**Coronavirus disease 2019 (COVID-19)**

**Situation Report – 32**

**Data as reported by 21 February 2020\***

**HIGHLIGHTS**

* No new countries reported cases of COVID-19 in the past 24 hours.
* Through the International Food Safety Authorities Network (INFOSAN), national food safety authorities are seeking more information on the potential for persistence of SARS-CoV-2, which causes COVID-19, on foods traded internationally as well as the potential role of food in the transmission of the virus. Currently, there are investigations conducted to evaluate the viability and survival time of SARS-CoV-2. As a general rule, the consumption of raw or undercooked animal products should be avoided. Raw meat, raw milk or raw animal organs should be handled with care to avoid cross-contamination with uncooked foods.

**SITUATION IN NUMBERS**

**total and new cases in last 24 hours**

**Globally**

76 769 confirmed (1021 new)

**China**

75569 confirmed (894 new)

2239 deaths (118 new)

**Outside of China**

1200 confirmed (127 new)

1. countries

8 deaths

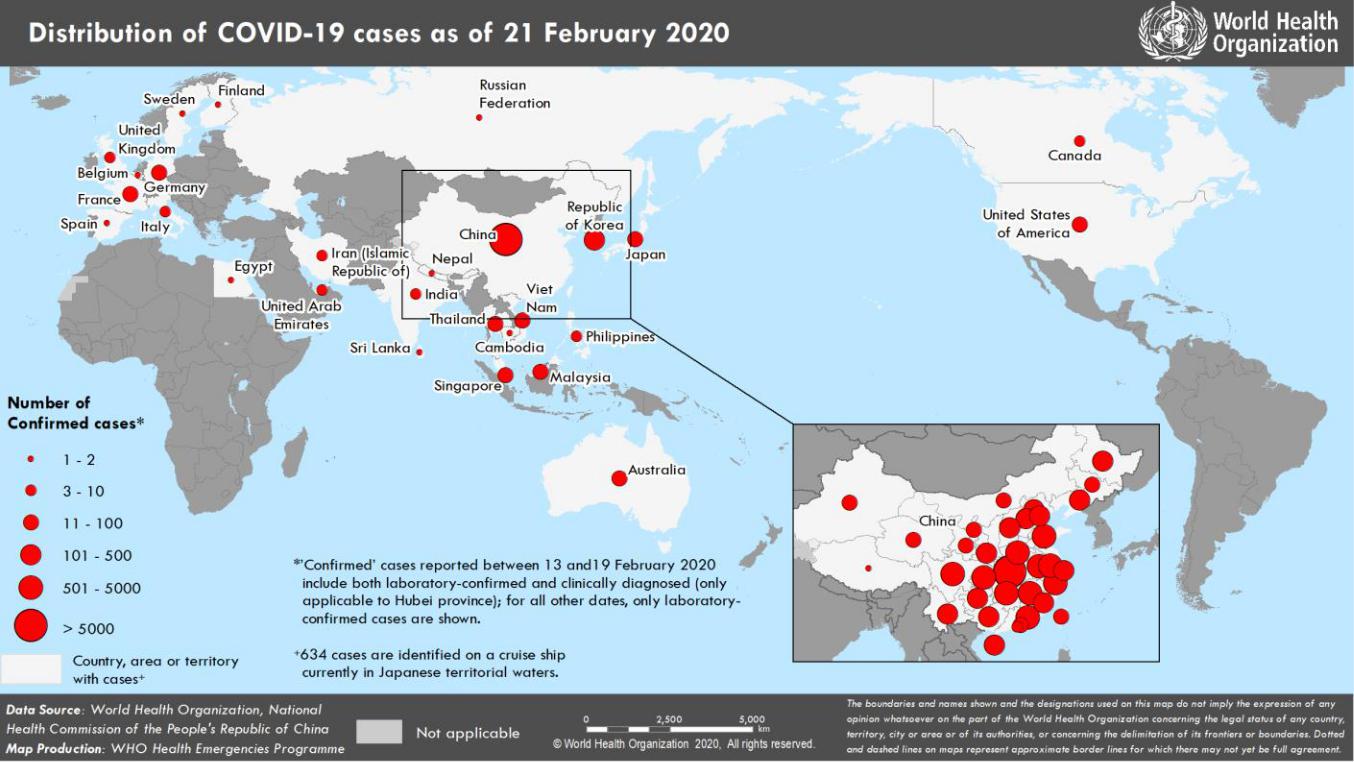
**WHO RISK ASSESSMENT**

China Very High

Regional Level High

Global Level High

**Figure 1. Countries, territories or areas with reported confirmed cases of COVID-19, 21 February 2020**



\*The situation report includes information provided by national authorities as of 10 AM Central European Time

**SUBJECT IN FOCUS: Food related considerations**

The new COVID-19 is caused by the virus SARS-CoV-2. The most likely ecological reservoirs for SARS-CoV-2 are bats, but it is believed that the virus jumped the species barrier to humans from another intermediate animal host. This intermediate animal host could be a domestic food animal, a wild animal, or a domesticated wild animal which has not yet been identified.

WHO continues to collaborate with experts, Member States and other partners to identify gaps and research priorities for the control of COVID-19, and provide advice to countries and individuals on prevention measures. National food safety authorities have been following this event with the International Food Safety Authorities Network (INFOSAN) Secretariat to seek more information on the potential for persistence of the virus on foods traded internationally and the potential role of food in the transmission of the virus. Experiences from previous outbreaks of related coronaviruses, such as the Severe Acute Respiratory Syndrome coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV) show that transmission through food consumption did not occur. To date, there have not been any reports of transmission of SARS-CoV-2 virus through food. However, concerns were expressed about the potential for these viruses to persist on raw foods of animal origin.

Currently, there are investigations conducted to evaluate the viability and survival time of SARS-CoV-2. In general, coronaviruses are very stable in a frozen state according to studies of other coronaviruses, which have shown survival for up to two years at -20°C. Studies conducted on SARS-CoV ad MERS-CoV indicate that these viruses can persist on different surfaces for up to a few days depending on a combination of parameters such as temperature, humidity and light. For example, at refrigeration temperature (4°C), MERS-CoV can remain viable for up to 72 hours. Current evidence on other coronavirus strains shows that while coronaviruses appear to be stable at low and freezing temperatures for a certain period, food hygiene and good food safety practices can prevent their transmission through food. Specifically, coronaviruses are thermolabile, which means that they are susceptible to normal cooking temperatures (70°C). Therefore, as a general rule, the consumption of raw or undercooked animal products should be avoided. Raw meat, raw milk or raw animal organs should be handled with care to avoid cross-contamination with uncooked foods.

SARS-CoV and MERS-CoV are susceptible to the most common cleaning and disinfection protocols and there is no indication so far that SARS-Cov-2 behaves differently.

Additional recommendations and materials on food safety are available on WHO and Food and Agriculture Organization of the United Nations (FAO) websites, such as:

1. [WHO: Five Keys to Safer Food Manual](https://www.who.int/foodsafety/publications/5keysmanual/en/) o [WHO: Guide on Safe Food for Travellers](https://www.who.int/foodsafety/publications/travellers/en/)

o [FAO and Pan American Health Organization (PAHO): Food Handlers Manual](http://www.fao.org/3/i7321en/I7321EN.pdf)

o [WHO: Q&A on Coronavirus](https://www.who.int/news-room/q-a-detail/q-a-coronaviruses)

**SURVEILLANCE**

**Table 1. Confirmed and suspected cases of COVID-19 acute respiratory disease reported by provinces, regions and cities in China, 21 February 2020**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Province/** |  |  | **Population** |  |  |  |  |  | **Daily** | |  |  |  |  | **Cumulative** | | | |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Region/** |  |  |  |  | **Confirmed** |  |  | **Suspected** |  |  |  |  |  | **Confirmed** |  |  |  |  |  |
|  |  |  | **(10,000s)** |  |  |  |  |  |  | **Deaths** |  |  |  |  | **Deaths** |  |  |
|  | **City** |  |  |  |  | **cases** |  |  | **cases** |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | **cases** |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Hubei |  |  | 5917 |  |  | 631 |  |  | 1279 |  |  | 115 |  |  | 62662 |  |  | 2144 |  |  |
|  | Guangdong | | 11346 | |  | 1 | |  | 1 | |  | 0 | |  | 1333 | |  | 5 | |  |  |
|  | Henan |  |  | 9605 |  |  | 2 |  |  | 31 |  |  | 0 |  |  | 1267 |  |  | 19 |  |  |
|  | Zhejiang | | 5737 | |  | 28 | |  | 4 | |  | 1 | |  | 1203 | |  | 1 | |  |  |
|  | Hunan |  |  | 6899 |  |  | 1 |  |  | 5 |  |  | 0 |  |  | 1011 |  |  | 4 |  |  |
|  | Anhui | | 6324 | |  | 1 | |  | 1 | |  | 0 | |  | 988 | |  | 6 | |  |  |
|  | Jiangxi |  |  | 4648 |  |  | 0 |  |  | 0 |  |  | 0 |  |  | 934 |  |  | 1 |  |  |
|  | Shandong | | 10047 | |  | 202 | |  | 14 | |  | 0 | |  | 748 | |  | 4 | |  |  |
|  | Jiangsu |  |  | 8051 |  |  | 0 |  |  | 1 |  |  | 0 |  |  | 631 |  |  | 0 |  |  |
|  | Chongqing | | 3102 | |  | 7 | |  | 28 | |  | 1 | |  | 567 | |  | 6 | |  |  |
|  | Sichuan |  |  | 8341 |  |  | 5 |  |  | 15 |  |  | 0 |  |  | 525 |  |  | 3 |  |  |
|  | Heilongjiang | | 3773 | |  | 3 | |  | 1 | |  | 0 | |  | 479 | |  | 12 | |  |  |
|  | Beijing |  |  | 2154 |  |  | 1 |  |  | 41 |  |  | 0 |  |  | 396 |  |  | 4 |  |  |
|  | Shanghai | | 2424 | |  | 1 | |  | 62 | |  | 0 | |  | 334 | |  | 2 | |  |  |
|  | Hebei |  |  | 7556 |  |  | 1 |  |  | 0 |  |  | 0 |  |  | 308 |  |  | 5 |  |  |
|  | Fujian | | 3941 | |  | 0 | |  | 0 | |  | 0 | |  | 293 | |  | 1 | |  |  |
|  | Guangxi |  |  | 4926 |  |  | 1 |  |  | 15 |  |  | 0 |  |  | 246 |  |  | 2 |  |  |
|  | Shaanxi | | 3864 | |  | 0 | |  | 8 | |  | 0 | |  | 245 | |  | 1 | |  |  |
|  | Yunnan |  |  | 4830 |  |  | 2 |  |  | 21 |  |  | 1 |  |  | 174 |  |  | 2 |  |  |
|  | Hainan | | 934 | |  | 0 | |  | 16 | |  | 0 | |  | 168 | |  | 4 | |  |  |
|  | Guizhou |  |  | 3600 |  |  | 0 |  |  | 3 |  |  | 0 |  |  | 146 |  |  | 2 |  |  |
|  | Shanxi | | 3718 | |  | 1 | |  | 5 | |  | 0 | |  | 132 | |  | 0 | |  |  |
|  | Tianjin |  |  | 1560 |  |  | 1 |  |  | 37 |  |  | 0 |  |  | 131 |  |  | 3 |  |  |
|  | Liaoning | | 4359 | |  | 0 | |  | 20 | |  | 0 | |  | 121 | |  | 1 | |  |  |
|  | Jilin |  |  | 2704 |  |  | 0 |  |  | 4 |  |  | 0 |  |  | 91 |  |  | 1 |  |  |
|  | Gansu | | 2637 | |  | 0 | |  | 1 | |  | 0 | |  | 91 | |  | 2 | |  |  |
|  | Xinjiang |  |  | 2487 |  |  | 0 |  |  | 0 |  |  | 0 |  |  | 76 |  |  | 1 |  |  |
|  | Inner Mongolia | | 2534 | |  | 0 | |  | 0 | |  | 0 | |  | 75 | |  | 0 | |  |  |
|  | Ningxia |  |  | 688 |  |  | 0 |  |  | 1 |  |  | 0 |  |  | 71 |  |  | 0 |  |  |
|  | Hong Kong SAR | | 745 | |  | 3 | |  | 0 | |  | 0 | |  | 68 | |  | 2 | |  |  |
|  | Taipei and environs |  |  | 2359 |  |  | 2 |  |  | 0 |  |  | 0 |  |  | 26 |  |  | 1 |  |  |
|  | Qinghai | | 603 | |  | 0 | |  | 0 | |  | 0 | |  | 18 | |  | 0 | |  |  |
|  | Macao SAR |  |  | 66 |  |  | 0 |  |  | 0 |  |  | 0 |  |  | 10 |  |  | 0 |  |  |
|  | Xizang | | 344 | |  | 0 | |  | 0 | |  | 0 | |  | 1 | |  | 0 | |  |  |
|  | **Total** |  |  | **142823** |  |  | **894** |  |  | **1614** |  |  | **118** |  |  | **75569** |  |  | **2239** |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Table 2. Countries, territories or areas outside China with reported laboratory-confirmed COVID-19 cases and deaths. Data as of 21 February 2020**

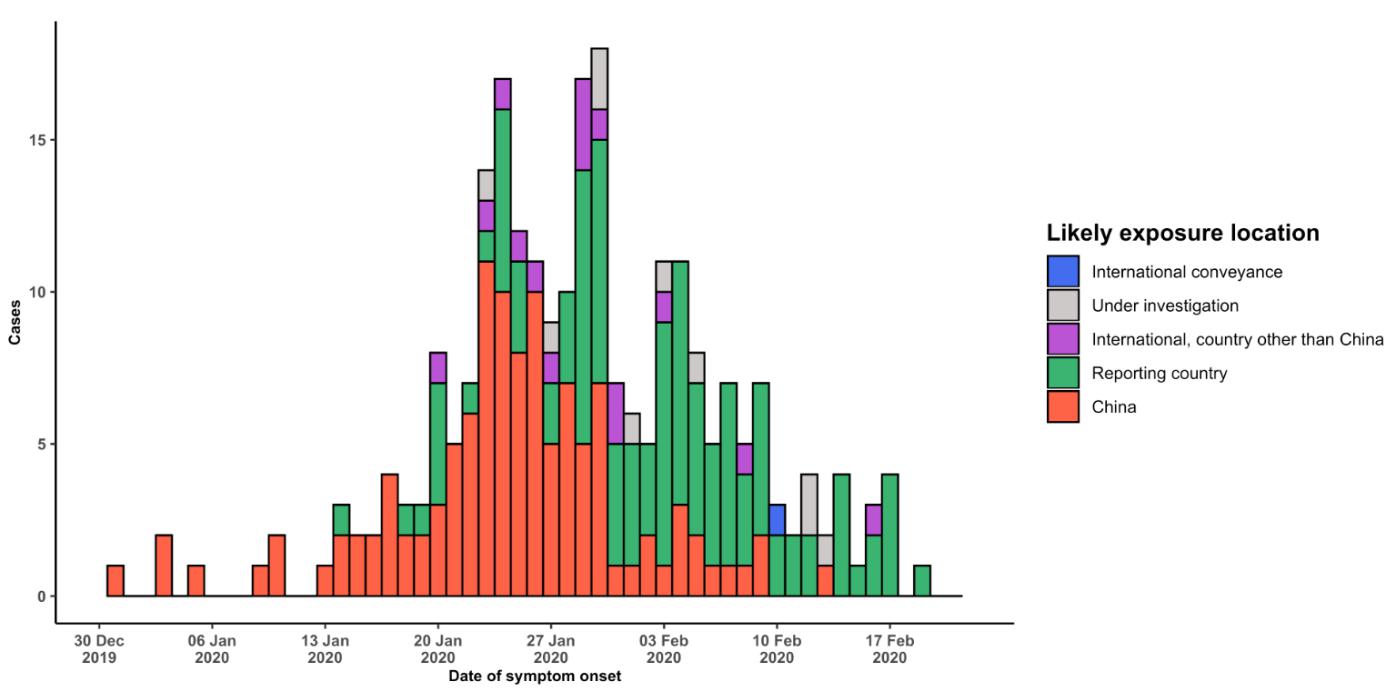
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  | **Likely place of exposure†** | | | | | | |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  | **Confirmed\*** | | |  |  |  |  |  | **Outside** |  |  | **In** |  |  | **Total cases with site of** | |  |  | **Total** |  |  |
|  | **Country/Territory/Area** |  |  |  |  |  |  |  | **reporting** |  |  |  |  | **transmission under** | |  |  | **deaths** |  |  |
|  |  |  | **cases (new)** | | |  |  | **China** |  |  |  |  | **reporting** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | **country and** |  |  |  |  | **investigation (new)** | |  |  | **(new)** |  |  |
|  |  |  |  |  |  |  |  |  | **(new)** |  |  |  |  | **country** |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | **outside** |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  | **(new)** |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | **China (new)** |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Western Pacific Region** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Republic of Korea | | 204 | | (100) | |  | 13 (0) | |  | 4 (0) | |  | 158 (86) | |  | 29 | | (14) |  | 1 (0) | |  |  |
|  |  | |  | | |  |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Japan | | 93 | | | (8) |  | 27 (0) | |  | 5 (2) | |  | 57 (5) | |  | 4 | | (1) |  | 1 (0) | |  |  |
|  |  | |  | | |  |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Singapore | | 85 | | | (1) |  | 23 (0) | |  | 0 (0) | |  | 55 (1) | |  | 7 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | | |  |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Malaysia | | 22 | | | (0) |  | 17 (0) | |  | 1 (0) | |  | 2 (0) | |  | 2 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | | |  |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Australia | | 17 | | | (2) |  | 12 (0) | |  | 2 (2) | |  | 3 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | | |  |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Viet Nam | | 16 | | | (0) |  | 8 (0) | |  | 0 (0) | |  | 8 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Philippines | | 3 | | (0) | |  | 3 (0) | |  | 0 (0) | |  | 0 (0) | |  | 0 | | (0) |  | 1 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Cambodia | | 1 | | (0) | |  | 1 (0) | |  | 0 (0) | |  | 0 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **South-East Asia Region** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Thailand | | 35 | | | (0) |  | 23 (0) | |  | 0 (0) | |  | 5 (0) | |  | 7 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | India | | 3 | | (0) | |  | 3 (0) | |  | 0 (0) | |  | 0 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Nepal | | 1 | | (0) | |  | 1 (0) | |  | 0 (0) | |  | 0 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Sri Lanka | | 1 | | (0) | |  | 1 (0) | |  | 0 (0) | |  | 0 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Region of the Americas** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | United States of | | 15 | | | (0) |  | 13 (0) | |  | 0 (0) | |  | 2 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  | America | |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Canada | | 8 | | (0) | |  | 7 (0) | |  | 0 (0) | |  | 0 (0) | |  | 1 | | (0) |  | 0 (0) | |  |  |
|  |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **European Region** | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Germany | | 16 | | | (0) |  | 2 (0) | |  | 0 (0) | |  | 14 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | | |  |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | France | | 12 | | | (0) |  | 5 (0) | |  | 0 (0) | |  | 7 (0) | |  | 0 | | (0) |  | 1 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | The United Kingdom | | 9 | | (0) | |  | 2 (0) | |  | 6 (0) | |  | 1 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Italy | | 3 | | (0) | |  | 3 (0) | |  | 0 (0) | |  | 0 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Russian Federation | | 2 | | (0) | |  | 2 (0) | |  | 0 (0) | |  | 0 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Spain | | 2 | | (0) | |  | 0 (0) | |  | 2 (0) | |  | 0 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Belgium | | 1 | | (0) | |  | 1 (0) | |  | 0 (0) | |  | 0 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Finland | | 1 | | (0) | |  | 1 (0) | |  | 0 (0) | |  | 0 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Sweden | | 1 | | (0) | |  | 1 (0) | |  | 0 (0) | |  | 0 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Eastern Mediterranean Region** | | | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | United Arab Emirates | | 9 | | (0) | |  | 6 (0) | |  | 0 (0) | |  | 2 (0) | |  | 1 | | (0) |  | 0 (0) | |  |  |
|  | Iran (Islamic Republic of) | | 5 | | (3) | |  | 0 (0) | |  | 0 (0) | |  | 5 (3) | |  | 0 | | (0) |  | 2 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | Egypt | | 1 | | (0) | |  | 0 (0) | |  | 0 (0) | |  | 1 (0) | |  | 0 | | (0) |  | 0 (0) | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  |  | |  | |  | |  |  | |  |  | |  |  | |  |  | |  |  |  | |  |  |
|  | **Subtotal for all regions** |  |  | 566 | (114) | |  |  | 175 (0) |  |  | 20 (4) |  |  | 320 (95) |  |  | 51 | (15) |  |  | 6 (0) |  |  |
|  | International | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | conveyance‡ (Diamond | | 634 | | | (13) |  | 0 (0) | |  | 0 (0) | |  | 0 (0) | |  | 634 (13) | | |  | 2 (0) | |  |  |
|  | Princess) | |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **Grand total** |  |  | **1200** | | **(127)** |  |  | **175 (0)** |  |  | **20 (4)** |  |  | **320 (95)** |  |  | **685 (28)** | |  |  | **8 (0)** |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

\*Case classifications are based on [WHO case definitions](https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov)) for COVID-19.

**†**Location of transmission is classified based on WHO analysis of available official data and may be subject to reclassification as additional data become available.

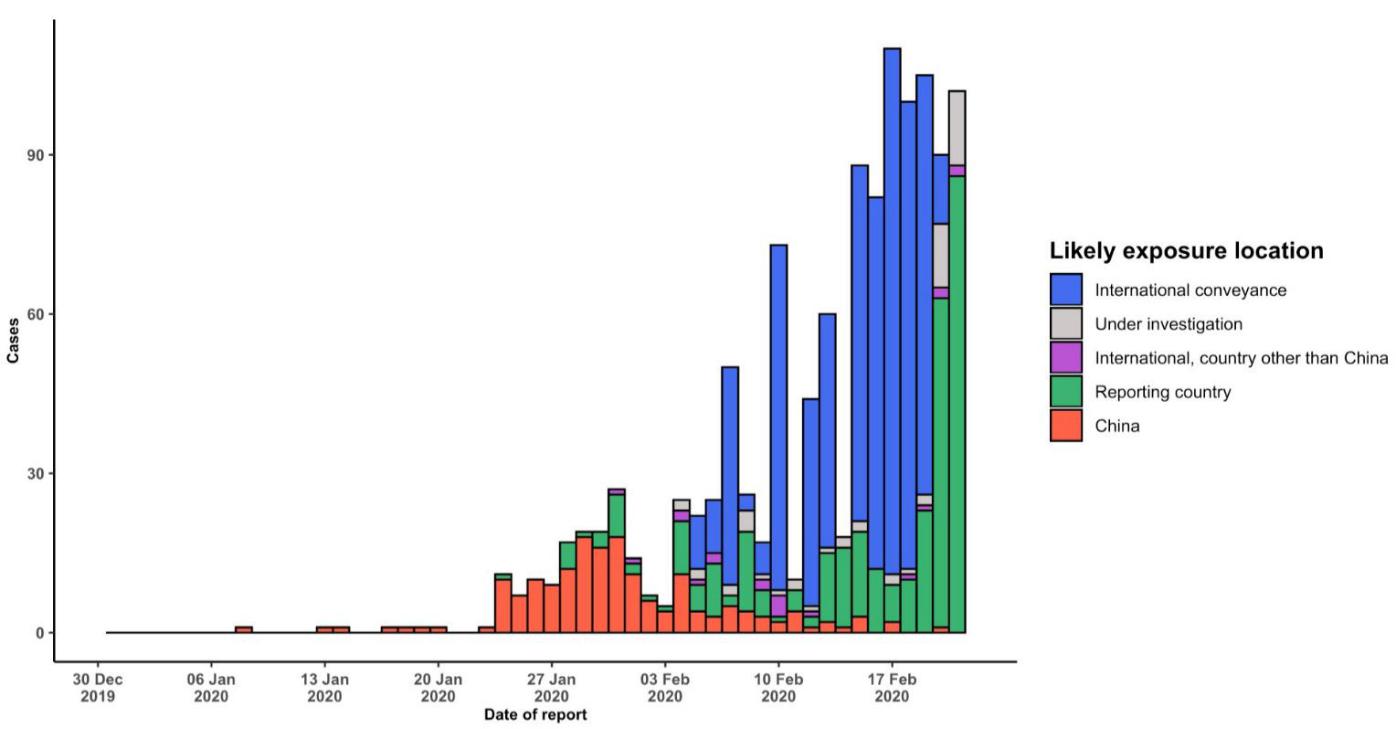
‡Cases identified on a cruise ship currently in Japanese territorial waters.

**Figure 2. Epidemic curve of COVID-19 cases (n=249) identified outside of China, by date of onset of symptoms and likely exposure location, 21 February 2020**



Note for figure 2: Of the 1200 cases reported outside China, 30 were detected while apparently asymptomatic. For the remaining 1170 cases, information on date of onset is available only for the 249 cases presented in the epidemiologic curve.

**Figure 3. Epidemic curve of COVID-19 cases (n=1200) identified outside of China, by date of report and likely exposure location, 21 February 2020**



**STRATEGIC OBJECTIVES**

WHO’s strategic objectives for this response are to:

* Limit human-to-human transmission including reducing secondary infections among close contacts and health care workers, preventing transmission amplification events, and preventing further international spread from China\*;
* Identify, isolate and care for patients early, including providing optimized care for infected patients;
* Identify and reduce transmission from the animal source;
* Address crucial unknowns regarding clinical severity, extent of transmission and infection, treatment options, and accelerate the development of diagnostics, therapeutics and vaccines;
* Communicate critical risk and event information to all communities and counter misinformation;
* Minimize social and economic impact through multisectoral partnerships.

\*This can be achieved through a combination of public health measures, such as rapid identification, diagnosis and management of the cases, identification and follow up of the contacts, infection prevention and control in health care settings, implementation of health measures for travelers, awareness-raising in the population and risk communication.

**PREPAREDNESS AND RESPONSE**

* To view all technical guidance documents regarding COVID-19, please go to [this webpage.](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance)
* WHO is working closely with International Air Transport Association (IATA) and have jointly developed a guidance document to provide advice to cabin crew and airport workers, based on country queries. The guidance can be found on the [IATA webpage.](https://www.iata.org/en/programs/safety/health/diseases/#tab-2)
* WHO has developed a protocol for the investigation of early cases (the “[First Few X (FFX) Cases and contact](https://www.who.int/publications-detail/the-first-few-x-(ffx)-cases-and-contact-investigation-protocol-for-2019-novel-coronavirus-(2019-ncov)-infection) [investigation protocol for 2019-novel coronavirus (2019-nCoV) infection](https://www.who.int/publications-detail/the-first-few-x-(ffx)-cases-and-contact-investigation-protocol-for-2019-novel-coronavirus-(2019-ncov)-infection)”). The protocol is designed to gain an early understanding of the key clinical, epidemiological and virological characteristics of the first cases of COVID-19 infection detected in any individual country, to inform the development and updating of public health guidance to manage cases and reduce potential spread and impact of infection.
* WHO has been in regular and direct contact with Member States where cases have been reported. WHO is also informing other countries about the situation and providing support as requested.
* WHO has developed interim guidance for [laboratory diagnosis,](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/laboratory-guidance) [advice on the use of masks during home care and](https://www.who.int/publications-detail/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak) [in health care settings in the context of the novel coronavirus (2019-nCoV) outbreak,](https://www.who.int/publications-detail/advice-on-the-use-of-masks-in-the-community-during-home-care-and-in-healthcare-settings-in-the-context-of-the-novel-coronavirus-(2019-ncov)-outbreak) [clinical management](https://www.who.int/publications-detail/clinical-management-of-severe-acute-respiratory-infection-when-novel-coronavirus-(ncov)-infection-is-suspected)[,](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/infection-prevention-and-control) [infection prevention and control in health care settings,](https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/infection-prevention-and-control) [home care for patients with suspected novel](https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts) [coronavirus,](https://www.who.int/publications-detail/home-care-for-patients-with-suspected-novel-coronavirus-(ncov)-infection-presenting-with-mild-symptoms-and-management-of-contacts) [risk communication and community engagement](https://www.who.int/publications-detail/risk-communication-and-community-engagement-readiness-and-initial-response-for-novel-coronaviruses-(-ncov)) and [Global Surveillance for human infection with](https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov)) [novel coronavirus (2019-nCoV).](https://www.who.int/publications-detail/global-surveillance-for-human-infection-with-novel-coronavirus-(2019-ncov))
* WHO has prepared [disease commodity package](https://www.who.int/publications-detail/disease-commodity-package---novel-coronavirus-(ncov)) that includes an essential list of biomedical equipment, medicines and supplies necessary to care for patients with 2019-nCoV.
* WHO has provided recommendations to reduce risk of [transmission from animals to humans.](https://www.who.int/health-topics/coronavirus/who-recommendations-to-reduce-risk-of-transmission-of-emerging-pathogens-from-animals-to-humans-in-live-animal-markets)
* WHO has published an [updated advice for international traffic in relation to the outbreak of the novel](https://www.who.int/ith/2019-nCoV_advice_for_international_traffic/en/) [coronavirus 2019-nCoV.](https://www.who.int/ith/2019-nCoV_advice_for_international_traffic/en/)
* WHO has activated of R&D blueprint to accelerate diagnostics, vaccines, and therapeutics.
* WHO has developed online courses on the following topics: [A general introduction to emerging respiratory](https://openwho.org/courses/introduction-to-ncov) [viruses,](https://openwho.org/courses/introduction-to-ncov) including novel coronaviruses (available in [French,](https://openwho.org/courses/introduction-au-ncov) [Chinese,](https://openwho.org/courses/introduction-to-ncov-ZH) and [Spanish](https://openwho.org/courses/introduccion-al-ncov)); [Critical Care of Severe Acute](https://openwho.org/courses/severe-acuterespiratory-infection) [Respiratory Infections;](https://openwho.org/courses/severe-acuterespiratory-infection) and [Health and safety briefing for respiratory diseases - ePROTECT](https://openwho.org/courses/eprotect-acute-respiratory-infections)
* WHO is providing guidance on early investigations, which are critical to carry out early in an outbreak of a new virus. The data collected from the protocols can be used to refine recommendations for surveillance and case definitions, to characterize the key epidemiological transmission features of COVID-19, help understand spread,

severity, spectrum of disease, impact on the community and to inform operational models for implementation of countermeasures such as case isolation, contact tracing and isolation. Several protocols are available here: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance/early-investigations>

* WHO is working with its networks of researchers and other experts to coordinate global work on surveillance, epidemiology, modelling, diagnostics, clinical care and treatment, and other ways to identify, manage the disease and limit onward transmission. WHO has issued interim guidance for countries, which are updated regularly.
* WHO is working with global expert networks and partnerships for laboratory, infection prevention and control, clinical management and mathematical modelling.

**RECOMMENDATIONS AND ADVICE FOR THE PUBLIC**

During previous outbreaks due to other coronavirus (Middle-East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS), human-to-human transmission occurred through droplets, contact and fomites, suggesting that the transmission mode of the COVID-19 can be similar. The basic principles to reduce the general risk of transmission of acute respiratory infections include the following:

* Avoiding close contact with people suffering from acute respiratory infections.
* Frequent hand-washing, especially after direct contact with ill people or their environment.
* Avoiding unprotected contact with farm or wild animals.
* People with symptoms of acute respiratory infection should practice cough etiquette (maintain distance, cover coughs and sneezes with disposable tissues or clothing, and wash hands).
* Within health care facilities, enhance standard infection prevention and control practices in hospitals, especially in emergency departments.

WHO does not recommend any specific health measures for travellers. In case of symptoms suggestive of respiratory illness either during or after travel, travellers are encouraged to seek medical attention and share their travel history with their health care provider.