Thunder”
Polling Question

Which scenario do you think is most likely for the US?

A. Scenario 1 – “Ideal”
B. Scenario 2 – “Seasonal variation”
C. Scenario 3 – “Premature Start”
D. Scenario 4 – “Rolling Thunder”
E. Scenario 5 – We just need to turn off 5G and it will go away
F. Scenario 6 – “Something else”