

Coronavirus disease 2019 (COVID-19)

Situation Report 87

Data as received by WHO from national authorities by 10:00 CEST, 16 April 2020

HIGHLIGHTS

- No new country/territory/area reported cases of COVID-19 in the past 24 hours.
- Speaking at the COVID-19 media briefing yesterday, WHO Director-General Dr Tedros stressed that our "commitment to public health, science and to serving all the people of the world without fear or favour remains absolute." The Director-General's speech is available [here](#).
- WHO has released a substantial update to its COVID-19 dashboard, offering better data visualization. The news article is available [here](#) and the dashboard is available on the WHO COVID-19 webpage [here](#).
- Drinking alcohol does not protect you against COVID-19: existing rules and regulations to protect health and reduce harm caused by alcohol such as restricting access, should be upheld and even reinforced during the outbreak. More on this is available [here](#), and a factsheet on Alcohol and COVID-19 is available [here](#).
- In India, WHO is deploying its national polio surveillance network and other field staff to help with the COVID-19 response. Find more on this [here](#).
- Oxygen therapy plays an extremely important role in case management and is briefly explored in the 'Subject in Focus' below.

SITUATION IN NUMBERS

total (new cases in last 24 hours)

Globally

1 991 562 confirmed (76 647)

130 885 deaths (7875)

European Region

1 013 093 confirmed (35 497)

89 317 deaths (4710)

Region of the Americas

707 121 confirmed (33 760)

30 245 deaths (2909)

Western Pacific Region

125 571 confirmed (1367)

4239 deaths (38)

Eastern Mediterranean Region

111 432 confirmed (4043)

5532 deaths (137)

South-East Asia Region

21 790 confirmed (1503)

990 deaths (54)

African Region

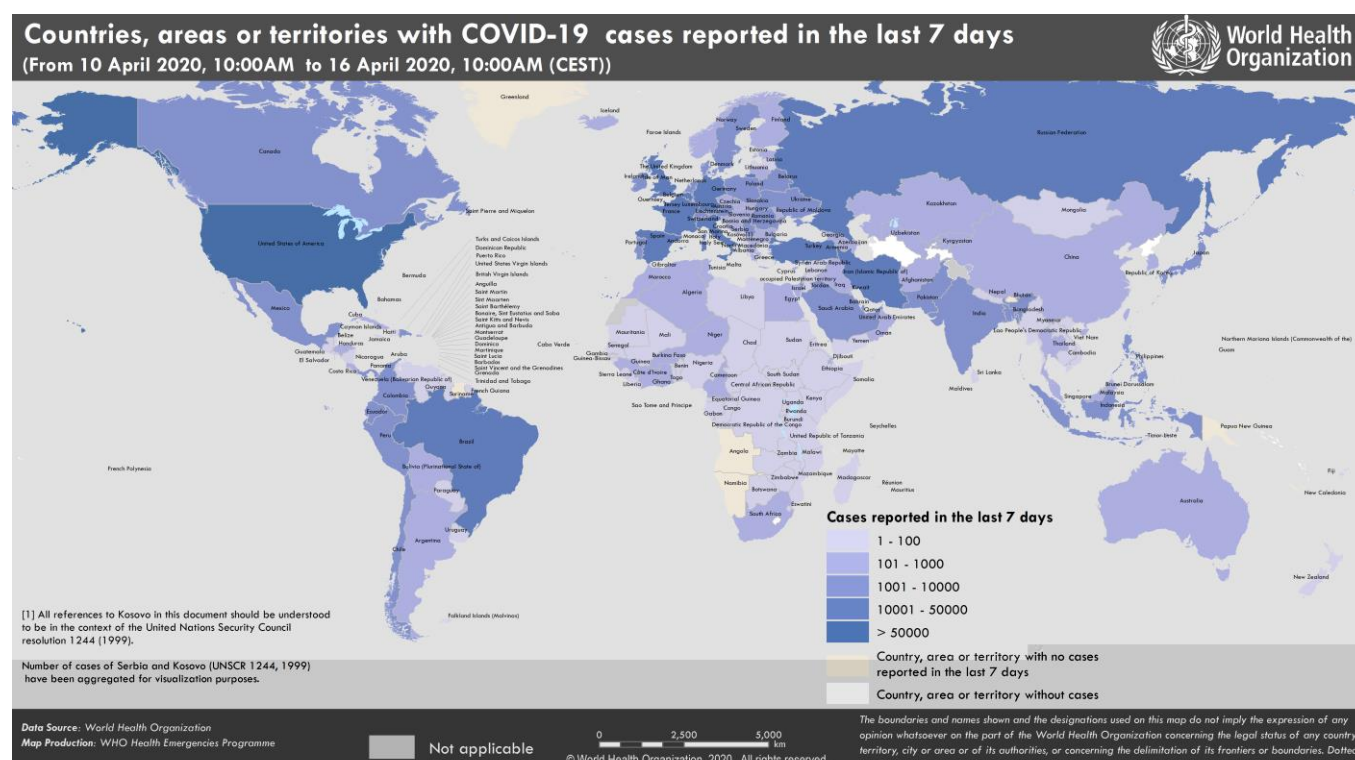
11843 confirmed (477)

550 deaths (27)

WHO RISK ASSESSMENT

Global Level Very High

Figure 1. Countries, territories or areas with reported confirmed cases of COVID-19, 16 April 2020



SUBJECT IN FOCUS: Case management and oxygen therapy

While the majority of patients with COVID-19 have mild or moderated illness, it is estimated that 20% of affected patients will need oxygen. The ability to boost capacity to deliver oxygen therapy is critical to being able to treat those patients and it has implications for the functioning of the entire system. WHO has recently published “Oxygen sources and distribution for COVID-19 treatment centres”, available [here](#), that describes in detail how to surge oxygen systems and distribution.

In many resource-limited settings, oxygen supply and delivery systems are limited and thus rapid gap analysis should be done to inform surge activities. To do so, the COVID-19 Essential Supply Forecast Tool (ESFT), found [here](#), can be used to forecast the total needs of oxygen and associated consumables and accessories (i.e. essential oxygen delivery devices and pulse oximeters). The forecast can then be compared to the existing oxygen supply availability. This method provides a way to identify a contextually appropriate oxygen surge strategy based on structures, capabilities, practices and technologies. Decision-makers can then use this strategy to frame and implement a surge plan.

SURVEILLANCE

Table 1. Countries, territories or areas with reported laboratory-confirmed COVID-19 cases and deaths. Data as of 16 April 2020*

Reporting Country/ Territory/Area [†]	Total confirmed ‡ cases	Total confirmed new cases	Total deaths	Total new deaths	Transmission classification [§]	Days since last reported case
Western Pacific Region						
China	83797	52	3352	0	Clusters of cases	0
Republic of Korea	10613	22	229	4	Clusters of cases	0
Japan	8582	482	136	17	Clusters of cases	0
Australia	6458	42	63	2	Clusters of cases	0
Philippines	5453	230	349	14	Clusters of cases	0
Malaysia	5072	85	83	1	Clusters of cases	0
Singapore	3699	447	10	0	Clusters of cases	0
New Zealand	1084	6	9	0	Clusters of cases	0
Viet Nam	267	1	0	0	Clusters of cases	0
Brunei Darussalam	136	0	1	0	Sporadic cases	5
Cambodia	122	0	0	0	Sporadic cases	4
Mongolia	30	0	0	0	Sporadic cases	1
Lao People's Democratic Republic	19	0	0	0	Sporadic cases	3
Fiji	16	0	0	0	Sporadic cases	5
Papua New Guinea	2	0	0	0	Sporadic cases	7
Territories**						
Guam	135	0	5	0	Clusters of cases	1
French Polynesia	55	0	0	0	Sporadic cases	2
New Caledonia	18	0	0	0	Sporadic cases	13
Northern Mariana Islands (Commonwealth of the)	13	0	2	0	Pending	1
European Region						
Spain	177633	5092	18579	523	Pending	0
Italy	165155	2667	21647	578	Pending	0
Germany	130450	2866	3569	315	Pending	0
France	105155	2622	17146	1438	Pending	0
The United Kingdom	98480	4603	12868	761	Pending	0
Turkey	69392	4281	1518	115	Community transmission	0
Belgium	33573	2454	4440	283	Pending	0
Netherlands	28153	734	3134	189	Pending	0
Russian Federation	27938	3448	232	34	Clusters of cases	0
Switzerland	26336	583	973	73	Community transmission	0
Portugal	18091	643	599	32	Pending	0
Austria	14370	136	393	9	Pending	0
Ireland	12547	1068	444	38	Pending	0
Israel	12200	332	126	9	Pending	0

Sweden	11927	482	1203	170	Pending	0
Poland	7582	380	286	23	Pending	0
Romania	7216	337	372	28	Pending	0
Denmark	6681	170	309	10	Pending	0
Norway	6677	111	130	3	Pending	0
Czechia	6303	162	166	5	Pending	0
Serbia	4873	408	99	5	Pending	0
Ukraine	4162	398	115	7	Clusters of cases	0
Belarus	3728	447	36	3	Clusters of cases	0
Luxembourg	3373	66	69	0	Pending	0
Finland	3237	76	72	8	Pending	0
Greece	2192	22	102	1	Pending	0
Republic of Moldova	2049	115	46	5	Pending	0
Croatia	1741	37	34	3	Pending	0
Iceland	1727	7	8	0	Pending	0
Hungary	1652	73	142	8	Pending	0
Estonia	1402	29	35	4	Pending	0
Uzbekistan	1349	135	4	0	Clusters of cases	0
Kazakhstan	1295	20	16	4	Pending	0
Azerbaijan	1253	56	13	0	Clusters of cases	0
Slovenia	1248	28	61	5	Pending	0
Armenia	1135	68	18	2	Clusters of cases	0
Bosnia and Herzegovina	1116	30	41	1	Community transmission	0
Lithuania	1091	21	29	5	Pending	0
North Macedonia	974	66	45	1	Clusters of cases	0
Slovakia	863	28	6	4	Pending	0
Bulgaria	747	34	36	1	Pending	0
Cyprus	715	20	17	0	Pending	0
Andorra	673	14	33	2	Community transmission	0
Latvia	666	9	5	0	Pending	0
Albania	494	19	25	1	Clusters of cases	0
Kyrgyzstan	466	17	5	0	Pending	0
Malta	399	6	3	0	Pending	0
San Marino	393	21	36	0	Community transmission	0
Georgia	336	30	3	0	Clusters of cases	0
Montenegro	288	0	4	0	Clusters of cases	1
Monaco	93	0	0	0	Sporadic cases	2
Liechtenstein	81	0	1	0	Pending	1
Holy See	8	0	0	0	Sporadic cases	7
Territories**						
Kosovo ^[1]	397	10	9	1	Community transmission	0
Isle of Man	254	12	2	0	Pending	0
Guernsey	223	4	7	1	Pending	0
Jersey	217	0	6	2	Pending	1
Faroe Islands	184	0	0	0	Pending	8
Gibraltar	129	0	0	0	Pending	3

Greenland	11	0	0	0	Pending	10
South-East Asia Region						
India	12380	941	414	37	Clusters of cases	0
Indonesia	5136	297	469	10	Community transmission	0
Thailand	2672	29	46	3	Pending	0
Bangladesh	1231	219	50	4	Pending	0
Sri Lanka	238	5	7	0	Clusters of cases	0
Myanmar	85	11	4	0	Clusters of cases	0
Maldives	21	1	0	0	Sporadic cases	0
Nepal	16	0	0	0	Sporadic cases	2
Timor-Leste	6	0	0	0	Sporadic cases	2
Bhutan	5	0	0	0	Sporadic cases	13
Eastern Mediterranean Region						
Iran (Islamic Republic of)	76389	1512	4777	94	Community transmission	0
Pakistan	6505	517	124	17	Clusters of cases	0
Saudi Arabia	5862	493	79	6	Clusters of cases	0
United Arab Emirates	5365	432	33	5	Pending	0
Qatar	3711	283	7	0	Pending	0
Egypt	2505	155	183	5	Clusters of cases	0
Morocco	2024	136	127	1	Clusters of cases	0
Bahrain	1677	149	7	0	Clusters of cases	0
Iraq	1415	15	79	1	Clusters of cases	0
Kuwait	1405	50	3	0	Clusters of cases	0
Oman	1019	109	4	0	Clusters of cases	0
Afghanistan	794	24	29	4	Clusters of cases	0
Tunisia	780	33	35	1	Community transmission	0
Lebanon	658	17	21	0	Clusters of cases	0
Djibouti	435	72	2	0	Clusters of cases	0
Jordan	401	4	7	0	Clusters of cases	0
Somalia	80	20	5	3	Sporadic cases	0
Libya	48	13	1	0	Clusters of cases	0
Syrian Arab Republic	33	4	2	0	Community transmission	0
Sudan	32	0	5	0	Sporadic cases	1
Yemen	1	0	0	0	Pending	5
Territories**						
occupied Palestinian territory	293	5	2	0	Clusters of cases	0
Region of the Americas						
United States of America	604070	25802	25871	2395	Community transmission	0
Canada	27540	1394	954	131	Community transmission	0
Brazil	25262	1832	1532	204	Community transmission	0
Peru	10303	2784	230	37	Community transmission	0

Chile	8273	356	94	2	Community transmission	0
Ecuador	7858	255	388	19	Community transmission	0
Mexico	5399	385	406	74	Community transmission	0
Dominican Republic	3614	328	189	6	Community transmission	0
Panama	3574	102	95	1	Community transmission	0
Colombia	2979	127	127	15	Community transmission	0
Argentina	2477	141	108	7	Community transmission	0
Cuba	814	48	24	3	Clusters of cases	0
Costa Rica	618	6	3	0	Clusters of cases	0
Uruguay	492	9	8	0	Clusters of cases	0
Honduras	419	12	31	5	Clusters of cases	0
Bolivia (Plurinational State of)	397	43	28	0	Clusters of cases	0
Venezuela (Bolivarian Republic of)	193	12	9	0	Clusters of cases	0
Guatemala	180	13	5	0	Clusters of cases	0
Paraguay	161	2	8	1	Community transmission	0
El Salvador	159	10	6	0	Clusters of cases	0
Trinidad and Tobago	114	1	8	0	Sporadic cases	0
Jamaica	105	32	5	1	Clusters of cases	0
Barbados	73	1	5	1	Clusters of cases	0
Bahamas	49	0	8	0	Clusters of cases	1
Guyana	48	1	6	0	Clusters of cases	0
Haiti	41	1	3	0	Clusters of cases	0
Antigua and Barbuda	23	0	2	0	Clusters of cases	2
Belize	18	0	2	0	Sporadic cases	1
Dominica	16	0	0	0	Clusters of cases	5
Saint Lucia	15	0	0	0	Sporadic cases	4
Grenada	14	0	0	0	Clusters of cases	4
Saint Kitts and Nevis	14	2	0	0	Sporadic cases	0
Saint Vincent and the Grenadines	12	0	0	0	Sporadic cases	5
Suriname	10	0	1	0	Sporadic cases	12
Nicaragua	9	0	1	0	Pending	3
Territories**						
Puerto Rico	974	51	51	6	Clusters of cases	0
Martinique	158	1	8	0	Clusters of cases	0
Guadeloupe	145	0	8	0	Clusters of cases	1
French Guiana	95	7	0	0	Clusters of cases	0
Aruba	93	1	1	1	Clusters of cases	0
Bermuda	57	0	5	0	Clusters of cases	2
Cayman Islands	54	0	1	0	Clusters of cases	1
Sint Maarten	53	1	9	0	Clusters of cases	0

United States Virgin Islands	51	0	1	0	Clusters of cases	5
Saint Martin	35	0	2	0	Sporadic cases	1
Curaçao	14	0	1	0	Sporadic cases	7
Falkland Islands (Malvinas)	11	0	0	0	Clusters of cases	1
Montserrat	11	0	0	0	Sporadic cases	2
Turks and Caicos Islands	10	0	1	0	Sporadic cases	1
Saint Barthélemy	6	0	0	0	Sporadic cases	16
Bonaire, Sint Eustatius and Saba	4	0	0	0	Sporadic cases	1
Anguilla	3	0	0	0	Sporadic cases	12
British Virgin Islands	3	0	0	0	Sporadic cases	15
Saint Pierre and Miquelon	1	0	0	0	Sporadic cases	8
African Region						
South Africa	2506	91	34	7	Community transmission	0
Algeria	2160	90	336	10	Community transmission	0
Cameroon	855	0	17	2	Clusters of cases	1
Côte d'Ivoire	654	16	6	0	Clusters of cases	0
Ghana	636	0	8	0	Clusters of cases	1
Niger	584	14	14	0	Clusters of cases	0
Burkina Faso	528	13	28	0	Clusters of cases	0
Guinea	404	41	1	1	Clusters of cases	0
Nigeria	373	30	11	1	Clusters of cases	0
Mauritius	324	0	9	0	Clusters of cases	3
Senegal	314	15	2	0	Clusters of cases	0
Democratic Republic of the Congo	267	13	22	1	Clusters of cases	0
Kenya	225	9	10	1	Clusters of cases	0
Mali	144	21	13	3	Sporadic cases	0
Rwanda	136	2	0	0	Sporadic cases	0
Congo	117	43	5	0	Clusters of cases	0
Madagascar	110	0	0	0	Clusters of cases	1
United Republic of Tanzania	88	35	4	1	Sporadic cases	0
Gabon	87	7	1	0	Sporadic cases	0
Ethiopia	85	3	3	0	Sporadic cases	0
Togo	77	0	3	0	Sporadic cases	1
Liberia	59	0	6	0	Sporadic cases	1
Uganda	55	1	0	0	Sporadic cases	0
Equatorial Guinea	51	10	0	0	Sporadic cases	0
Zambia	48	3	2	0	Sporadic cases	0
Guinea-Bissau	43	3	0	0	Sporadic cases	0
Benin	35	0	1	0	Sporadic cases	4
Eritrea	35	1	0	0	Sporadic cases	0
Mozambique	28	0	0	0	Sporadic cases	1
Chad	27	4	0	0	Sporadic cases	0

Zimbabwe	23	5	3	0	Sporadic cases	0
Angola	19	0	2	0	Sporadic cases	7
Eswatini	16	1	0	0	Sporadic cases	0
Malawi	16	0	2	0	Sporadic cases	2
Namibia	16	0	0	0	Sporadic cases	10
Botswana	13	0	1	0	Sporadic cases	6
Sierra Leone	13	2	0	0	Sporadic cases	0
Central African Republic	11	0	0	0	Sporadic cases	5
Seychelles	11	0	0	0	Sporadic cases	9
Cabo Verde	10	0	1	0	Sporadic cases	2
Gambia	9	0	1	0	Sporadic cases	4
Mauritania	7	0	1	0	Sporadic cases	5
Burundi	5	0	0	0	Sporadic cases	3
São Tomé and Príncipe	4	0	0	0	Pending	9
South Sudan	4	0	0	0	Pending	4
Territories**						
Réunion	390	0	0	0	Clusters of cases	2
Mayotte	221	4	3	0	Clusters of cases	0
Subtotal for all Regions	1990850	76647	130873	7875		
International conveyance (Diamond Princess)	712	0	12	0	Not Applicable ^{††}	31
Grand total	1991562	76647	130885	7875		

* 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 a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis and may be upgraded or downgraded as new information becomes available. Not all locations within a given country/territory/area are equally affected; countries/territories/areas experiencing multiple types of transmission are classified in the highest category reported. Within a given transmission category, different countries/territories/areas may have differing degrees of transmission as indicated by the differing numbers of cases, recency of cases, and other factors.

Terms:

- **No cases:** Countries/territories/areas with no confirmed cases (not shown in table)
- **Sporadic cases:** Countries/territories/areas with one or more cases, imported or locally detected
- **Clusters of cases:** Countries/territories/areas experiencing cases, clustered in time, geographic location and/or by common exposures
- **Community transmission:** Countries/area/territories experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to:
 - Large numbers of cases not linkable to transmission chains
 - Large numbers of cases from sentinel lab surveillance
 - Multiple unrelated clusters in several areas of the country/territory/area

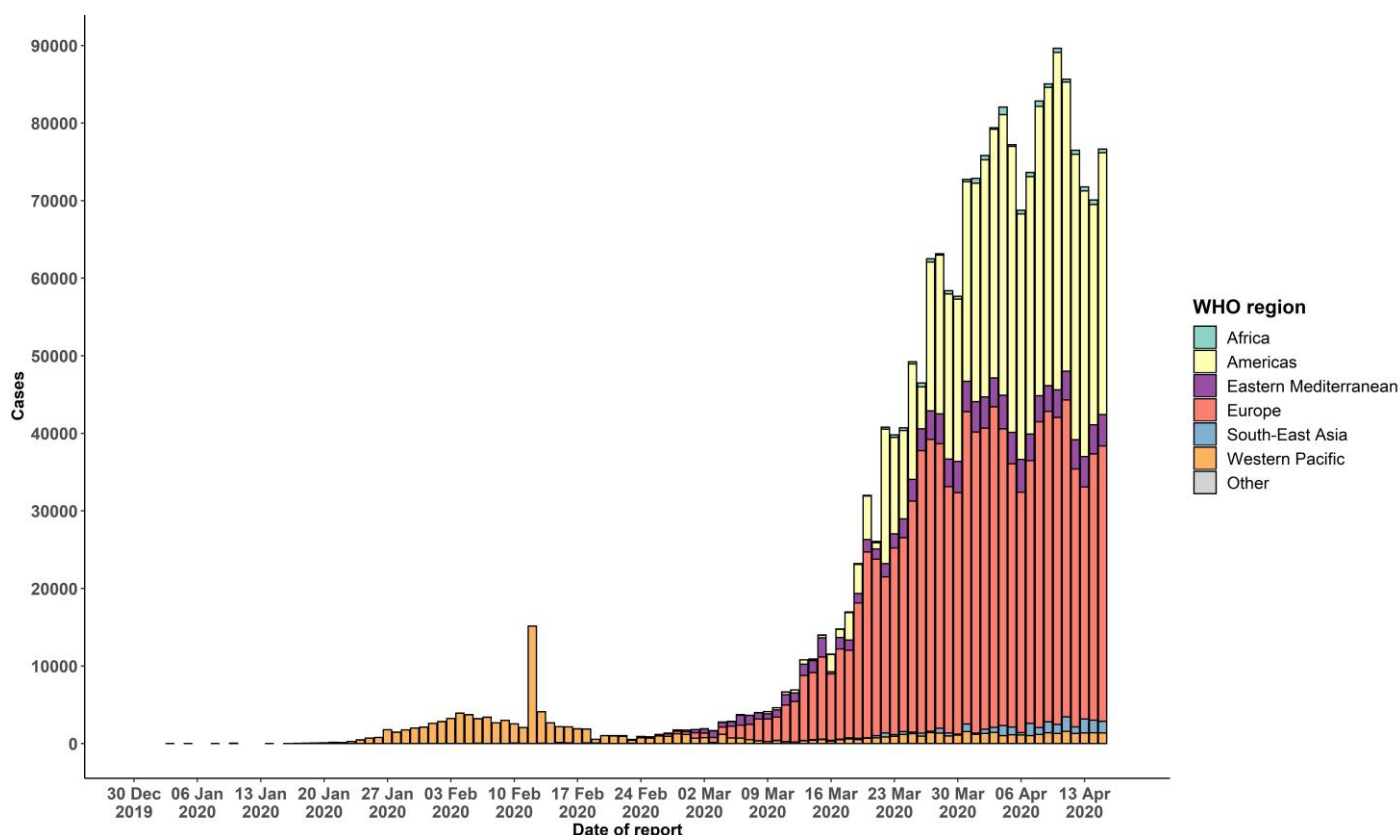
** "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status

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

†† As the international conveyance (Diamond Princess) is no longer occupied, transmission classification cannot be applied.

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.

Figure 1. Epidemic curve of confirmed COVID-19, by date of report and WHO region through 16 April 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 COVID-19 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 COVID-19.

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 COVID-19.

WHO has provided recommendations to reduce risk of [transmission from animals to humans](#).

WHO has published an [updated recommendations for international traffic in relation to COVID-19 outbreak](#).

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](#) and courses in [additional national languages here](#). Specifically, WHO has developed online courses on the following topics:

- Introduction to Go.Data – Field data collection, chains of transmission and contact follow-up. The Go.Data tool is available globally to WHO staff, member states and partners to support outbreak investigation, focusing on field data collection, contact tracing and visualisation of chains of transmission.
- A general introduction to emerging respiratory viruses, including novel coronaviruses (available in Arabic, Chinese, English, French, Russian, Spanish, Hindi, Indian Sign Language, Persian, Portuguese, Serbian and Turkish);
- Clinical care for Severe Acute Respiratory Infections (available in English, French, Russian, Indonesian and Vietnamese);
- Health and safety briefing for respiratory diseases - ePROTECT (available in Chinese, English, French, Russian, Spanish, Indonesian and Portuguese);
- Infection Prevention and Control for Novel Coronavirus (COVID-19) (available in Chinese, 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 a history of travel to or residence in a location reporting community transmission 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 symptom onset;

OR

- C. A patient with severe acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath; AND requiring hospitalization) AND in the absence of an alternative diagnosis that fully explains the clinical presentation.

Probable case

- A. A suspect case for whom testing for the COVID-19 virus is inconclusive.
a. Inconclusive being the result of the test reported by the laboratory.

OR

- B. A suspect case for whom testing could not be performed for any reason.

Confirmed case

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

- Technical guidance for laboratory testing can be found [here](#).

Definition of contact

A contact is a person who experienced any one of the following exposures during the 2 days before and the 14 days after the onset of symptoms of a probable or confirmed case:

1. Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes;
2. Direct physical contact with a probable or confirmed case;
3. Direct care for a patient with probable or confirmed COVID-19 disease without using proper personal protective equipment¹; OR
4. Other situations as indicated by local risk assessments.

Note: for confirmed asymptomatic cases, the period of contact is measured as the 2 days before through the 14 days *after the date on which the sample was taken* which led to confirmation.

¹ World Health Organization. Infection prevention and control during health care when COVID-19 is suspected
[https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected-20200125](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected-20200125)