

# COVID-19: Overview and Preparedness Plan

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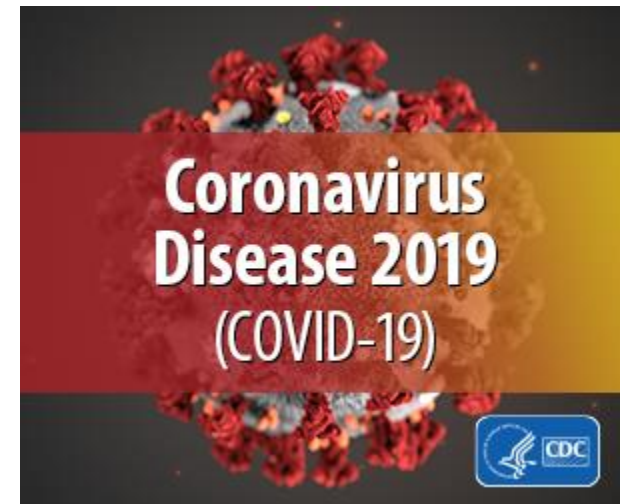
Last Updated: Feb. 27, 2020

# Overview

- This presentation is intended to provide health care providers and Beaumont Health employees an overview of the 2019 novel coronavirus (SARS-CoV-2) and the disease it causes (COVID-19)
- For specific questions or concerns not addressed here, please refer to the Beaumont Health “Infection Prevention” intranet page, the CDC’s coronavirus website, or contact your local infection prevention team

# Novel Coronavirus: SARS-CoV-2

- Coronaviruses are common in many different species of animals; SARS-CoV-2 has its origin in bats
- Rarely, animal coronaviruses can infect people and then spread between people such as with MERS-CoV, SARS-CoV



# COVID-19: Epidemiology

- Tens of thousands of cases reported; most in central China, Hubei province
- The incubation period is estimated to be approximately 5 days; range is 2-14 days
- Risk factors for severe illness are not yet clear; older patients and those with chronic medical conditions at higher risk
- Most cases have occurred in adults (median age 59 years)

# COVID-19: Transmission

- **Person-to-person** spread
  - Close contact, touching
  - Respiratory droplets from coughing or sneezing
- Contact with **contaminated surfaces** (fomites)
- Persons are thought to be most contagious when they are sickest
  - Some spread of virus may be possible in asymptomatic individuals

# COVID-19: Clinical Manifestations

- At illness onset:
  - Fever (83–98%)
  - Cough (46%–82%)
  - Myalgia or fatigue (11–44%)
  - Shortness of breath (31%)
- Other symptoms:
  - Sore throat
  - Headache
  - Diarrhea/gastrointestinal symptoms

# COVID-19: Prevention

- General recommendations:
  - Avoid close contact with people who are sick
  - Stay home when you are sick
  - Cover your cough or sneeze with a tissue
  - Clean and disinfect frequently touched objects and surfaces using a household disinfectant
- For health care providers:
  - Practice CONTACT and AIRBORNE precautions (gown, gloves, N-95 respirator, eye protection: goggles or face shield)
  - Practice good hand hygiene before and after contact with a patient's environment
- *The CDC does NOT recommend that people who are healthy wear a facemask to protect themselves from respiratory diseases, including COVID-19*

# COVID-19: Person under investigation (PUI) definition

Clinical Features	&	Epidemiologic Risk
Fever <sup>1</sup> <b>or</b> signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)	<b>AND</b>	Any person, including health care workers <sup>2</sup> , who has had close contact <sup>3</sup> with a laboratory-confirmed <sup>4</sup> COVID-19 patient within 14 days of symptom onset
Fever <sup>1</sup> <b>and</b> signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization	<b>AND</b>	A history of travel from <b>CHINA, JAPAN, SOUTH KOREA, ITALY or IRAN</b> within 14 days of symptom onset
Fever <sup>1</sup> with severe acute lower respiratory illness (e.g., pneumonia, ARDS) requiring hospitalization <sup>4</sup> and without alternative explanatory diagnosis (e.g., influenza) <sup>6</sup>	<b>AND</b>	No source of exposure has been identified



# If a patient meets suspected PUI criteria...

- Place a **surgical mask** on the patient
- Move the patient to an **airborne isolation** room immediately
  - If an airborne isolation room is not available, move the patient to a private room
- **Immediately** notify infection prevention personnel at your facility and notify the local or state health department

**All Beaumont campuses are equipped  
to handle patients with confirmed or  
suspected COVID-19**

# COVID-19: Testing

- All testing is currently conducted through state and federal health authorities
- **Lower respiratory (sputum) and upper respiratory (NP and OP)** samples are collected
- Be sure to also test for usual respiratory viruses (flu/RSV, respiratory virus panel)
- Refer to Beaumont Health Lab Bulletin for details



# COVID-19: Treatment

- Treatment is primarily supportive care: fluids, fever-reducing medications, etc.
- There is no proven antiviral treatment for COVID-19
  - Several off-label antivirals have been used, with varying degrees of success
- Vaccine investigations are in early stages

# COVID-19: Employee Health

- Health care providers should **practice STANDARD, AIRBORNE, and CONTACT precautions** when caring for patients with confirmed or suspected COVID-19
- **Only essential health care providers should enter a room** of a patient with confirmed or suspected COVID-19
  - Non-essential employees should avoid potential exposure
- **Health care providers should log entry in and out of rooms** of patients with confirmed or suspected COVID-19

# COVID-19: Employee Health

- Beaumont Health has an Employee Health policy for defining exposure risk after exposure to a patient under investigation
- In certain instances of exposure, work restrictions may be necessary
- For more information, contact your local infection prevention team, or contact Employee Health



# Ambulatory Sites

In the event a suspected PUI arrives at an ambulatory facility:

1. Place a **mask** on the patient
2. Move the patient to a **private room**, away from others
3. Contact your **local infection prevention team**, and contact the **local or state health department**
4. Disposition: depending upon the severity of illness, the patient may be advised to report to the EC, or may be advised to return home for self-monitoring/quarantine
5. If transportation of the patient is required, be sure to **notify the receiving facility**

# Transporting COVID-19 Patients

- Transportation of patients should be minimized, and should only include medically necessary tests/procedures
- If a patient requires transportation, transport personnel should wear all recommended PPE (gloves, a gown, N95 respirator, and eye protection)
- Receiving health care providers should be notified in advance of patient transfer
- Beaumont Health has a standard operating procedure for transporting patients with confirmed or suspected COVID-19



# COVID-19: Special populations

- **Pregnant women:**
  - Limited data available about COVID-19 and pregnancy
  - Pregnant women could be at risk for more severe illness compared to the general population (as seen in SARS and MERS-CoV)
- **Infants/children:**
  - Almost all COVID-19 cases have occurred among adults; infection in children is relatively uncommon, and those affected tend to have milder symptoms

# COVID-19: Preparedness Plan

- Beaumont Health has Infection Prevention teams at each campus with the most up to date information on COVID-19
- **COVID-19 committee** meeting regularly
- **Education sessions and briefings** being given by local infectious disease physicians at various sites
- **Tabletop drills** being conducted throughout BH campuses
- **Weekly check-ins** with federal, state and local health authorities

# COVID-19: Communication Plan

- **Resources, policies and documents** posted on Beaumont Intranet page
- **Regular internal communications** (e.g., e-mail) among employees and leaders

# COVID-19: Contact Information

- Beaumont Infection Prevention teams:
  - Dearborn (313) 593-7657
  - Farmington Hills (947) 521-8315
  - Grosse Pointe (313) 473-1715
  - Royal Oak (248) 551-4040
  - Taylor (313) 295-5049
  - Trenton (734) 671-3283
  - Troy (248) 964-7144
  - Wayne (734) 467-4497

# COVID-19: Contact Information

- Health Department Contact Information:
  - Macomb (586) 783-8190
  - Oakland (248) 858-1286
  - State of Michigan (517) 335-8165
  - Washtenaw (734) 544-6700
  - Wayne (734) 727-7078

# COVID-19: References

- CDC has the following information available at:  
<https://www.cdc.gov/coronavirus/2019-nCoV/hcp/index.html>
  - *Interim Guidance for Public Health Personnel Evaluating Persons Under Investigation (PUIs) and Asymptomatic Close Contacts of Confirmed Cases at Their Home or Non-Home Residential Settings*
  - *Interim Guidance for Collection and Submission of Postmortem Specimens from Deceased Persons Under Investigation (PUI) for COVID-19, February 2020*
  - *Evaluating and Reporting Persons Under Investigation (PUI)*
  - *Healthcare Infection Control Guidance*
  - *Clinical Care Guidance*
  - *Home Care Guidance*
  - *Guidance for EMS*
  - *Healthcare Personnel with Potential Exposure Guidance*
  - *Inpatient Obstetric Healthcare Guidance*

# COVID-19: References

- Beaumont has the following references available through the BH intranet:
  - *MDHHS PUI Form – Must be completed when evaluating a suspected PUI!*
  - *COVID-19 “One-Pager” reference*
  - *COVID-19 Checklist (EC)*
  - *COVID-19 Checklist (Patient transport)*
  - *Guidance for N-95 Use in Patients with Confirmed or Suspected COVID-19*
  - *Flowchart to Identify and Assess COVID-19*
  - *APIC Coronavirus Fact Sheet*
- There are also links to:
  - *Infection Prevention Policies and Procedures*
  - *Isolation quick reference*
  - *Isolation signs*
  - *Hand hygiene pledge*

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