2019 Novel Coronavirus (COVID-19)

South Dakota Department of Health

March 5th, 2020
This is an **emerging, rapidly evolving situation**. Information in this presentation is current as of March 4, 2020. Please check the South Dakota Department of Health website for the most current information and guidance.

Agenda

• Situation Update
• Laboratory Guidance
• Infection Prevention
• 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.
Emergence of Coronavirus

- Dec 31: Pneumonia of unexplained origin was first identified in Wuhan City, Hubei Province, China
  - Jan 7: World Health Organization (WHO) reported a novel coronavirus identified by China
  - Jan 30: WHO declares a Public Health Emergency

- COVID-19 – disease caused by the virus
- SARS-CoV-2 – the virus
Emergence of Coronavirus

• Emergence into U.S.
  • Jan 21: 1st US case confirmed (WA)
  • Jan 30: 6th US case confirmed; 1st person-to-person transmission (IL)
  • Jan 31: US Dept. of Health & Human Services declares a Public Health Emergency
  • Feb 26: 1st case of community spread in US (CA)
  • Feb 29: 1st US death (WA)
    1st Health care worker infection (WA)
    1st Long-term care facility outbreak (WA)
Coronavirus Situation – as of 03/04/2020

• **International** (76 countries)
  • 93,090 confirmed cases
  • 2,984 deaths

• **United States** (13 states)
  • 80 confirmed cases in U.S.
  • 16 likely person-to-person (40 under investigation)
  • 9 deaths

• **South Dakota**
  • 0 confirmed cases in South Dakota
  • 0 deaths
## PUI Definition

### Priority Level

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Clinical Features</th>
<th>Risk Exposure*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>Fever OR Cough OR Shortness of Breath</td>
<td>None identified</td>
</tr>
<tr>
<td>Medium</td>
<td>Fever OR Cough OR Shortness of Breath</td>
<td>Identified risk</td>
</tr>
<tr>
<td>High</td>
<td>Fever AND Cough OR Shortness of Breath</td>
<td>Identified risk</td>
</tr>
</tbody>
</table>

*Individual meets the risk exposure criterion if they have one of the following:

- Close contact to a laboratory-confirmed case within 14 days of symptom onset.
Disease Prevention Strategies

• Border containment
  – Traveler monitoring

• Community mitigation
  – Individual
    • Prevent exposure
    • Prevent spread
  – Community
    • Social distancing
    • Potential school closure
    • Consider event postponement or cancellation
  – Environmental
    • Regular cleaning high-touch surfaces and counters using normal cleaning products

“Don’t let the illness spread beyond you.” - Dr. Nancy Messonier, CDC
Laboratory Guidelines

• Required Materials
• Specimen Collection
• Packaging and Shipping
• Diagnostic Testing
• SARS-CoV-2 Results
• Archived Information
Laboratory Guidance: Required Materials

• Swabs:
  • **Acceptable:** Synthetic tip such as nylon or Dacron
  • **Acceptable:** Aluminum or plastic shaft
  • **Unacceptable:** Calcium alginate swabs
  • **Unacceptable:** Cotton swabs with wooden shafts

• Viral Transport Media (aka. VTM, UTM, M4):
  • Minimum of 2-3 ml required

• Sterile sputum cups

• Category B shipping supplies

• Collection kits are available from the SDPHL
Laboratory Guidance: Specimen Collection

• Required:
  • Nasopharyngeal (NP) swab in VTM:
    • Insert swab into the nostril parallel to the palate
    • Leave swab in place for a few seconds
    • Swab both nostrils with the same swab
  • Oropharyngeal (OP) swab in VTM:
    • Swab the posterior pharynx
    • Avoid the tongue
• Optional:
  • Sputum (if patient is producing)
Laboratory Guidance: Packaging/Shipping

• Specimens should be shipped to the SDPHL:
  • As a Category B, Biological Substance
  • On ice packs
  • With an accompanying requisition
• SDPHL courier service:
  • 877-434-9366
Laboratory Guidance: Diagnostic Testing

• COVID-19 PUIs must be tested for:
  • Common respiratory pathogens (e.g. Influenza, RSV)
  • SARS-CoV-2

• Testing offered by SDPHL:
  • Respiratory Pathogens Panel (multiplex PCR)
  • SARS-CoV-2 (CDC RT-PCR)
  • These tests will be offered at no charge
  • Duplicate specimens are required if SDPHL is asked to perform respiratory pathogen testing and SARS-CoV-2 testing
Laboratory Guidance: SARS-CoV-2 Results

• Results for SARS-CoV-2 testing performed by SDPHL:
  • “Presumptive Positive”
  • “Not Detected”
  • “Inconclusive”
  • “Invalid”
• Results will be called to submitting laboratory
• Official report will be faxed to submitting laboratory
Laboratory Guidance: Archived Information

https://doh.sd.gov/lab/medical-microbiology/
Infection Prevention
Infection Prevention

Isolation Requirements: Standard, Contact, & Airborne Precautions, Including the Use of Eye Protection

Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus Disease 2019 (COVID-19)

1. Minimize Chance for Exposures
   – Before Arrival
   – Upon Arrival and During the Visit

2. Adherence to Standard, Contact, and Airborne Precautions, Including the Use of Eye Protection
   – Patient Placement
   – Hand Hygiene
   – Personal Protective Equipment
     • Gloves
     • Gowns
     • Respiratory Protection
     • Eye Protection
   – Use Caution When Performing Aerosol-Generating Procedures
   – Diagnostic Respiratory Specimen Collection
   – Duration of Isolation Precautions for PUIs and confirmed COVID-19 patients
Continued…

3. Manage Visitor Access and Movement Within the Facility
4. Implement Engineering Controls
5. Monitor and Manage Ill and Exposed Healthcare Personnel
6. Train and Educate Healthcare Personnel
7. Implement Environmental Infection Control
8. Establish Reporting within Healthcare Facilities and to Public Health Authorities

Appendix: Additional Information about Respirators and Facemasks
Guidance for Specific Settings & Scenarios

- Strategies to Prevent the Spread of COVID-19 in Long-Term Care Facilities (LTCF)
- The Society for Post-Acute and Long-Term Care Medicine - COVID-19 in PALTC settings
- CDC/NIOSH - Expedient Methods for Surge Airborne Isolation within Healthcare Settings during Response to a Natural or Manmade Epidemic
Environmental Cleaning and Disinfection

• Routine cleaning and disinfection procedures are appropriate for SARS-CoV-2 in healthcare settings, including those patient-care areas in which aerosol-generating procedures are performed. Products with EPA-approved emerging viral pathogens claims are recommended for use against SARS-CoV-2. Management of laundry, food service utensils, and medical waste should also be performed in accordance with routine procedures.

• Coronaviruses are enveloped viruses, meaning they are one of the easiest to kill with the appropriate disinfectant product. (EPA Link)

Strategies to Optimize Supply

• Strategies for Optimizing the Supply of N95 Respirators
  • Conventional Capacity Strategies
  • Contingency Capacity Strategies
  • Crisis/Alternate Strategies
PPE Use & Notes from Response Hospitals

Rough usage estimates from hospitals caring for COVID-19 patients
- 6 sets of PPE Per Shift when patient feeling relatively well
- 20 sets per shift when patient was more symptomatic

Initial Response  ➔  “Right sized” Response
Supply Chain Management
Supply Chain Management: CDC Guidance

• Checklist for Healthcare Facilities: Strategies for Optimizing the Supply of N95 Respirators during the COVID-19 Response
  – CDC guidance previously sent out – Last reviewed Mar 2

• Release of Stockpiled N95 Filtering Facepiece Respirators Beyond the Manufacturer-Designated Shelf Life: Considerations for the COVID-19 Response
  – CDC guidance previously sent out – Updated Feb 28
Supply Chain Management: SD Preparations

• South Dakota Health Care Preparedness Coalition caches
  – 4 Chapters in SD

• South Dakota DOH PPE / Medical caches
  – Central cache
  – Forward deployed caches

• South Dakota Medical Shelter Trailers
  – 10 locations across the state

• Federal Mobile Medical Station
  – 250 bed

Note: We will host a teleconference series focused on supply chain management starting next week. Invitations will go out to Healthcare Coalitions.
On-Going Communications

• SD Health Alert Network: [https://sdhan.sd.gov](https://sdhan.sd.gov)

• Please log in and be sure your contact information is up-to-date. Click on Forgot Username or Password? for assistance.

• New accounts: Please click on the Register button and complete the form. If you unsure of your organization, please select “Other” and you will be placed in the proper organization and role when accepted.
**SDDOH will host a weekly teleconference for laboratory and infection prevention professionals. Invitation for this teleconference series will be distributed using the SD Laboratory and HAI listservs the week of March 9.**
SD HAI Listserv

Subscribe

https://doh.sd.gov/diseases/hai/
SD Epi Listserv

Subscribe

https://doh.sd.gov/
Questions?

Follow-up after the webinar
General: 800-592-1861
Epidemiology: 605-773-3737
Laboratory: 605-773-3368

Live starting Monday (Mar 9)
COVIDSD@state.sd.us