2019 Novel Coronavirus (2019-nCoV)
Presentation Outline

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- Coronavirus
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  - Transmission
  - Treatment
  - Case Definition
- Patient Placement
- Personal Protective Equipment (PPE)
- Environmental Cleaning
- Laboratory Specimens
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Background

• A cluster of cases of pneumonia was reported in Wuhan, China on December 31, 2019, caused by a new Coronavirus.

• This new strain is called 2019 Novel Coronavirus or 2019-nCoV.
Coronavirus (general)

- Common in different species of animals
- Human coronaviruses usually cause uncomplicated upper respiratory tract infections (ie. common cold)
- Has been implicated in more serious recent outbreaks, including SARS and MERS

Severity of illness variable: can cause more severe illness in

- Immune compromised people
- The very young and the very old
- People with cardiac/respiratory disease
2019-nCoV Facts

Symptoms (variable)
- Fever
- Cough
- Shortness of breath

Treatment
- No specific treatment or vaccine
- Supportive care

2019-nCoV Facts (2)

• Transmission
  – Human to human is possible, but level of infectiousness unclear currently
  – Incubation period appears to be within 14 days, but likely shorter (ie. 5-6 days)
  – Virus appears to spread via close contact and/or large droplets (ie. within 2 metres)
As of January 26, 2020 thousands of confirmed cases of 2019-nCoV reported in China.

Hundreds of these cases “severe”

106 attributable deaths to date (Jan. 28/20)

There have been reported cases in several countries

First presumptive Canadian case identified January 25, 2020
Current Situation

• At this time, all cases have been related to travel to and from Wuhan, China.

• Risk remains low for Canada, but more cases expected
Case Definition

• with fever (over 38 degrees Celsius) and/or new onset of (or exacerbation of chronic) cough
  AND

• who meets the 2019-nCoV exposure criteria
  AND

• in whom laboratory diagnosis of 2019-nCoV is inconclusive, not available, or negative (if specimen quality or timing is suspect) or in whom the laboratory test for 2019-nCoV was positive but not confirmed by the National Microbiology Laboratory (NML)
Exposure Criteria

• Travel to an affected area in the 14 days before onset of illness
  OR
• Close contact with a confirmed or probable case of 2019-nCoV within 14 days before their illness onset
  OR
• Close contact with a person with acute respiratory illness who has been to an affected area within 14 days prior to their illness onset
  OR
• Laboratory exposure to biological material (e.g. primary clinical specimens, virus culture isolates) known to contain 2019-nCoV.
Patient Placement

• Isolation
  • Contact + Droplet precautions with placement in negative pressure room, if available*
  • Please use dedicated equipment for suspect/confirmed cases
  • *Because of potential for aerosol generating medical procedures
Personal Protective Equipment

- Surgical mask with eye protection
- AAMI level 2 fluid resistant gown
- Gloves (nitrile 12 inch)
- N95 and eye protection for aerosol generating procedures
Environmental Cleaning

- Clear room signage must be in place
- Standard hospital grade disinfectants effective
- Twice a day room cleaning recommended
Laboratory Specimens

• Please call MOH on call and Microbiologist on call before collecting anything!

• In general, the following specimens will be required*:
  – 1. Nasopharyngeal swab +/- sputum
  – 2. Blood for serology
  – 3. Urine
  – 4. Stool
  – *subject to change based on new information
Demonstrations

- Donning and doffing
- NP swab collection
Reporting Requirements

• All suspect cases should be reported immediately to
  – Medical Officer of Health on call
  – Microbiologist on call
  – Infection Prevention and Control
  – Infectious Diseases Physician on call
Thank You

• Questions?