2019-nCoV update 31st January 2020

Date: Friday 31st January 2020
Sources: Multiple, see end of update.

Case numbers
As of this morning China has reported 9,692 cases, of which 213 had a fatal outcome. 127 cases are reported from other countries. The number of new cases in China reported over the last 24 hours were 1,921, and the day before 1,796.

WHO Travel advice update 27th January (1)
Exit screening
- Conduct exit screening at international airports and ports in the affected areas of China,
- Encourage screening in China at domestic airports, railway stations, and long-distance bus stations as necessary;

Advice for entry screening in countries/areas without transmission of the novel coronavirus 2019-nCoV that choose to perform entry screening
The evidence from the past outbreaks shows that effectiveness of entry screening is uncertain, but it may support risk communication strategy by providing information to travellers from affected countries/areas to reduce the general risk of acute respiratory infections, and to seek medical attention early if they develop symptoms compatible with the infection.
Previous advice with regards to procedures for an ill traveller detected on board a plane and requirements for IHR capacities at Points of Entry remains unchanged (see WHO Advice published on 10 January 2020).

WHO declare Public Health Emergency of International Concern, PHEIC (2)
The Director-General declared that the outbreak of 2019-nCoV constitutes a PHEIC and accepted the Committee’s advice and issued this advice as Temporary Recommendations under the IHR (2).
All countries should be prepared for containment, including active surveillance, early detection, isolation and case management, contact tracing and prevention of onward spread of 2019-nCoV infection, and to share full data with WHO (2).

WHO procedure for screening contacts (3)
The WHO has released a procedure for screening contacts of the first case of infection in order to better investigate incubation period.

NEJM Perspective pathogenicity and epidemiology (4)
It appears that 2019-nCoV may be less pathogenic than MERS-CoV and SARS-CoV (see table). However, the virus’s emergence raises an important question: What is the role of
overall pathogenicity in our ability to contain emerging viruses, prevent large-scale spread, and prevent them from causing a pandemic or becoming endemic in the human population?

**ECDC statement following reported confirmed case of 2019-nCoV in Germany (5)**
At this stage of the on-going outbreak in the Hubei province in China, it is likely that there will be more imported cases in Europe. As a consequence, it could be expected to see (limited) local transmission in Europe. A single detected case in Europe does not change the overall picture for Europe, nor does it change the assessment that there is currently a moderate likelihood of importation of cases of 2019-nCoV to the EU/EEA.

**Novel Coronavirus(2019-nCoV) WHO Situation Report - 9 (6)**
https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200128-sitrep-8-ncov-cleared.pdf?sfvrsn=8b671ce5_2

**Incubation period**
The average period from onset of symptoms to isolation of 2019-nCoV and SARS cases were 2.9 and 4.2 days, respectively. The R values of 2019-nCoV were 2.90 (95%CI: 2.32-3.63) and 2.92 (95%CI: 2.28-3.67) estimated using EG and ML respectively, while the corresponding R values of SARS-CoV were 1.77 (95%CI: 1.37-2.27) and 1.85 (95%CI: 1.32-2.49) (7).
Another study estimate that the mean incubation period to be 5.8 (4.6 - 7.9, 95% CI) days, ranging from 1.3 to 11.3 days (2.5th to 97.5th percentile) (8).

**CDC Travel warning (9)**
The 28th January CDC issued a “level 3” warning: Avoid Nonessential Travel. CDC recommends that travellers avoid all nonessential travels to China. The WHO does not advise any travel restrictions.

**Airport screening not effective (10)**
Although several of the internally detected cases were picked up through entry screening, this is not considered to be very effective. A study by Quilty et al. evaluated the effectiveness of exit and entry screening for 2019-nCoV infection. In the baseline scenario, it was estimated that 63.4% (95%CI: 51.9 to 74.6) of infected travellers would not be detected, depending on the incubation period, sensitivity of exit and entry screening, and the proportion of cases which are asymptomatic. Therefore, a risk is that entry screening provides a false sense of security.

**Sequence analysis and estimation of recombination event (11)**
The 2019-nCoV although closely related to BatCoV RaTG13 sequence throughout the genome (sequence similarity 96.3%), shows discordant clustering with the Bat-SARS-like coronavirus sequences. The new coronavirus provides a new lineage for almost half of its genome, with no close genetic relationships to other viruses within the subgenus of
In the literature


Sources

1. Updated WHO advice for international traffic in relation to the outbreak of the novel coronavirus 2019-nCoV

2. Waiting for outcome of WHO PHEIC meeting


4. **A Novel Coronavirus Emerging in China — Key Questions for Impact Assessment**

5. **ECDC statement following reported confirmed case of 2019-nCoV in Germany.**

   https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200129-sitrep-9-ncov-v2.pdf?sfvrsn=e2c8915_2


8. **The incubation period of 2019-nCoV infections among travellers from Wuhan, China**
   Backer JA, Klinkenberg D, Wallinga J. https://www.medrxiv.org/content/10.1101/2020.01.27.20018986v1
doi: https://doi.org/10.1101/2020.01.27.20018986


10. **Effectiveness of airport screening at detecting travellers infected with 2019-nCoV.**
    Quilty B et al. Centre for Mathematical Modelling of Infectious Diseases, Department of Infectious Disease Epidemiology, London School of Hygiene and Tropical Medicine, United Kingdom.

11. **Full-genome evolutionary analysis of the novel corona virus (2019-nCoV) rejects the hypothesis of emergence as a result of a recent recombination event**
EITaF Comment

1. The WHO yesterday declared the 2019-nCoV outbreak a "Public Health Emergency of International Concern" PHEIC, under the International Health Regulations, IHR.

Even though there are still many uncertainties, it is clear that:

2. There is extensive human-to-human transmission in China.

3. Visit to Wuhan is a very high risk exposure situation and quarantine has been imposed on arrivals from Wuhan even for asymptomatic individuals including nationals evacuated from Wuhan to their home country.

4. The mortality is about 2% compared to 9.5% for SARS.

5. Transmission outside China has been very limited with only 7 secondary cases reported so far.

6. The reported new cases in China per 24-hour are almost the same for the past 3 days (1800, 1797, 1921), which is encouraging and may indicate that the major restrictions of internal travel in China have started to work.

7. Travel to Wuhan (Hubei Province) should be strongly discouraged.

8. Travelers should be aware of screening predeparture from China and upon arrival in any country.

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