



Emerging Respiratory Virus Bulletin – January 25, 2020

Dear Colleagues -

Update RE: Expansion of 2019 novel coronavirus (2019-nCoV)

Please see the update below regarding expansion of 2019 novel coronavirus (2019-nCoV) within China and abroad. Please share with others as you deem appropriate. Please note that each of these bulletins are also posted on our British Columbia Centre for Disease Control (BCCDC) website, [here](#).

KEY MESSAGES:

1. The number of confirmed 2019-nCoV cases reported from China and abroad has increased substantially, with recognized human-to-human transmission. However, the risk to British Columbians remains low at this time.
2. Outside of China, confirmed cases of 2019-nCoV have been reported from several other countries, including first report of a presumptive confirmed case from Canada (Ontario) and two confirmed cases from the United States (Washington State and Illinois). Most (but not all) imported cases had direct history of travel to Wuhan City (including the presumptive confirmed case in Canada), with three instances of secondary human-to-human transmission outside of Wuhan.
3. Although on January 23 the World Health Organization concluded that the 2019-nCoV outbreak does not yet constitute a Public Health Emergency of International Concern (PHEIC), all countries have been instructed to prepare for containment.
4. The Provincial Health Officer of British Columbia (BC) confirms that 2019-nCoV is a reportable condition under the Public Health Act in BC and any suspect cases (including anyone for whom testing is requested) must be reported to the local Medical Health Officer.
5. Clinicians in BC are now asked to screen patients with fever and acute respiratory illness for history of travel to **Hubei Province (where Wuhan City is located)** in the 14 days prior to symptom onset (note, a change beyond Wuhan City) and to notify their local Medical Health Officer of such patients.

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6. Patients under investigation for 2019-nCoV should be managed with contact and droplet precautions (including eye protection); additional precautions including N95 respirators with eye protection should be used during aerosol-generating procedures. The attached guidelines from the Provincial Infection Control Network of BC (PICNet) reinforce that nasopharyngeal (NP) swabs and throat swabs can be performed using contact and droplet precautions with surgical mask and eye protection, and do not require the use of an N95 respirator.
7. The BCCDC Public Health Laboratory (PHL) has updated laboratory guidance for 2019-nCoV diagnostic testing. Such testing requires notification and consultation with the local Medical Health Officer and the BCCDC PHL Medical Microbiologist on-call. Please see the attached for updated guidance.

SITUATION REPORT:

The 2019-nCoV situation is highly dynamic. Confirmed case counts globally are increasing rapidly. Tallies provided below are as of mid-day, January 25, 2020 and include 1439 confirmed cases with 42 deaths (per case fatality of 3%) globally. This is a substantial increase compared to the 237 cases and 3 deaths reported in our bulletin earlier this week on January 20, 2020.

China (n=1406; 42 deaths)

Of the 1439 cases globally, 1406 (98%) are from regions of China as shown in the attached **Map**. Of the total global tally, 572/1439 (40%) have come from Wuhan City and 761/1439 (53%) from Hubei Province (includes Wuhan City). The number of cases in China reported from outside of Hubei Province has also increased substantially since our last bulletin on January 20, 2020 (i.e. from 20 cases to 645 cases). Currently, only Tibet remains without confirmed cases.

Males and older adults appear to be disproportionately affected among cases for whom that information is available. To date the youngest recorded ages among cases are 2 years and 10 years, the latter reportedly identified as a confirmed case (within a family cluster) who was asymptomatic but with radiographic evidence of pneumonia. Recall that milder illness in children and asymptomatic presentations were also reported in a few patients with SARS-CoV.

The illness due to 2019-nCoV presents mainly with fever, fatigue and cough. About 25-30% of cases have been in critical condition. There have been 42 deaths reported to date, all among confirmed cases from China, including 40 from Hubei province and one each from the provinces of Heilongjiang and Hebei. Among these deaths are an otolaryngologist who died January 25; it is unclear if he had been treating patients with the disease.

Details are available on-line for 34 of the deaths and we have reviewed these individual reports this morning. Of them, 25/33 (76%) are male (one unknown) with age range of 48 to 89 years and median age of 70 years. Of the 34 reviewed deaths, about two-thirds had mention of some underlying comorbidity.

For a review of the first 41 hospitalized cases in China, published this week in the Lancet see: <https://www.thelancet.com/pb-assets/Lancet/pdfs/S0140673620301835.pdf>

Elsewhere (n=33; 0 deaths)

Outside of China, 33 confirmed cases of 2019-nCoV have been reported from eleven other countries of: **Asia** (Japan (3), Malaysia (4), Nepal (1), Singapore (4), South Korea (2), Thailand (7), Vietnam (2)); **Europe** (France (3)); **North America** (Canada (1 presumptive confirmed), United States (2)); and **Oceania** (Australia (4)).

Of the 33 imported cases, we have been able to find travel information for 30/33 (details pending on 3 from Thailand). Of these 30, cases, a history of travel to Wuhan City was cited for all but three – this is not surprising given that screening globally has thus far focused on Wuhan travel history. There are three cases indicative of human-to-human transmission outside of Wuhan including: one case from Australia who had traveled to China but not to Wuhan City, but who did have contact with a sick person from Wuhan; and two cases (one from France and one from Vietnam) who were family members of cases with Wuhan travel history.

The cases in North America all had travel history to Wuhan. The US cases have been reported from Washington and Illinois. The presumptively confirmed Canadian case was reported today from Ontario – a man in his fifties who became ill with respiratory illness on January 22nd and was hospitalized on January 23rd. He flew from Wuhan to Guangzhou and from there, to Toronto. He is currently in stable condition and identified contacts are in self-isolation. Those involved in his care, including paramedics, are reported to have donned full protective gear.

2019-nCoV TRANSMISSIBILITY ESTIMATES

Researchers from the WHO Collaborating Centre for Infectious Disease Modelling at Imperial College in the United Kingdom have estimated a basic reproduction number (R_0) for the 2019-nCoV based on various assumptions about the number of cases initially infected by animals. Based on their estimate of 4000 cases infected by January 18th 2020, R_0 would be 2.6 (uncertainty range 1.5-3.5). Recognizing uncertainty around underlying assumptions, this estimate of R_0 for 2019-nCoV is similar to that of SARS-CoV. The estimate reinforces that the outbreak will not stop on its own and that control measures will have to prevent more than 60% of all transmissions to halt it.

See: <https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/news--wuhan-coronavirus/>

RISK ASSESSMENT AND RESPONSE

The 2019-nCoV originated in an animal reservoir, likely bats with a possible intermediary animal host. However, most of the cases are now likely due to person-to-person transmission, including recognized instances of spread among family clusters and within the hospital setting.

Although initial cases of atypical pneumonia were moderate-to-severe, with the availability of diagnostic tests more cases with mild illness have also been detected.

As reinforced by the World Health Organization (WHO) following the Emergency Committee meeting it convened under the International Health Regulations on January 22 and 23, the emergence of this disease is an urgent issue. Efforts to contain the virus can prevent it from becoming an established human pathogen.

Although the WHO concluded that the 2019-nCoV outbreak does not yet constitute a Public Health Emergency of International Concern (PHEIC), all countries have been instructed to prepare for containment, including active surveillance to enable early detection and appropriate case and contact follow up. See: [https://www.who.int/news-room/detail/23-01-2020-statement-on-the-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news-room/detail/23-01-2020-statement-on-the-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov))

In China, strong new containment measures have been applied with a travel ban covering 15 cities in the province of Hubei. Authorities in several regions of China, including Beijing, have cancelled Lunar New Year (Spring Festival) celebrations, and Hong Kong has closed schools until February 17. Major sightseeing locations and public venues (e.g. theaters) have been shut down by some local authorities. China has also announced the construction of two new hospitals intended for the care of 2019-nCoV cases.

RECOMMENDATIONS FOR BRITISH COLUMBIA

Recommendations for British Columbians are reinforced by recent events and are especially important given the start of Lunar New Year celebrations, also known as the Spring Festival, on January 25, 2020. In particular:

1. Travelers should consult the Public Health Agency of Canada health notice which has been upgraded to Level 2 (practice enhanced precautions). See: <https://travel.gc.ca/travelling/advisories/pneumonia-china>

2. The Provincial Health Officer of BC confirms that 2019-nCoV is a reportable condition under the Public Health Act in BC and any suspect cases (including anyone for whom testing is requested) must be reported to the local MHO.
3. To facilitate early detection and containment, clinicians in British Columbia should notify their local Medical Health Officer, Infection Control Practitioner and/or Medical Microbiologist as soon as possible about patients presenting with:
 - Fever and acute respiratory illness, with or without pneumonia AND
 - Recent travel to **Hubei Province (includes Wuhan City), China** within 14 days prior to symptom onset OR
 - Another potential relevant exposure (e.g. close contact with someone who was ill and had recently travelled to **Hubei Province (includes Wuhan City), China**)

As always, patients presenting with severe acute respiratory illness (SARI) without known etiology and with a history of travel anywhere within the 14 days prior to illness onset should also be notified to the local Medical Health Officer.

4. Patients under investigation should be managed with contact and droplet precautions (including eye protection); additional precautions including N95 respirators with eye protection should be used during aerosol-generating procedures (e.g. open suctioning of respiratory tract, intubation, bronchoscopy, cardiopulmonary resuscitation).
 - **PLEASE NOTE:** the attached guidelines from the Provincial Infection Control Network of British Columbia (PICNet) reinforce that nasopharyngeal (NP) swabs and throat swabs can be performed using contact and droplet precautions with surgical mask and eye protection, and do not require the use of an N95 respirator.
5. The BCCDC Public Health Laboratory (PHL) has updated laboratory guidance for 2019-nCoV diagnostic testing. Such testing requires notification and consultation with the local Medical Health Officer and the BCCDC PHL Medical Microbiologist on-call. Please see the attached for updated details.

ADDITIONAL RESOURCES:

WHO: <https://www.who.int/westernpacific/emergencies/novel-coronavirus>

US CDC: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

Public Health Agency of Canada: <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection.html>

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