2019 Novel Coronavirus (COVID-19) Briefing for Local Leadership

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Coronaviruses that Infect People

❖ 4 cause the common cold
❖ 2 cause severe lung infection (SARS and MERS)
❖ Spread through coughing, sneezing or close personal contact
❖ Symptoms start 2-14 days after exposure

2019 Novel Coronavirus (SARS-CoV-2)
# COVID-19 Compared to Past CoV Epidemics

**as of 03/05/2020**

<table>
<thead>
<tr>
<th>CoV</th>
<th>Origin</th>
<th>Cases</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>COVID-19 (As of 3/03/2020)</td>
<td>Dec 2019 (China)</td>
<td>96,888</td>
<td>3,305 CFR = 3.4%?</td>
</tr>
<tr>
<td>MERS-CoV</td>
<td>2012 (Saudi Arabia)</td>
<td>2,494</td>
<td>858 CFR = 34%</td>
</tr>
<tr>
<td>SARS-CoV</td>
<td>2002 (China)</td>
<td>8,098 (None since 2004)</td>
<td>774 CFR = 10%</td>
</tr>
</tbody>
</table>

*Reported by the World Health Organization

## How Contagious Is It?

<table>
<thead>
<tr>
<th>Disease</th>
<th>$R_0$</th>
</tr>
</thead>
<tbody>
<tr>
<td>MERS-CoV</td>
<td>$&lt; 1$</td>
</tr>
<tr>
<td>Seasonal influenza</td>
<td>1-2</td>
</tr>
<tr>
<td>SARS-CoV</td>
<td>3</td>
</tr>
<tr>
<td>COVID-19 (SARS-CoV-2)</td>
<td>Estimates: 1.4-3.9</td>
</tr>
<tr>
<td>Measles</td>
<td>12-18</td>
</tr>
</tbody>
</table>

When Did the Outbreak Start?

Cluster of 44 cases of pneumonia announced in Wuhan
12/31/19

First exported case from China diagnosed
1/13/20

CDC developed rRT-PCR test
1/19/20

1/7/20
Novel coronavirus isolated in China

1/17/20
Entry screening at 3 U.S. airports began

1/21/20
First U.S. case diagnosed

Source: www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/
## How Many People Are Sick?

<table>
<thead>
<tr>
<th>Date</th>
<th>Cases</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/3/20</td>
<td>44 cases</td>
<td>6</td>
</tr>
<tr>
<td>1/24/20</td>
<td>1,320 cases</td>
<td>15</td>
</tr>
<tr>
<td>1/28/20</td>
<td>24,554 cases</td>
<td>29</td>
</tr>
<tr>
<td>2/22/20</td>
<td>80,239 cases</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
</tr>
<tr>
<td></td>
<td>946,888 cases; 3,305 deaths</td>
<td></td>
</tr>
</tbody>
</table>

**Confirmed Cases as of 3/05/20**

Reported by the World Health Organization and CDC

<table>
<thead>
<tr>
<th>Region</th>
<th>Cases</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>80,422 cases</td>
<td>3,013 deaths</td>
</tr>
</tbody>
</table>
| United States| 100 cases and 10 deaths | - 17 Person to Person  
- 30 Travel Related  
- 53 Under Investigation |
| Virginia     | 0 cases           | (18 PUIs ruled out)                                 |

WHO Frequency Map

Distribution of COVID-19 cases as of 03 March 2020

Number of Confirmed cases*
- 1 - 2
- 3 - 10
- 11 - 100
- 101 - 500
- 501 - 5000
- > 5000

Country, area or territory with cases

*Confirmed' cases reported between 13 and 19 February 2020
include both laboratory-confirmed and clinically diagnosed (only applicable to Hubei province); for all other dates, only laboratory-confirmed cases are shown.

705 cases are identified on a cruise ship currently in Japanese territorial waters.

Data Source: World Health Organization, National Health Commission of the People’s Republic of China
Map Production: WHO Health Emergencies Programme

Source: www.who.int/emergencies/diseases/novel-coronavirus-2019/situation-reports/
How Is the U.S. Responding?

❖ Public health entry screening at 20 U.S. airports
❖ CDC Travel Advisories/Warnings: Level 3 (avoid all nonessential travel) - China, South Korea, Italy, Iran
❖ Entry of foreign nationals suspended: China, Iran
❖ Surveillance & Risk Stratification
❖ Diagnostic lab test developed
❖ Ongoing research for medical tx for COVID-19
❖ Started on vaccine development
❖ Information and guidance to public and medical
What Is the Current Risk in U.S.?
(As of 3/05/2020)

• 100 total cases in the U.S. in 13 States
  o 30 cases Travel-related
  o 17 cases by Person to person spread
  o 53 Under Investigation

• Not spreading widely in the community in the U.S.
• Immediate risk to general public remains low
• Greatest at-risk: family members and healthcare workers caring for patients with COVID-19
• Situation is rapidly evolving

What’s the Situation in Virginia?
(As of 3/05/2020)

• 0 cases of COVID-19 in Virginia
• 21 Persons Under Investigation (PUI):
  ❖ 18 have tested negative for virus
• 339 travelers under public health monitoring (14 days):
  ❖ 231 have successfully completed monitoring
  ❖ 95 currently medium risk
  ❖ 13 currently low risk

How is VDH Responding?

❖ Established ICS structure to coordinate the public health response
  o Daily command meetings
  o Situation reports 3x/week

❖ Working closely with clinical providers and CDC EOC to find, isolate, and diagnose cases early to help prevent further spread

❖ Monitoring patients who are being tested for the virus
❖ Identifying contacts of those patients
How is TRHD Responding?

❖ Established Incident Management Team to coordinate response & prepare for escalating event;

❖ Engaging with hospitals, clinical providers, schools, & other community partners to raise awareness and provide most current information;

❖ Conducting Surveillance & Investigation of any potential suspect cases (Persons Under Investigation = PUI);

❖ Identifying all at-risk travelers returning from China and supervising their self-monitoring.
Take Home Messages

❖ Rapidly evolving situation
  o Case counts will grow in the coming days and weeks
  o Interim guidance will change

❖ Much more to learn about this coronavirus: e.g., source, transmission factors, and risks

❖ Influenza is still our #1 infectious threat in the U.S. currently (need to promote respiratory infection prevention in general)

❖ Updates will be communicated via www.vdh.virginia.gov/coronavirus as more information is available.
Resources

Virginia Department of Health (VDH)
- 35 Local Health Districts
- www.vdh.virginia.gov/coronavirus
- Respiratory@vdh.virginia.gov

Centers for Disease Control and Prevention (CDC)
- www.cdc.gov/coronavirus/2019-nCoV
  - This page will be updated regularly at noon Mondays through Fridays. Numbers close out at 4 p.m. the day before reporting.

World Health Organization (WHO)
- www.who.int/emergencies/diseases/novel-coronavirus-2019