COVID-19 Update

Dr Mark Cunningham-Hill
Medical Director NEBGH

Monday July 27th
### Essential functions in the acute phase of a pandemic

<table>
<thead>
<tr>
<th>Surveillance and detection</th>
<th>Clinical management</th>
<th>Prevention of the spread in the community</th>
<th>Maintaining essential services</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Laboratory capacity</td>
<td>- Patient management</td>
<td>- Medical countermeasures such as vaccination and prophylaxis</td>
<td>- Essential services continuity</td>
</tr>
<tr>
<td>- Outbreak investigation</td>
<td>- Health service continuity</td>
<td>- Non-medical countermeasures to contain and mitigate the infection</td>
<td>- Recovery</td>
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<td>- Monitoring of the epidemic</td>
<td>- Infection prevention and control in healthcare settings</td>
<td></td>
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<tr>
<td>- Risk and severity assessment</td>
<td></td>
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</tr>
</tbody>
</table>

Surveillance and Detection

- Laboratory Capacity
  - More testing than any other country but....
- Outbreak investigation
- Monitoring the epidemic
- Risk and severity assessment
Testing

6-10 days to get a result

https://coronavirus.jhu.edu/testing/individual-states

https://coronavirus.jhu.edu/testing/testing-positivity
Surveillance and Detection

- Laboratory Capacity
  - More testing than any other country but....
- Outbreak investigation
- Monitoring the epidemic
- Risk and severity assessment

**Contact Tracing**
- New York 100%
- Connecticut 100%
- New Jersey 60%
- California 23%
- Texas 6%
- S. Carolina 5%
- Arizona 3%
- Florida 3%
Clinical Management

- Patient management
  - Respiratory, Immune response, Coagulation
  - ICU care
- Health service continuity
  - ICU capacity
- Infection prevention and control in healthcare settings
  - Initial PPE shortages
  - 800+ healthcare and frontline workers have died
  - High-risk populations
Prevention & Spread in the Community

- Vaccination and prophylaxis
- Non-medical countermeasures
  - Lack of central strategy
  - Political versus science driven response
  - Mask use
  - Social media driven misinformation

Medical countermeasures such as vaccination and prophylaxis
Non-medical countermeasures to contain and mitigate the infection

Americans' Use of Face Masks in Public

- 44% Always
- 28% Very often
- 11% Sometimes
- 4% Rarely
- 14% Never

How often do you wear a mask when outside your home?
Maintaining Essential Services

- Essential services
  - Public services
- Recovery
  - Economic stimulus and support
  - CARES act
### Where is the USA today?

<table>
<thead>
<tr>
<th>Country/State</th>
<th>Cases per million</th>
<th>Relative 14-day Change</th>
<th>Percentage COVID+ test Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>512</td>
<td>10%</td>
<td>19.00%</td>
</tr>
<tr>
<td>Louisiana</td>
<td>465</td>
<td>17%</td>
<td>9.70%</td>
</tr>
<tr>
<td>Mississippi</td>
<td>444</td>
<td>72%</td>
<td>20.70%</td>
</tr>
<tr>
<td>Alabama</td>
<td>376</td>
<td>34%</td>
<td>19.20%</td>
</tr>
<tr>
<td>Arizona</td>
<td>369</td>
<td>-23%</td>
<td>21.90%</td>
</tr>
<tr>
<td>South Carolina</td>
<td>344</td>
<td>5%</td>
<td>16.20%</td>
</tr>
<tr>
<td>Georgia</td>
<td>341</td>
<td>18%</td>
<td>14.40%</td>
</tr>
<tr>
<td>Nevada</td>
<td>340</td>
<td>39%</td>
<td>15.30%</td>
</tr>
<tr>
<td>Montenegro</td>
<td>335</td>
<td>210%</td>
<td>ND</td>
</tr>
<tr>
<td>Tennessee</td>
<td>302</td>
<td>37%</td>
<td>9.10%</td>
</tr>
<tr>
<td>Texas</td>
<td>286</td>
<td>-8%</td>
<td>12.50%</td>
</tr>
<tr>
<td>Idaho</td>
<td>281</td>
<td>12%</td>
<td>16.80%</td>
</tr>
<tr>
<td>Brazil</td>
<td>262</td>
<td>32%</td>
<td>83.50%</td>
</tr>
<tr>
<td>Arkansas</td>
<td>260</td>
<td>6%</td>
<td>11.30%</td>
</tr>
<tr>
<td>California</td>
<td>253</td>
<td>28%</td>
<td>8.00%</td>
</tr>
</tbody>
</table>
School

New CDC guidelines

https://int.nyt.com/data/documenthelper/7072-school-reopening-packet/b70172f2cc13c9cf0e6a/optimized/full.pdf#page=1
Risk Balance

Risks of keeping closed

- Lost education
- Social and Emotional Skill Development
- Safety
- Nutrition
- Physical activity
- Caregiving and ability to work

Risks of Opening

- \( \uparrow \) COVID+ in children, teachers, parents, and community
- High risk children, teachers and parents
- Children >10 as spreaders
- Multisystem inflammatory syndrome (MIS-C) after exposure to SARS-CoV-2
Guiding Principles

- The more people a student or staff member interacts with, and the longer that interaction, the higher the risk of COVID-19 spread.

- The risk of COVID-19 spread increases in school settings as follows:
  - **Lowest Risk**: Students and teachers engage in virtual-only classes, activities, and events.
  - **More Risk**: Small, in-person classes, activities, and events. Groups of students stay together and with the same teacher throughout/across school days and groups do not mix. Students remain at least 6 feet apart and do not share objects (e.g. hybrid virtual and in-person class structures, or staggered/rotated scheduling to accommodate smaller class sizes).
  - **Highest Risk**: Full sized, in-person classes, activities, and events. Students are not spaced apart, share classroom materials or supplies, and mix between classes and activities.
Factors to be considered

- Community COVID activity and capability:
  - Testing and contact tracing
  - Cases involving teachers and children
- Parent and teacher sentiment
- Ability to put in place mitigation measures
- How to manage high-risk individuals and individual situations
Questions