Thank you for joining our COVID-19 response webinar. We will begin in a few minutes.

In the meantime, please your mute your phonelines.
COVID-19 Provider Webinar

Patsy Kelso, PhD – State Epidemiologist
Julia Brennan, APN, MPH – Epidemiologist

February 21, 2020
Logistics

Please make sure your line is muted

Do not put the call on hold

If you are having connection issues, try hanging up and calling back in

We have set aside time Q&A at the end - submit questions through the chat box

Slides will be available online following this call
Objectives

Background on COVID-19
International and national outbreak response
Health care provider role
    Identify
    Isolate
    Inform
Monitoring health care personnel
Testing for COVID-19
Treatment and management
Coronaviruses

Can cause the common cold

Strains that evolved from animal infections and now infect humans
  MERS-CoV, SARS-CoV, and SARS-CoV-2

These strains cause MERS, SARS, and COVID-19
What we’ve learned about COVID-19 infections so far:

Infections vary from asymptomatic to severe (~20% severe)

Greater risk of severe disease among immunocompromised, older adults, and individuals with comorbidities

Most common symptoms at onset:
- fever (83%–98%)
- cough (46%–82%)
- myalgia & fatigue (11%–44%)
- shortness of breath (31%)

Transmission: person-to-person via respiratory droplets

Coronavirus testing with a PCR panels has NO cross reactivity with COVID-19
What we are still learning:

Incubation period: average 4–7 days, may range up to 14 days

Infectiousness unknown
  - Pre-symptomatic
  - Post illness
  - Asymptomatic infections

Transmissibility: $R_0$ estimated between 1.5–3.6

Severity: ~20% severe illness and ~2% fatal
Global Situation
There is no community-based transmission in the United States.
U.S. has restricted entry of people who have been in China in the last 14 days

All flights from China are limited to 11 airports

Incoming travelers are undergoing enhanced health screenings

Evacuees from highest risk areas are going to U.S. military bases

CDC notifies the Health Department of travelers returning to Vermont

The Health Department uses CDC risk assessment tools to determine monitoring needed
Collaboration needed during the COVID-19 response

Health care providers are the frontline response team for identifying and treating patients

Public health working to limit additional spread
Recommendations for Health Care Settings

- Identify
- Isolate
- Inform
Identify

Ask everyone with respiratory symptoms about:
  Contact with a person with a possible COVID-19 infection
  Travel to areas with COVID-19 — China highest risk

Instruct all patients with respiratory symptoms to wear a face mask at triage

Use CDC Person Under Investigation (PUI) guidance to evaluate patients
# Current PUI Criteria

<table>
<thead>
<tr>
<th>Clinical Features</th>
<th>&amp;</th>
<th>Epidemiologic Risk</th>
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<tbody>
<tr>
<td>Fever(^1) or signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)</td>
<td>AND</td>
<td>Any person, including health care workers, who has had close contact(^2) with a laboratory-confirmed(^3,4) 2019-nCoV patient within 14 days of symptom onset</td>
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<tr>
<td>Fever(^1) and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath)</td>
<td>AND</td>
<td>A history of travel from Hubei Province, China(^5) within 14 days of symptom onset</td>
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<tr>
<td>Fever(^1) and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization(^4)</td>
<td>AND</td>
<td>A history of travel from mainland China(^5) within 14 days of symptom onset</td>
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Make it easy for patients to practice respiratory hygiene.

Alcohol based hand sanitizer
Tissues
Masks
Posters or visual aids
  Practice coughing etiquette and hand hygiene

Refer patients with questions to:
Visit: www.healthvermont.gov/COVID-19
Call: 2-1-1
Isolate

All suspect COVID-19 patients should be placed in an AIIR.

If AIIR unavailable, have patient wear a mask and isolate in private room with door closed.

All staff entering room should wear all recommended PPE.
PPE and Infection Prevention

Eye protection (goggles or face shield)
Standard precautions
Contact precautions (gown, gloves)
Airborne precautions (fit-tested N95 or PAPR)

Use dedicated equipment for confirmed cases
   Dispose OR clean and disinfect per manufacturer’s instructions

Limit staff entering room and keep log
Immediately:
Alert your infection preventionist and call the Health Department for:
  PUI
  Suspected COVID-19 infection
  Contact with a possible COVID-19 infection
Infection Prevention and Preparedness Recommendations

Create a plan to track and monitor all staff who interacted with people with confirmed COVID-19 infections

Monitor PPE stock and create a plan to optimize the use of PPE at your facility
   Exclude HCP not directly involved in patient care
   Limit face to face interactions with patients
   Strategic N95 fit testing

Identify airborne isolation rooms or plan for transferring if appropriate

Communicate plans with staff so all staff are familiar and prepared
Monitoring Health Care Providers

Facilities will need to track all HCPs with direct contact to a PUI with pending lab results or a confirmed case.

All HCPs who had direct contact with a confirmed case or their infectious secretions will need to be tracked for 14 days.

Even if all PPE recommendations are followed, HCPs will still need to be monitored.

Your IP will work with VDH to ensure proper monitoring and tracking for HCPs.
Treating a Person Being Monitored

Travelers undergoing monitoring have been instructed to
- Call their provider before seeking healthcare
- Wear a mask when presenting for care

If evaluated for respiratory illness, all infection prevention recommendations for COVID-19 should be followed

If symptoms unrelated to respiratory illness, PPE use should be guided by that health concern
Testing PUI for the Virus that Causes COVID-19

Real-time RT-PCR testing at CDC (through Health Department Lab)
  Testing at VDH Lab in the future

Collect upper and lower respiratory specimens

Collect specimens as soon as possible once PUI is identified, regardless of symptom onset or other respiratory test results

Wear all recommended PPE when collecting specimens

If recommended PPE is not available, patient should be transferred for testing
Outpatient Management or Hospitalization

Treatment and evaluation should happen in an AIIR with all recommended PPE

If a PUI is stable enough for outpatient management, watch closely for clinical deterioration
   Risk factors for deterioration include older age, comorbid conditions and immunocompromising conditions

Before deciding on outpatient management, please consult with the Health Department

If a patient requires hospitalization, they should be in an AIIR
   If AIIR unavailable, transfer to another facility
**Clinical Course**

Severity ranging from mild to severe respiratory illness

Clinical deterioration may be more likely during the second week of illness

20%–30% of hospitalized cases with pneumonia required intensive care for respiratory support

4%–15% of hospitalized cases with pneumonia have been fatal
Laboratory and Radiology Findings

Common laboratory findings:
- Leukopenia
- Leukocytosis
- Lymphopenia
- Elevated ALT and AST
- Normal procalcitonin levels

Chest CT:
- Bilateral findings
- Multiple areas of consolidation
- Ground glass opacities
No recommended antiviral treatments for COVID-19
Supportive care for management of complications
Corticosteroids should only be used if indicated for other reasons
Discontinuing Precautions

Case-by-case, in consultation with the Health Department
Resources

Call the Health Department 24/7 at 802-863-7240

More resources at:

www.healthvermont.gov/covid-19
www.cdc.gov/covid19

Immunization and Infectious Disease Conference
April 7, 2020 in Burlington

Health Alerts (HAN) vthan@vermont.gov
Thank you

Catherine Knott, MPH, Vector-borne and Zoonotic Disease Epidemiologist
Infectious Disease Epidemiology Program
Vermont Department of Health
Q&A Session

Please write your questions in the chat box.
Thank you!

Still have questions?

Email: AHS.VDHPublicCommunication@vermont.gov
Visit: www.healthvermont.gov/COVID-19
Call: 802-863-7240