2019 Novel Coronavirus (COVID-19)

South Dakota Department of Health

September 10, 2020

We will begin in just a few moments. Thanks!
This is an **emerging, rapidly evolving situation**. Information in this presentation is current as of September 9, 2020. Please check the South Dakota Department of Health website for the most current information and guidance.

[COVID.sd.gov](https://COVID.sd.gov)
Agenda

• Situation Update
• Laboratory Guidance
• Long Term Care
• Community Mitigation
• Supply Chain Management
• On-going Communications
• Q&A Session

Note: Slides and a recording of the presentations will be posted to the website following the webinar.
| International | 27,617,194 confirmed cases | 898,456 deaths |
| United States | 6,310,663 confirmed cases in U.S. | 189,147 deaths |
| South Dakota | 15,571 confirmed cases in South Dakota | 173 deaths |
|              | 12,964 recovered               |
Epidemiologic “Epi” Curve of COVID-19 Cases, by Onset Date

As of September 9, 2020

Positive Cases by Date Reported to SD-DOH

COVID-19 Case Map, by County

Medical providers are recommended to test individuals with signs and symptoms compatible with COVID-19 infection, including:

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- Fatigue
- Muscle or body aches
- Headache
- New loss of taste or smell
- Sore throat
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea

As of June 18, 2020

Reporting COVID-19 Tests to SD-DOH

• **Reminder**: Coronavirus respiratory syndromes are a Category I disease

• Report *immediately* on suspicion of disease

• Reporting mechanisms:
  • Electronic Laboratory Report (ELR) – HL7 message to SD Health Link (health information exchange)
  • Flat file (CSV) – Secure email
  • Disease reporting website – [sd.gov/diseasereport](http://sd.gov/diseasereport)
  • Fax – 605.773.5509
COVID-19 Among School- and College-Aged Individuals, Jul 19-Sep 5

<table>
<thead>
<tr>
<th>Age</th>
<th>Hospitalizations</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-17 years</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>18-22 years</td>
<td>7</td>
<td>0</td>
</tr>
</tbody>
</table>
### COVID-19 Hospitalization and Death by Age

**Factors that Increase Community Spread and Individual Risk**

- Crowded Situations
- Close / Physical Contact
- Enclosed Space
- Duration of Exposure

#### Rate ratios compared to 18-29 year olds

| 0-4 years | 5-17 years | 18-29 years | 30-39 years | 40-49 years | 50-64 years | 65-74 years | 75-84 years | 85+ years |
|-----------|------------|-------------|-------------|-------------|-------------|-------------|-------------|------------|----------|
| 4x lower  | 9x lower   | Comparison Group | 2x higher   | 3x higher   | 4x higher   | 5x higher   | 8x higher   | 13x higher |
|           |            |              |             |             |             |             |             |            |          |

#### Hospitalization

- 4x lower
- 9x lower
- Comparison Group
- 2x higher
- 3x higher
- 4x higher
- 5x higher
- 8x higher
- 13x higher

#### Death

- 9x lower
- 16x lower
- Comparison Group
- 4x higher
- 10x higher
- 30x higher
- 90x higher
- 220x higher
- 630x higher

#### Actions to Reduce Risk of COVID-19

- Wearing a Mask
- Social Distancing (6 FT Goal)
- Hand Hygiene
- Cleaning and Disinfection

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2. Data source: NCHS Provisional Death Counts [https://www.cdc.gov/nchs/nvss/vari/CORONAVIRUS/UK/19/index.htm](https://www.cdc.gov/nchs/nvss/vari/CORONAVIRUS/UK/19/index.htm), accessed 08/08/20; Numbers are unadjusted rate ratios.

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Multisystem Inflammatory Syndrome in Children (MIS-C)

- Multisystem inflammatory syndrome in children (MIS-C) is a condition where different body parts can become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs.

- Symptoms:
  - Fever
  - Abdominal pain
  - Vomiting
  - Diarrhea
  - Neck pain
  - Rash
  - Bloodshot eyes
  - Feeling extra tired

Treatment
- No FDA-approved treatment
- Remdesivir – available through EUA or compassionate use programs for children
- Dexamethasone – May be beneficial in pediatric patients with COVID-19 respiratory disease who are on mechanical ventilation

Multisystem Inflammatory Syndrome in Children (MIS-C)

- Case definition:
  - An individual aged <21 years presenting with fever, laboratory evidence of inflammation, and evidence of clinically severe illness requiring hospitalization, with multisystem (>2) organ involvement (cardiac, renal, respiratory, hematologic, gastrointestinal, dermatologic or neurological); AND
  - No alternative plausible diagnoses; AND
  - Positive for current or recent SARS-CoV-2 infection by RT-PCR, serology, or antigen test; or exposure to a suspected or confirmed COVID-19 case within the 4 weeks prior to the onset of symptoms.

- Cases of MIS-C:
  - USA: 792 confirmed cases and 16 deaths in 42 states
  - SD: 1 confirmed case and zero deaths

https://www.cdc.gov/mis-c/cases/index.html

Laboratory Guidance
Statewide Priority Populations for SARS-CoV-2 Testing

It is a statewide priority that ALL individuals with symptoms of COVID-19 be tested for SARS-CoV-2 with the recommendation from a health care provider.

- Hospitalized individuals
- Healthcare workers, first responders, and active military
- Critical infrastructure workers in food manufacturing and agriculture
- Individuals in communal living settings like long-term care facilities
- Underinsured or uninsured individuals
- Low-income individuals or individuals unable to pay for testing
- Homeless individuals
SDPHL COVID-19 Testing Priorities

- **Symptomatic** hospitalized patients
- **Symptomatic** healthcare workers, first responders, and active military
- **Symptomatic** individuals in congregate living settings like long-term care facilities
- **Symptomatic** individuals with no way to pay for testing
- **Asymptomatic** participants in state-sponsored sentinel surveillance:
  - Long-term care (staff and residents)
  - Tribes
  - K-12 schools (adults)
Specimen Collection Reminders

• Please remember to label every specimen with, at minimum, patient first name, last name, and date-of-birth.

• Please ensure information on the specimen container is identical to the patient information on the requisition.

• Please label tubes using indelible pen or marker and write legibly.
Abbott ID Now Reminders

• Due to high demand for Abbott ID Now COVID test kits, the following stewardship practices are recommended for facilities that receive ID Now COVID kits from SDPHL:
  - Test symptomatic individuals
  - Test symptomatic individuals determined to be high-priority using the SDDOH criteria
  - Test symptomatic individuals who would benefit most from rapid testing
  - Do not retest individuals who have tested COVID-positive in the last 90 days
FDA has issued Emergency Use Authorization for the following:

- 160 (4): Molecular Diagnostic Tests for SARS-CoV-2
- 43 (1): Serological Tests
- 35: Molecular-Based Laboratory Developed Tests for SARS-CoV-2
- 4: Antigen Diagnostic Tests for SARS-CoV-2

This week SDDOH will review information from CDC/FDA including:

- CDC recommendations for the use of antigen tests
CDC: Using Antigen Tests

Types of Testing

• **Diagnostic Testing:** used to identify current infection for individuals with signs and symptoms of COVID-19, or for asymptomatic individuals with a suspected or known exposure to SARS-CoV-2.

• **Screening Testing:** used to identify infected individuals who are asymptomatic and without suspected or known exposure to SARS-CoV-2 so that measures can be taken to prevent further transmission by contagious individuals.

• **Surveillance Testing:** used to monitor community or population-level infection and disease.
Rapid Antigen Testing: General Guidance

• Antigen tests detect the presence of a specific viral protein or “antigen” which indicates current viral infection.

• Antigen tests are relatively quick, inexpensive and can be used at the point-of-care.

• Antigen tests can result in both false-positive and false-negative results so these tests should be used and interpreted by trained professionals.
Rapid Antigen Testing: Performance

• Antigen test performance is typically evaluated against RT-PCR, the “gold standard” for SARS-CoV-2.

• Antigen test sensitivity is generally lower than RT-PCR (84-97.6%) which means there is some risk for false-negative results.

• Antigen test specificity is typically as high as RT-PCR tests which means the likelihood of a false-positive result is low.

• Antigen tests that provide results inconsistent with the clinical context of patient presentation might be “confirmed” by another testing method such as molecular test.
Rapid Antigen Testing: When to Use?

- Antigen testing performance is influenced by infection prevalence in a community.

- Facilities using antigen testing should consider tracking infection prevalence based on a rolling average of positivity rate of COVID-19 over 7-10 days.
SARS-CoV-2 antigen tests are currently EUA-approved for testing of symptomatic or acutely ill individuals, so the following interpretive criteria are for symptomatic individuals:

<table>
<thead>
<tr>
<th>Pre-Test Probability</th>
<th>Result</th>
<th>Confirmation Needed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Negative</td>
<td>No</td>
</tr>
<tr>
<td>Low</td>
<td>Positive</td>
<td>Consider Confirmation</td>
</tr>
<tr>
<td>High</td>
<td>Negative</td>
<td>Consider Confirmation</td>
</tr>
<tr>
<td>High</td>
<td>Positive</td>
<td>No</td>
</tr>
</tbody>
</table>
Long Term Care
Disease Impact – United States as of 08.23.20

Resident Cases and Deaths

TOTAL COVID-19 CONFIRMED CASES
207,315

TOTAL COVID-19 SUSPECTED CASES
124,549

TOTAL COVID-19 DEATHS
51,700

• This rule establishes Nursing Home testing requirements for staff and residents. Specifically,
  • Facilities are required to test staff on a routine basis, during an outbreak, or if symptomatic.
  • Facilities are to test residents during an outbreak or if they are symptomatic. Routine testing of asymptomatic residents is not recommended by regulation.
• Facility staff is defined as employees, consultants, contractors, volunteers, and caregivers who provide care and services to residents on behalf of the facility, and students in the facility’s nurse aide training programs or from affiliated academic institutions.
• Testing of staff and residents with COVID-19 symptoms should continue.
Federal Department of Health and Human Services - CMS

- Facilities can meet the testing requirements through the use of rapid Point-of-Care (POC) diagnostic testing devices or through an arrangement with an offsite laboratory.
- The labs of choice may include Avera, LabCorp, Monument, or Sanford.
- Use the federal funds through the CARES Act to help support your routine testing efforts.
- Nursing Homes received federal funds recently of $2.5 Billion dollars specifically for testing.
- The South Dakota Public Health Lab will not conduct routine testing in Nursing Homes.
Federal Department of Health and Human Services - CMS

- Providers should have a testing plan for routine staff testing and outbreak testing of residents and staff.
- Continue Sentinel Testing if you do not have a POC device or arrangement with a lab for routine testing.
Federal Department of Health and Human Services - CMS

• County positivity rate will be sent out through the OLC Listserv every Monday
  • Community Activity Low (<5%) test all staff once per month.
  • Community Activity Medium (5-10%) test all staff once per week.
  • Community Activity High (>10%) test all staff twice per week.
  • This frequency presumes availability of Point of Care testing on-site at the nursing home or where off-site lab testing is available.

Federal Department of Health and Human Services - CMS

**Documentation**
- Symptomatic residents and staff.
- Identification of a new COVID case.
- Routine testing of staff.
- If you do not have access to a Point-of-Care testing device or a arrangement laboratory to support the CMS testing.
- If no access to a lab for testing, you can revert to Sentinel testing or PPS testing when responding to positive cases in their facility (like the current practice).
Community Mitigation
### Dashboard

#### New Cases Today
- **89**

#### Active Cases
- **951**

#### Recovered Cases
- **8,080**

#### Currently Hospitalized
- **43**

#### Ever Hospitalized
- **856**

#### Deaths
- **137**

#### Total Cases
- **9,168**

#### Total Persons Tested
- **116,374**

#### Total Tests
- **145,555**

#### % Progress (June Goal: 44,233 Tests)
- **97%**

#### % Progress (July Goal: 44,233 Tests)
- **106%**

#### % Progress (August Goal: 44,233 Tests)
- **9%**

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#### Test Positivity Rate

<table>
<thead>
<tr>
<th>Period</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Last 1 Day</td>
<td>7.5%</td>
</tr>
<tr>
<td>Last 7 Days</td>
<td>7.0%</td>
</tr>
<tr>
<td>Last 14 Days</td>
<td>6.6%</td>
</tr>
<tr>
<td>Cumulative</td>
<td>7.3%</td>
</tr>
</tbody>
</table>

*Test Positivity Rate: This rate is equal to the number of Positive Tests divided by Total Tests, within specified period of time.*

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#### 14-Day Trend of Positive Cases by Date Reported to SD-DOH

<table>
<thead>
<tr>
<th>Date Reported to SD-DOH</th>
<th>Positive Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jul 21</td>
<td>55</td>
</tr>
<tr>
<td>Jul 22</td>
<td>67</td>
</tr>
<tr>
<td>Jul 23</td>
<td>108</td>
</tr>
<tr>
<td>Jul 24</td>
<td>62</td>
</tr>
<tr>
<td>Jul 25</td>
<td>59</td>
</tr>
<tr>
<td>Jul 26</td>
<td>112</td>
</tr>
<tr>
<td>Jul 27</td>
<td>70</td>
</tr>
<tr>
<td>Jul 28</td>
<td>117</td>
</tr>
<tr>
<td>Jul 29</td>
<td>38</td>
</tr>
<tr>
<td>Jul 30</td>
<td>88</td>
</tr>
</tbody>
</table>

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#### County

- **All**
Supply Chain Management
All requests for PPE from DOH must be:

- Emailed to COVIDResourceRequests@state.sd.us,
- Faxed to 605.773.5942, or
- Called in to 605.773.3048 to ensure prioritization and coordination of requests.

- Do not duplicate your request by using all three means of communication.

- Any requests received through any other email or number will all be directed to email COVIDResourceRequests@state.sd.us OR call 605.773.3048 and requesting entities must provide information regarding their current facility status.
On-going Communication
Helpful sources of information:

covid.sd.gov

coronavirus.gov

SD COVID-19 Help Line:  800-997-2880
Communications

• SD-HAN: sdhan.sd.gov
• Epi Listserv
• Lab Listserv
• HAI Listserv
• OLC Listserv

Visit covid.sd.gov to subscribe
Questions?

Follow-up after the webinar
COVID Helpline: 800-997-2880
Epidemiology: 605-773-3737
Laboratory: 605-773-3368

COVID.sd.gov
COVIDSD@state.sd.us