

# Coronavirus disease 2019 (COVID-19) Situation Report – 59

Data as reported by national authorities by 00:00 CET 19 March 2020

## HIGHLIGHTS

- Seven new countries/territories/areas (African Region [3], Eastern Mediterranean Region [1], European Region [1], and Region of the Americas [2]) have reported cases of COVID-19.
- The number of confirmed cases worldwide has exceeded 200 000. It took over three months to reach the first 100 000 confirmed cases, and only 12 days to reach the next 100 000.
- A new protocol to investigate the extent of COVID-19 infection in the population, as determined by positive antibody tests in the general population has been developed. The protocol is titled the [Population-based age-stratified seroepidemiological investigation protocol for COVID-19 virus infection](#). See *Subject in Focus* for details.

## SITUATION IN NUMBERS total (new) cases in last 24 hours

### Globally

209 839 confirmed (16 556)  
8778 deaths (828)

### Western Pacific Region

92 333 confirmed (488)  
3377 deaths (20)

### European Region

87 108 confirmed (10 221)  
4084 deaths (591)

### South-East Asia Region

657 confirmed (119)  
23 deaths (14)

### Eastern Mediterranean Region

19 518 confirmed (1430)  
1161 deaths (150)

### Region of the Americas

9144 confirmed (4166)  
119 deaths (50)

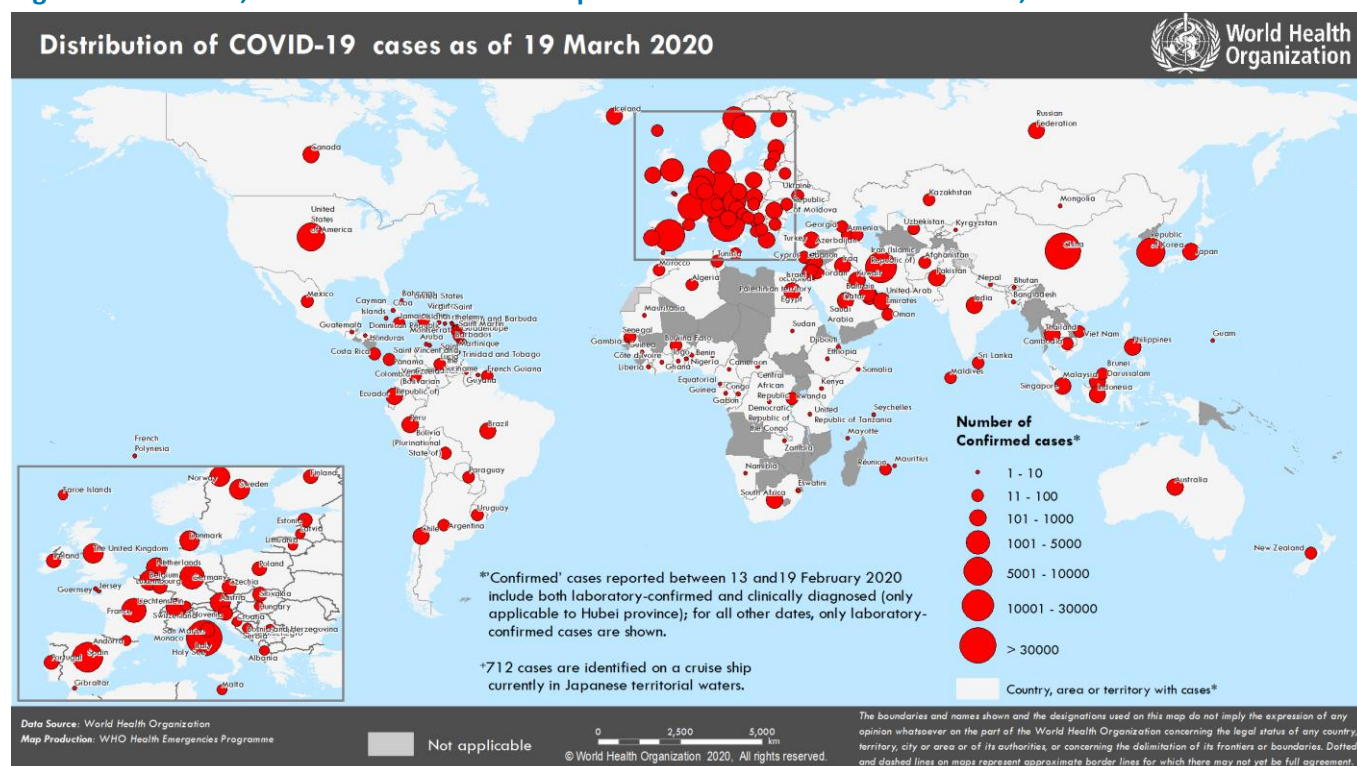
### African Region

367 confirmed (132)  
7 deaths (3)

### WHO RISK ASSESSMENT

Global Level      Very High

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



## SUBJECT IN FOCUS: New protocol for Early Epidemiologic investigations for public health response

With the emergence of COVID-19 virus, many uncertainties remain as to certain epidemiological, seroepidemiological (related to identifying antibodies in the population), clinical and virological characteristics of the virus and associated disease. Studies to assess these characteristics in different settings are critical to furthering our understanding. They will also provide the robust information needed to refine forecasting models and inform public health measures.

As such, WHO, in collaboration with technical partners, has adapted early epidemiological investigations protocols from pandemic influenza and from MERS-CoV, to better understand these characteristics and how they may be used to inform public health measures.

To date, five early seroepidemiological **core protocols and data collection forms** are available on the [WHO COVID-19 Technical guidance website](#).

All protocols propose a standardized methodology to allow data and biological samples to be systematically collected, taking into consideration local setting and outbreak characteristics, and shared rapidly in a format that can be easily aggregated, tabulated and analyzed across many different settings globally.

Study Protocol	Objectives
<a href="#">The First Few COVID-19 cases and contacts transmission investigation protocol (FFX)</a>	To provide descriptions and/or estimates of the: <ul style="list-style-type: none"><li>• clinical presentation of COVID-19 infection and course of associated disease</li><li>• secondary infection rate (SIR) and secondary clinical attack rate of COVID-19 infection among close contacts (overall, and by key factors such as setting, age and sex, for various end-points)</li><li>• serial interval of COVID-19 infection</li><li>• symptomatic proportion of COVID-19 cases (through contact tracing and laboratory testing); and identification of possible routes of transmission</li></ul>
<a href="#">Households transmission of COVID-19 investigation protocol</a>	<ul style="list-style-type: none"><li>• To better understand the extent of transmission within a household by estimating the secondary infection rate for household contacts at an individual level, and factors associated with any variation in the secondary infection risk</li><li>• To characterize secondary cases including the range of clinical presentation, risk factors for infection, and the extent and fraction of asymptomatic infections</li><li>• To characterize serologic response following confirmed COVID-19 infection</li></ul>
<a href="#">Assessment of COVID-19 risk factors among Health workers protocol</a>	<ul style="list-style-type: none"><li>• To better understand the extent of human-to-human transmission among health care workers, by estimating the secondary infection rate for health care worker contacts at an individual level</li><li>• To characterize the range of clinical presentation of infection and the risk factors for infection among health care workers</li><li>• To evaluate effectiveness of infection prevention and control measures among health care workers</li></ul>
<a href="#">Surface sampling of COVID-19 for health care professionals</a>	<ul style="list-style-type: none"><li>• To assess the extent and persistence of surface contamination with COVID-19 virus</li><li>• To identify environmental surfaces which may play a role in onwards transmission of COVID-19 infection</li></ul>
<a href="#">Population based serologic survey</a>	<ul style="list-style-type: none"><li>• To estimate age-specific seroprevalence</li></ul>

The latest protocol, the [Population-based age-stratified seroepidemiological investigation protocol for COVID-19 virus infection](#), is intended to provide key epidemiological and serologic characteristics of COVID-19 virus in the general population. Specifically, data from this protocol will provide critical information about the extent of infection (as measured by the presence of antibodies in study subjects) in the general population, age-specific infection

cumulative incidence, and the fraction of people with asymptomatic or subclinical infection.

The results of these investigations, whether individually or pooled across study sites/countries, will allow further understanding and provide robust estimates of key clinical, epidemiological and virological characteristics of the COVID-19 virus, including:

- Key epidemiological parameters, such as: secondary infection rate and secondary clinical attack rate of COVID-19 infection among close contacts, asymptomatic fraction of infection, serial interval and incubation period of COVID-19, the basic reproduction number of COVID-19 infection
- Clinical presentation of COVID-19 infection and course of associated disease
- Risk factors for transmission and infection, and identification of possible routes of transmission
- Impact of infection prevention and control measures in health care settings
- Serological response following symptomatic COVID-19 infection
- Age-stratified seroprevalence of antibodies against COVID-19 virus
- Cumulative incidence of infection, including extent of age-specific infection
- Infection and disease-severity ratios (case-hospitalization ratio [CHR] and case-fatality ratio [CFR])
- Viral load and shedding profiles
- Viral persistence on surfaces

To date, 13 countries across five of the six WHO regions, including both high-income and low-and middle-income countries, have begun to implement at least one of the early investigation protocols. A further 18 countries have signaled their intention to implement one of the protocols. WHO will continue to support countries in their epidemiological investigations through the provision of clear and comprehensive protocols.

For more information, please contact: [EarlyInvestigations-2019-nCoV@who.int](mailto:EarlyInvestigations-2019-nCoV@who.int)

## SURVEILLANCE

**Table 1. Countries, territories or areas with reported laboratory-confirmed COVID-19 cases and deaths. Data as of 19 March 2020\***

Reporting Country/ Territory/Area <sup>†</sup>	Total confirmed ‡ cases	Total confirmed new cases <sup>1</sup>	Total deaths	Total new deaths <sup>1</sup>	Transmission classification <sup>§</sup>	Days since last reported case
<b>Western Pacific Region</b>						
China	81174	58	3242	11	Local transmission	0
Republic of Korea	8413	93	84	3	Local transmission	0
Japan	873	44	29	1	Local transmission	0
Malaysia	673	120	2	2	Local transmission	0
Australia	510	96	6	1	Local transmission	0
Singapore	313	47	0	0	Local transmission	0
Philippines	187	0	14	2	Local transmission	1
Viet Nam	66	5	0	0	Local transmission	0
Brunei Darussalam	56	2	0	0	Local transmission	0
Cambodia	35	11	0	0	Local transmission	0
New Zealand	20	9	0	0	Local transmission	0
Mongolia	5	1	0	0	Imported cases only	0
<b>Territories**</b>						
Guam	5	2	0	0	Local transmission	0
French Polynesia	3	0	0	0	Imported cases only	3
<b>European Region</b>						
Italy	35713	4207	2978	473	Local transmission	0
Spain	13716	2538	598	107	Local transmission	0
France	9043	0	244	0	Local transmission	1
Germany	8198	1042	13	0	Local transmission	0
Switzerland	3010	353	21	2	Local transmission	0
The United Kingdom	2630	672	103	0	Local transmission	0
Netherlands	2051	0	58	0	Local transmission	1
Austria	1646	314	4	1	Local transmission	0
Belgium	1486	0	14	0	Local transmission	1
Norway	1423	115	3	0	Local transmission	0
Sweden	1279	112	3	0	Local transmission	0
Denmark	1044	67	4	0	Local transmission	0
Portugal	642	194	2	1	Local transmission	0
Czechia	522	30	0	0	Local transmission	0
Israel	427	0	0	0	Local transmission	2
Greece	418	0	5	0	Local transmission	1
Finland	359	40	0	0	Local transmission	0
Ireland	292	0	2	0	Local transmission	1
Poland	287	0	5	0	Local transmission	1
Slovenia	286	0	1	0	Local transmission	1
Estonia	258	33	0	0	Local transmission	0
Iceland	250	25	0	0	Local transmission	0
Romania	246	62	0	0	Local transmission	0
Luxembourg	210	63	2	1	Local transmission	0
Turkey	191	51	2	1	Local transmission	0
Russian Federation	147	54	0	0	Imported cases only	0
San Marino	109	5	14	3	Local transmission	0
Slovakia	105	8	0	0	Local transmission	0
Serbia††	96	11	0	0	Local transmission	0
Bulgaria	92	11	2	0	Local transmission	0

Armenia	84	32	0	0	Local transmission	0
Croatia	81	16	0	0	Local transmission	0
Latvia	71	11	0	0	Imported cases only	0
Albania	59	2	2	1	Local transmission	0
Cyprus	58	25	0	0	Local transmission	0
Hungary	58	8	1	0	Local transmission	0
Malta	48	10	0	0	Imported cases only	0
Belarus	46	10	0	0	Local transmission	0
Georgia	38	4	0	0	Imported cases only	0
Bosnia and Herzegovina	36	7	0	0	Local transmission	0
Kazakhstan	36	3	0	0	Imported cases only	0
North Macedonia	36	5	0	0	Local transmission	0
Republic of Moldova	36	0	0	0	Local transmission	1
Azerbaijan	34	13	1	1	Imported cases only	0
Lithuania	26	1	0	0	Imported cases only	0
Liechtenstein	25	18	0	0	Imported cases only	0
Ukraine	16	7	2	0	Local transmission	0
Uzbekistan	16	0	0	0	Imported cases only	1
Monaco	9	0	0	0	Under investigation	2
Kyrgyzstan	3	3	0	0	Under investigation	0
Montenegro	2	0	0	0	Imported cases only	1
Holy See	1	0	0	0	Under investigation	12
<b>Territories**</b>						
Faroe Islands	58	11	0	0	Imported cases only	0
Andorra	39	23	0	0	Imported cases only	0
Gibraltar	8	5	0	0	Under investigation	0
Jersey	5	0	0	0	Imported cases only	1
Greenland	2	0	0	0	Under investigation	1
Guernsey	1	0	0	0	Imported cases only	9
<b>South-East Asia Region</b>						
Indonesia	227	55	19	14	Local transmission	0
Thailand	212	35	1	0	Local transmission	0
India	151	14	3	0	Local transmission	0
Sri Lanka	42	13	0	0	Local transmission	0
Maldives	13	0	0	0	Local transmission	3
Bangladesh	10	2	0	0	Local transmission	0
Bhutan	1	0	0	0	Imported cases only	12
Nepal	1	0	0	0	Imported cases only	55
<b>Eastern Mediterranean Region</b>						
Iran (Islamic Republic of)	17361	1192	1135	147	Local transmission	0
Qatar	442	0	0	0	Local transmission	1
Bahrain	256	5	1	0	Local transmission	0
Pakistan	241	54	0	0	Imported cases only	0
Saudi Arabia	238	67	0	0	Local transmission	0
Egypt	196	30	6	2	Local transmission	0
Iraq	164	0	12	0	Local transmission	1
Kuwait	142	12	0	0	Local transmission	0
Lebanon	133	13	4	1	Local transmission	0
United Arab Emirates	113	15	0	0	Local transmission	0
Jordan	52	13	0	0	Imported cases only	0
Morocco	49	11	2	0	Local transmission	0
Oman	33	9	0	0	Imported cases only	0

Tunisia	29	5	0	0	Local transmission	0
Afghanistan	22	0	0	0	Imported cases only	1
<b>Djibouti</b>	1	1	0	0	Under investigation	0
Somalia	1	0	0	0	Imported cases only	2
Sudan	1	0	1	0	Imported cases only	4
<b>Territories**</b>						
occupied Palestinian territory	44	3	0	0	Local transmission	0
<b>Region of the Americas</b>						
United States of America	7087	3551	100	42	Local transmission	0
Canada	569	145	8	7	Local transmission	0
Brazil	291	57	1	1	Local transmission	0
Chile	238	82	0	0	Local transmission	0
Ecuador	155	97	2	0	Local transmission	0
Peru	145	59	0	0	Local transmission	0
Colombia	93	48	0	0	Local transmission	0
Mexico	93	11	0	0	Imported cases only	0
Panama	86	17	1	0	Local transmission	0
Argentina	79	14	2	0	Local transmission	0
Costa Rica	50	9	0	0	Local transmission	0
Venezuela (Bolivarian Republic of)	36	3	0	0	Imported cases only	0
Uruguay	29	23	0	0	Imported cases only	0
Dominican Republic	21	0	1	0	Local transmission	1
Jamaica	13	1	0	0	Local transmission	0
Bolivia (Plurinational State of)	12	1	0	0	Imported cases only	0
Paraguay	11	2	0	0	Local transmission	0
Cuba	10	5	1	0	Local transmission	0
Honduras	9	1	0	0	Imported cases only	0
Trinidad and Tobago	7	2	0	0	Imported cases only	0
Guatemala	6	0	1	0	Imported cases only	1
Guyana	4	1	1	0	Local transmission	0
Bahamas	3	2	0	0	Local transmission	0
<b>Barbados</b>	2	2	0	0	Imported cases only	0
Saint Lucia	2	0	0	0	Imported cases only	3
Antigua and Barbuda	1	0	0	0	Imported cases only	5
<b>Montserrat</b>	1	1	0	0	Imported cases only	0
Saint Vincent and the Grenadines	1	0	0	0	Imported cases only	5
Suriname	1	0	0	0	Imported cases only	3
<b>Territories**</b>						
Guadeloupe	33	15	0	0	Imported cases only	0
Martinique	23	7	0	0	Imported cases only	0
French Guiana	11	4	0	0	Imported cases only	0
Puerto Rico	5	2	0	0	Imported cases only	0
Aruba	4	2	0	0	Imported cases only	0
Saint Martin	4	2	0	0	Under investigation	0
Curaçao	3	0	0	0	Imported cases only	1
Saint Barthélemy	3	0	0	0	Under investigation	3
United States Virgin Islands	2	0	0	0	Imported cases only	1
Cayman Islands	1	0	1	0	Imported cases only	5

African Region						
South Africa	116	54	0	0	Local transmission	0
Algeria	72	12	6	2	Local transmission	0
Senegal	36	9	0	0	Local transmission	0
Burkina Faso	26	6	1	1	Imported cases only	0
Rwanda	11	4	0	0	Local transmission	0
Cameroon	10	5	0	0	Local transmission	0
Cote d'Ivoire	9	3	0	0	Imported cases only	0
Ghana	9	1	0	0	Imported cases only	0
Nigeria	8	6	0	0	Imported cases only	0
Democratic Republic of the Congo	7	4	0	0	Local transmission	0
Kenya	7	4	0	0	Local transmission	0
Ethiopia	6	1	0	0	Imported cases only	0
Seychelles	6	2	0	0	Imported cases only	0
Congo	3	2	0	0	Imported cases only	0
Equatorial Guinea	3	2	0	0	Imported cases only	0
Gabon	3	2	0	0	Imported cases only	0
Mauritius	3	3	0	0	Under investigation	0
United Republic of Tanzania	3	2	0	0	Imported cases only	0
Liberia	2	1	0	0	Local transmission	0
Mauritania	2	1	0	0	Imported cases only	0
Namibia	2	0	0	0	Imported cases only	4
Zambia	2	2	0	0	Imported cases only	0
Benin	1	0	0	0	Imported cases only	1
Central African Republic	1	0	0	0	Imported cases only	4
Eswatini	1	0	0	0	Imported cases only	4
Gambia	1	1	0	0	Imported cases only	0
Guinea	1	0	0	0	Imported cases only	4
Togo	1	0	0	0	Imported cases only	11
Territories**						
Réunion	12	3	0	0	Imported cases only	0
Mayotte	3	2	0	0	Imported cases only	0
<b>Subtotal for all regions</b>	<b>209127</b>	<b>16556</b>	<b>8771</b>	<b>828</b>		
International conveyance (Diamond Princess)	712	0	7	0	Local transmission	3
<b>Grand total</b>	<b>209839</b>	<b>16556</b>	<b>8778</b>	<b>828</b>		

\*Numbers include both domestic and repatriated cases

†The designations employed and the presentation of the material in this publication do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

‡Case classifications are based on [WHO case definitions](#) for COVID-19.

§Transmission classification is based on WHO analysis of available official data and may be subject to reclassification as additional data become available. Countries/territories/areas experiencing multiple types of transmission are classified in the highest category for which there is evidence; they may be removed from a given category if interruption of transmission can be demonstrated. It should be noted that even within categories, different countries/territories/areas may have differing degrees of transmission as indicated by the differing numbers of cases and other factors. Not all locations within a given country/territory/area are equally affected.

Terms:

- **Community transmission** is evidenced by the inability to relate confirmed cases through chains of transmission for a large number of cases, or by increasing positive tests through sentinel samples (routine systematic testing of respiratory samples from established laboratories).
- **Local transmission** indicates locations where the source of infection is within the reporting location.
- **Imported cases only** indicates locations where all cases have been acquired outside the location of reporting.
- **Under investigation** indicates locations where type of transmission has not been determined for any cases.
- **Interrupted transmission** indicates locations where interruption of transmission has been demonstrated (details to be determined)

\*\* "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status

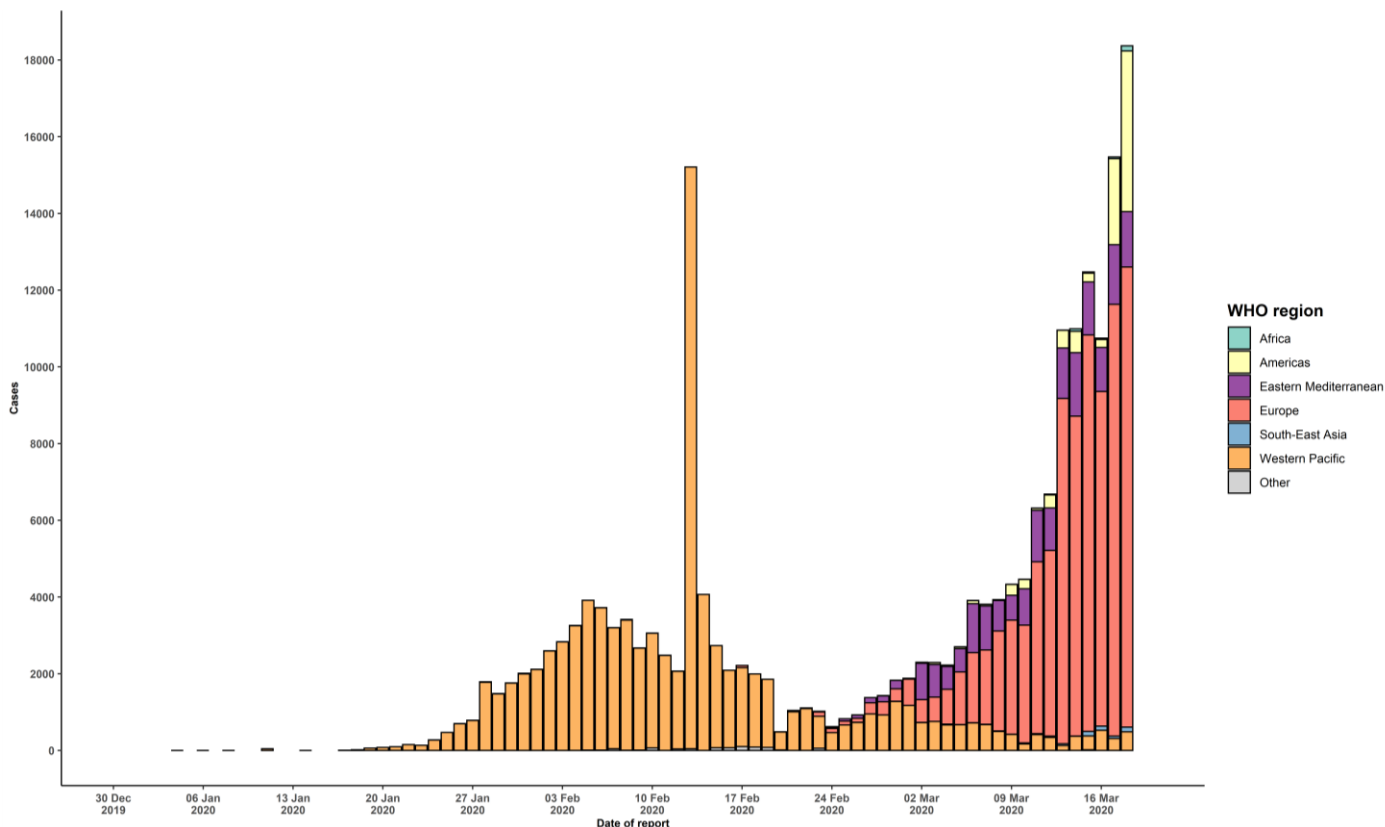
\*\*Including 13 cases from Kosovo<sup>[1]</sup>

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999).

Due to differences in reporting methods, retrospective data consolidation, and reporting delays, the number of new cases may not always reflect the exact difference between yesterday's and today's totals. WHO COVID-19 Situation Reports present official counts of confirmed COVID-19 cases, thus differences between WHO reports and other sources of COVID-19 data using different inclusion criteria and different data cutoff times are to be expected.

New countries/territories/areas are shown in red.

Figure 2. Epidemic curve of confirmed COVID-19, by date of report and WHO region through 19 March 2020





## STRATEGIC OBJECTIVES

WHO's strategic objectives for this response are to:

- Interrupt human-to-human transmission including reducing secondary infections among close contacts and health care workers, preventing transmission amplification events, and preventing further international spread\*;
- 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](#).
- WHO has developed interim guidance for laboratory diagnosis, advice on the use of masks during home care and in health care settings in the context of the novel coronavirus (2019-nCoV) outbreak, clinical management, infection prevention and control in health care settings, home care for patients with suspected novel coronavirus, risk communication and community engagement and Global Surveillance for human infection with novel coronavirus (2019-nCoV).
- 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](#).
- 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 is working with its networks of researchers and other experts to coordinate global work on surveillance, epidemiology, mathematical modelling, diagnostics and virology, clinical care and treatment, infection prevention and control, and risk communication. WHO has issued interim guidance for countries, which are updated regularly.
- WHO has prepared a [disease commodity package](#) 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](#).
- WHO has published an [updated advice for international traffic in relation to the outbreak of the novel coronavirus 2019-nCoV](#).
- WHO has activated the R&D blueprint to accelerate diagnostics, vaccines, and therapeutics.
- OpenWHO is an interactive, web-based, knowledge-transfer platform offering online courses to improve the response to health emergencies. [COVID-19 courses can be found here](#). Specifically, WHO has developed online courses on the following topics: A general introduction to emerging respiratory viruses, including novel

coronaviruses (available in Arabic, Chinese, English, French, Russian, Spanish, Portuguese, Persian, Serbian, and Turkish); Clinical Care for Severe Acute Respiratory Infections (available in English, French, Russian, and Vietnamese); Health and safety briefing for respiratory diseases - ePROTECT (available in English, French, Russian, Indonesian, and Portuguese); Infection Prevention and Control for Novel Coronavirus (COVID-19) (available in English, French, Russian, Spanish, Indonesian, Italian, Japanese, Portuguese, and Serbian); and COVID-19 Operational Planning Guidelines and COVID-19 Partners Platform to support country preparedness and response (available in English and coming soon in additional languages).

- WHO is providing guidance on early investigations, which are critical 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](#). One such protocol is for the investigation of early COVID-19 cases and contacts (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 the potential spread and impact of infection.

## RECOMMENDATIONS AND ADVICE FOR THE PUBLIC

If you are not in an area where COVID-19 is spreading or have not travelled from an area where COVID-19 is spreading or have not been in contact with an infected patient, your risk of infection is low. It is understandable that you may feel anxious about the outbreak. Get the facts from reliable sources to help you accurately determine your risks so that you can take reasonable precautions (see [Frequently Asked Questions](#)). Seek guidance from WHO, your healthcare provider, your national public health authority or your employer for accurate information on COVID-19 and whether COVID-19 is circulating where you live. It is important to be informed of the situation and take appropriate measures to protect yourself and your family (see [Protection measures for everyone](#)).

If you are in an area where there are cases of COVID-19 you need to take the risk of infection seriously. Follow the advice of WHO and guidance issued by national and local health authorities. For most people, COVID-19 infection will cause mild illness however, it can make some people very ill and, in some people, it can be fatal. Older people, and those with pre-existing medical conditions (such as cardiovascular disease, chronic respiratory disease or diabetes) are at risk for severe disease (See [Protection measures for persons who are in or have recently visited \(past 14 days\) areas where COVID-19 is spreading](#)).

## CASE DEFINITIONS

WHO periodically updates the [Global Surveillance for human infection with coronavirus disease \(COVID-19\)](#) document which includes case definitions.

For easy reference, case definitions are included below.

### Suspect case

- A. A patient with acute respiratory illness (fever and at least one sign/symptom of respiratory disease (e.g., cough, shortness of breath), AND with no other etiology that fully explains the clinical presentation AND a history of travel to or residence in a country/area or territory reporting local transmission (See [situation report](#)) of COVID-19 disease during the 14 days prior to symptom onset.

**OR**

B. A patient with any acute respiratory illness AND having been in contact with a confirmed or probable COVID-19 case (see definition of contact) in the last 14 days prior to onset of symptoms;

**OR**

C. A patient with severe acute respiratory infection (fever and at least one sign/symptom of respiratory disease (e.g., cough, shortness breath) AND requiring hospitalization AND with no other etiology that fully explains the clinical presentation.

**Probable case**

A suspect case for whom testing for COVID-19 is inconclusive.

- Inconclusive being the result of the test reported by the laboratory

**Confirmed case**

A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms.

- Information regarding laboratory guidance can be found [here](#).