Coronavirus disease 2019 (COVID-19)
Situation Report – 93

Data as received by WHO from national authorities by 10:00 CEST, 22 April 2020

HIGHLIGHTS

- WHO is deeply saddened at the death of a member of personnel during a security incident in Rakhine district of Myanmar, who was transporting COVID-19 surveillance samples in support of the Ministry of Health and Sports. WHO condemns targeting of health workers involved in the COVID-19 response. More information is available here.
- As of 22 April, Japan changed the method of reporting deaths, which now includes both the number of (i) deceased cases with complete data matching and verification; and (ii) deceased cases whose data matching and verification are in progress. The notable increase in the number of deaths reported from Japan can be attributed to this change.
- A WHO mission to Belarus has recommended the introduction of community-wide steps to increase physical distancing. More information is available here.
- OpenWHO has launched a new online course on *Standard precautions: Hand hygiene*. The module has been prepared to help summarize the WHO guidelines on hand hygiene, associated tools and ideas for effective implementation. To date, there has been more than 1.5 million enrolments in the platform's courses to support the COVID-19 response.
- The WHO Information Network for Epidemics (EPI-WIN) was launched at the beginning of the COVID-19 outbreak, specifically for infodemic management. For updates and more information, see the 'Subject in Focus' below.
- WHO issued guidance on *Safe Ramadan practices in the context of COVID-19*, which is available in Arabic, English, French, Russian and Spanish. For details, see the 'Subject in Focus' below.

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

Globally
2 471 136 confirmed (73 920)
169 006 deaths (6058)

European Region
1 219 486 confirmed (32 302)
109 952 deaths (3618)

Region of the Americas
925 291 confirmed (32 172)
44 775 deaths (2089)

Eastern Mediterranean Region
139 349 confirmed (4879)
6326 deaths (141)

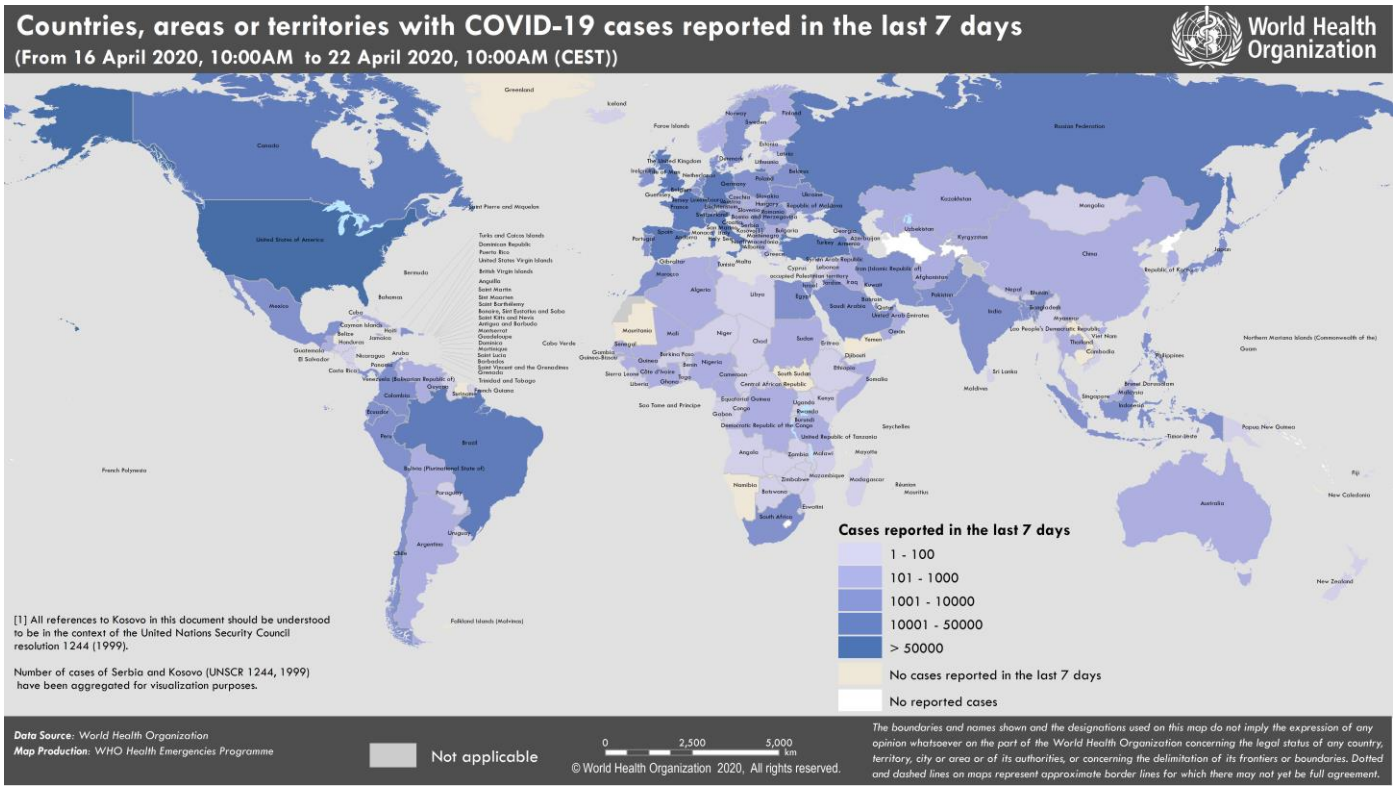
Western Pacific Region
136 271 confirmed (1765)
5793 deaths (108)

South-East Asia Region
33 912 confirmed (2242)
1427 deaths (86)

African Region
16 115 confirmed (560)
720 deaths (16)

WHO RISK ASSESSMENT
Global Level Very High

Figure 1. Countries, territories or areas with reported confirmed cases of COVID-19, 22 April 2020



SUBJECT IN FOCUS: Infodemic management: the right information at the right time

The ongoing COVID-19 pandemic response requires rapid action from multiple sectors of society and government. Individuals need to adopt new behaviors; societies need to implement new public health measures; businesses need to develop new services to operate differently; faith leaders need to change practices to protect their communities; and the sports and entertainment sectors need to make difficult decisions to protect the public's health. For this to happen, people need answers to their questions and advice designed for their needs and contexts. The WHO Information Network for Epidemics (EPI-WIN) was launched at the beginning of the COVID-19 outbreak, specifically to meet these information demands and those of future pandemics and emergencies.

Since January 2020, EPI-WIN has been engaging with some of the most vital sectors involved in the COVID-19 response through amplification webinars. The partnerships with the healthcare, business, faith, travel and tourism, food and agriculture and high-visibility events (sports and entertainment) sectors have helped EPI-WIN broaden the global reach of WHO's life-saving risk communication messages significantly.

The Network has reached more than 160 health organizations or professional associations that bring together millions of frontline healthcare workers – the backbone of a country's defenses to save lives and limit the spread of disease. It also provided illustrated guidance to caretakers at home who play a vital role when health systems become overstretched.

In addition to engaging the health community, EPI-WIN has connected with the world's employers and employees. With over 3 billion people in paid employment globally, the business sector serves as a major amplifier of information. EPI-WIN has directly connected with more than 400 businesses in food, agriculture, travel and tourism.

Approximately 84% of the world's population identifies with a religious group and sadly many outbreaks of COVID-19 have been linked to faith gatherings. Faith-based organizations can and need to mobilize and inform millions of people through their churches, mosques, synagogues and temples. EPI-WIN has worked directly with more than 60 faith organizations to recommend critically important health behaviors for faith settings.

The Network also combats misinformation by providing transparent, evidence-based guidance as events unfold. The COVID-19 pandemic continues to evolve rapidly, making the need for updated, accurate and trusted information even more critical. EPI-WIN meets this information need, through behavior change and myth-busting messages. EPI-WIN's science-based information has supported WHO's website and social media channels. The EPI-WIN messaging is used on WHO's COVID-19 website which has received 147 million page views since 22 January 2020. This information also fed the Google coronavirus page which received hundreds of millions of visitors every day, as well as a record of over 14.5 million users on WhatsApp and Viber.
EPI-WIN will continue to adapt and grow to meet the information needs of specific audiences as COVID-19 continues and as the world faces other future public health threats.

Stay abreast of new amplification activities at who.int/epi-win.

Figure 2. WHO Information Network for Epidemics (EPI-WIN) amplification webinars and participants since January 2020

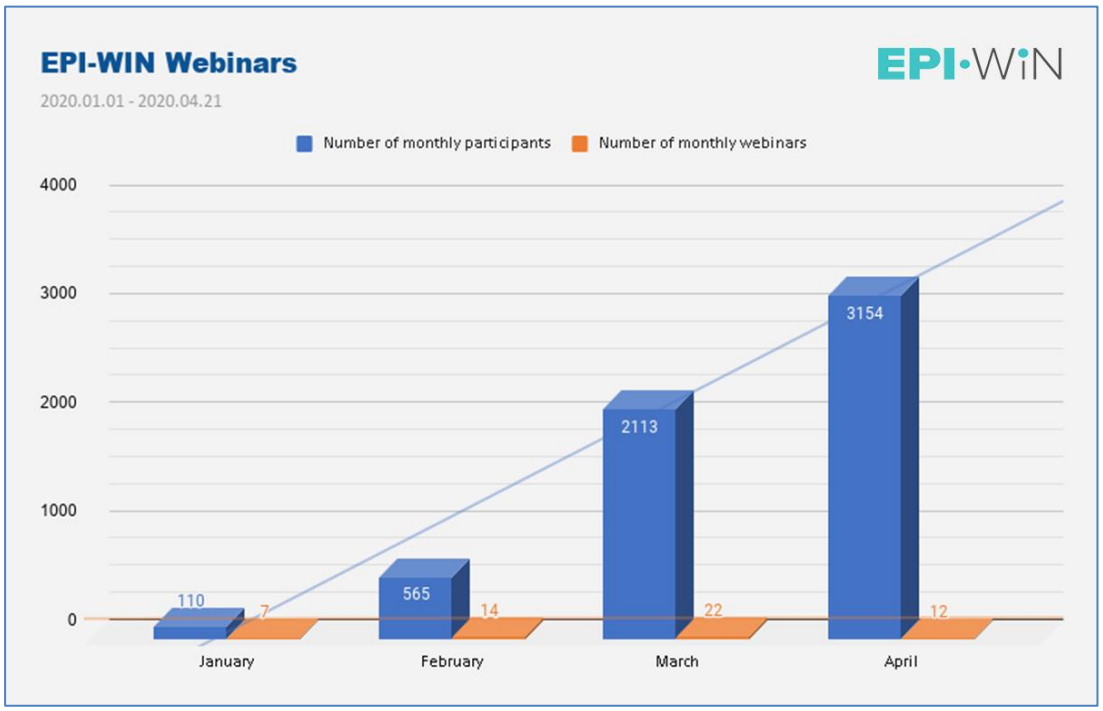
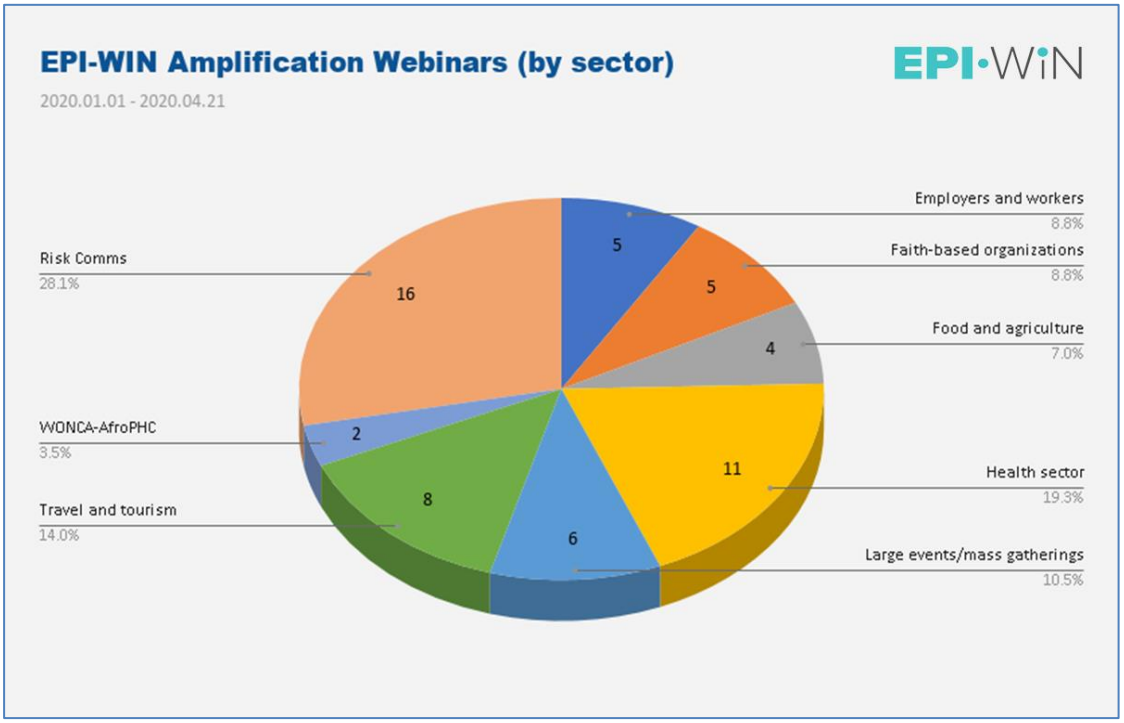


Figure 3. WHO Information Network for Epidemics (EPI-WIN) amplification webinars by sector



SUBJECT IN FOCUS: Safe Ramadan practices in the context of the COVID-19

Ramadan is the ninth month of the Islamic calendar and is observed by Muslims worldwide as a month of fasting from sunrise to sunset, prayer and reflection. It is marked by numerous religious and social gatherings, as families and friends unite to break their fast together, after sunset during *iftar* or before dawn during *suhour*.

As this year Ramadan is expected to start on 23 April and end on 23 May, thus falling during the ongoing pandemic of COVID-19, WHO has issued dedicated guidance on Safe Ramadan practices in the context of COVID-19. The purpose is to provide advice on gatherings occurring during the month of Ramadan, or immediately preceding and following it. Guidance was released on 15 April and is available in Arabic, English, French, Russian and Spanish. The document is addressed to national health authorities with the aim of facilitating their role in establishing policies for events. Early involvement of religious leaders in the decision-making process is also recommended, so that they may disseminate information to the faithful community. In general, a strong communication strategy should ensure that decisions taken are explained to all those concerned in a timely and consistent manner.

As a first step, WHO recommends that decisions to restrict, modify, postpone, cancel or proceed with holding a mass gathering during Ramadan should be based on a rigorous and standardized assessment of the risks associated with such events in terms of contributing to the spread of COVID-19. Detailed guidance on risk-assessment protocols is included in Practical considerations and recommendations for Religious Leaders and Faith-based Communities in the context of COVID-19, with a risk-assessment tool and decision tree. Cancelling in-person events and holding them virtually, using platforms such as television, radio, digital and social media is therefore an option to be considered, especially if risk of transmission is significant.

The decision-making process can be facilitated by some overarching considerations related to physical distancing: for example, a distance of at least one metre (three feet) between people should be strictly maintained at all times during the event. People who are feeling unwell or have any symptoms of COVID-19 – as they may transmit the infection, and older people and anyone with pre-existing medical conditions should be discouraged from attending, as they have higher likelihood of developing severe illness.

If it is decided that physical gatherings shall go ahead, WHO recommends that mitigation measures be applied to further decrease risk of COVID-19 transmission during the planned event. Mitigation measures include: improving the venue's facilities and arrangements (e.g. holding the event outdoors rather than indoors, or ensuring adequate ventilation), encouraging healthy practices by attendees (e.g. handwashing or taking safety steps in mosques, such as using personal prayer rugs), and ensuring that premises and often-touched objects are thoroughly and regularly cleaned.

The document also provides recommendations tailored to many social activities typical of Ramadan, such as the practice of charity (*sadaqat* or *zakah*), or the traditional *iftar* banquets, suggesting ways to safely live in full the spirit of Ramadan as the COVID-19 pandemic continues. Additional considerations pertaining to fasting, physical activity, healthy diet and nutrition, and tobacco use, as well as to mental and psycho-social health and response to domestic violence are also proposed with the aim of clarifying misconceptions, and providing advice that may help make the most out of the holy month of Ramadan and its myriad of celebrations.

SURVEILLANCE

Table 1. Countries, territories or areas with reported laboratory-confirmed COVID-19 cases and deaths. Data as of 22 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	84287	37	4642	0	Clusters of cases	0
Japan	11496	378	277	91	Clusters of cases	0
Republic of Korea	10694	11	238	1	Clusters of cases	0
Singapore	9125	1111	11	0	Clusters of cases	0
Australia	6647	22	74	3	Clusters of cases	0
Philippines	6599	140	437	9	Clusters of cases	0
Malaysia	5482	58	92	3	Clusters of cases	0
New Zealand	1113	6	14	1	Clusters of cases	0
Viet Nam	268	0	0	0	Clusters of cases	5
Brunei Darussalam	138	0	1	0	Sporadic cases	2
Cambodia	122	0	0	0	Sporadic cases	10
Mongolia	34	1	0	0	Sporadic cases	0
Lao People's Democratic Republic	19	0	0	0	Sporadic cases	9
Fiji	18	0	0	0	Sporadic cases	1
Papua New Guinea	7	0	0	0	Sporadic cases	5
Territories[**]						
Guam	133	0	5	0	Clusters of cases	10
French Polynesia	57	1	0	0	Sporadic cases	0
New Caledonia	18	0	0	0	Sporadic cases	19
Northern Mariana Islands (Commonwealth of the)	14	0	2	0	Pending	4
European Region						
Spain	204178	3968	21282	430	Pending	0
Italy	183957	2729	24648	534	Community transmission	0
Germany	145694	2237	4879	281	Community transmission	0
The United Kingdom	129048	4301	17337	828	Pending	0
France	116151	2638	20763	530	Community transmission	0
Turkey	95591	4611	2259	119	Community transmission	0
Russian Federation	57999	5236	513	57	Clusters of cases	0
Belgium	40956	973	5998	170	Community transmission	0
Netherlands	34134	729	3916	165	Pending	0
Switzerland	27981	119	1186	45	Community transmission	0
Portugal	21379	516	762	27	Pending	0

Ireland	16040	388	730	43	Pending	0
Sweden	15322	545	1765	185	Pending	0
Austria	14833	50	463	1	Pending	0
Israel	13942	59	184	3	Pending	0
Poland	9856	263	401	21	Pending	0
Romania	9242	306	483	32	Community transmission	0
Denmark	7695	180	370	6	Pending	0
Norway	7166	53	163	9	Pending	0
Czechia	7041	127	201	5	Community transmission	0
Serbia	6890	260	130	5	Pending	0
Belarus	6723	459	55	4	Clusters of cases	0
Ukraine	6592	467	174	13	Community transmission	0
Finland	4014	146	141	43	Pending	0
Luxembourg	3618	60	78	3	Pending	0
Republic of Moldova	2641	93	73	3	Pending	0
Greece	2401	156	121	5	Pending	0
Hungary	2168	70	225	12	Clusters of cases	0
Kazakhstan	1995	143	19	0	Pending	0
Croatia	1908	27	48	1	Pending	0
Iceland	1778	5	10	0	Pending	0
Uzbekistan	1657	0	6	1	Clusters of cases	1
Estonia	1552	17	43	3	Pending	0
Azerbaijan	1480	44	20	1	Clusters of cases	0
Armenia	1377	38	24	2	Clusters of cases	0
Lithuania	1370	20	38	1	Pending	0
Bosnia and Herzegovina	1340	40	50	1	Community transmission	0
Slovenia	1340	5	77	3	Pending	0
North Macedonia	1231	6	55	1	Clusters of cases	0
Slovakia	1199	26	14	1	Clusters of cases	0
Bulgaria	975	46	45	2	Pending	0
Cyprus	784	12	17	0	Clusters of cases	0
Latvia	748	9	9	4	Pending	0
Andorra	723	5	37	1	Community transmission	0
Albania	634	25	26	0	Clusters of cases	0
Kyrgyzstan	612	22	7	0	Pending	0
San Marino	476	14	40	1	Community transmission	0
Malta	443	12	3	0	Pending	0
Georgia	411	3	5	1	Clusters of cases	0
Montenegro	313	1	5	0	Clusters of cases	0
Liechtenstein	82	0	1	0	Pending	3
Monaco	68	0	1	0	Sporadic cases	8
Holy See	9	0	0	0	Sporadic cases	1
Territories[**]						

Kosovo[1]	604	32	18	6	Community transmission	0
Isle of Man	307	10	10	6	Pending	0
Jersey	250	1	14	2	Pending	0
Guernsey	239	0	10	1	Community transmission	2
Faroe Islands	185	0	0	0	Pending	2
Gibraltar	133	0	0	0	Clusters of cases	4
Greenland	11	0	0	0	Pending	16
South-East Asia Region						
India	19984	1383	640	50	Clusters of cases	0
Indonesia	7135	375	616	26	Community transmission	0
Bangladesh	3382	434	110	9	Pending	0
Thailand	2826	15	49	1	Pending	0
Sri Lanka	310	6	7	0	Clusters of cases	0
Myanmar	121	2	5	0	Clusters of cases	0
Maldives	83	16	0	0	Clusters of cases	0
Nepal	42	11	0	0	Sporadic cases	0
Timor-Leste	23	0	0	0	Clusters of cases	1
Bhutan	6	0	0	0	Sporadic cases	1
Eastern Mediterranean Region						
Iran (Islamic Republic of)	84802	1297	5297	88	Community transmission	0
Saudi Arabia	11631	1147	109	6	Clusters of cases	0
Pakistan	9749	533	209	17	Clusters of cases	0
United Arab Emirates	7755	490	46	3	Pending	0
Qatar	6533	518	9	0	Pending	0
Egypt	3490	157	264	14	Clusters of cases	0
Morocco	3209	163	145	2	Clusters of cases	0
Kuwait	2080	85	11	2	Clusters of cases	0
Bahrain	1973	66	7	0	Clusters of cases	0
Oman	1614	106	8	0	Clusters of cases	0
Iraq	1602	28	83	1	Clusters of cases	0
Afghanistan	1092	66	36	0	Clusters of cases	0
Djibouti	945	99	2	0	Clusters of cases	0
Tunisia	901	17	38	0	Community transmission	0
Lebanon	682	5	22	1	Clusters of cases	0
Jordan	428	3	7	0	Clusters of cases	0
Somalia	286	49	14	6	Sporadic cases	0
Sudan	140	33	13	1	Sporadic cases	0
Libya	59	8	1	0	Clusters of cases	0
Syrian Arab Republic	42	3	3	0	Community transmission	0
Yemen	1	0	0	0	Pending	11
Territories**						
occupied Palestinian territory	335	6	2	0	Clusters of cases	0
Region of the Americas						

United States of America	776907	25634	37602	1718	Community transmission	0
Brazil	40581	1927	2575	113	Community transmission	0
Canada	37374	1991	1728	117	Community transmission	0
Peru	16325	697	445	45	Community transmission	0
Chile	10832	325	147	8	Community transmission	0
Ecuador	10398	270	520	13	Community transmission	0
Mexico	8772	511	712	26	Community transmission	0
Dominican Republic	5044	80	245	10	Community transmission	0
Panama	4658	191	136	10	Community transmission	0
Colombia	3977	185	189	10	Community transmission	0
Argentina	3073	113	145	9	Community transmission	0
Cuba	1137	50	38	2	Clusters of cases	0
Costa Rica	662	2	6	1	Clusters of cases	0
Bolivia (Plurinational State of)	598	34	34	1	Clusters of cases	0
Uruguay	535	7	10	0	Clusters of cases	0
Honduras	494	17	46	0	Clusters of cases	0
Guatemala	294	5	9	2	Clusters of cases	0
Venezuela (Bolivarian Republic of)	285	29	10	1	Clusters of cases	0
El Salvador	225	7	7	0	Clusters of cases	0
Jamaica	223	27	6	1	Clusters of cases	0
Paraguay	208	0	8	0	Community transmission	1
Trinidad and Tobago	114	0	8	0	Sporadic cases	6
Barbados	75	0	5	0	Clusters of cases	5
Guyana	66	1	7	0	Clusters of cases	0
Bahamas	64	4	9	0	Clusters of cases	0
Haiti	57	10	3	0	Clusters of cases	0
Antigua and Barbuda	23	0	3	0	Clusters of cases	8
Belize	18	0	2	0	Sporadic cases	7
Dominica	16	0	0	0	Clusters of cases	11
Saint Kitts and Nevis	15	0	0	0	Sporadic cases	1
Saint Lucia	15	0	0	0	Sporadic cases	10
Grenada	14	1	0	0	Clusters of cases	0
Saint Vincent and the Grenadines	12	0	0	0	Sporadic cases	11
Nicaragua	10	1	2	0	Pending	0
Suriname	10	0	1	0	Sporadic cases	18
Territories[**]						
Puerto Rico	1298	46	64	1	Clusters of cases	0

Martinique	163	0	14	0	Clusters of cases	3
Guadeloupe	148	0	12	1	Clusters of cases	2
Aruba	97	0	2	0	Clusters of cases	2
French Guiana	97	0	1	0	Clusters of cases	1
Bermuda	86	0	5	0	Clusters of cases	2
Sint Maarten	68	1	10	0	Clusters of cases	0
Cayman Islands	66	5	1	0	Clusters of cases	0
United States Virgin Islands	54	1	3	0	Clusters of cases	0
Saint Martin	37	0	2	0	Sporadic cases	3
Curaçao	14	0	1	0	Sporadic cases	13
Falkland Islands (Malvinas)	11	0	0	0	Clusters of cases	7
Montserrat	11	0	0	0	Sporadic cases	8
Turks and Caicos Islands	11	0	1	0	Sporadic cases	5
Saint Barthélemy	6	0	0	0	Sporadic cases	22
Bonaire, Sint Eustatius and Saba	5	0	0	0	Sporadic cases	4
British Virgin Islands	4	0	1	0	Sporadic cases	2
Anguilla	3	0	0	0	Sporadic cases	18
Saint Pierre and Miquelon	1	0	0	0	Sporadic cases	14
African Region						
South Africa	3465	165	58	0	Community transmission	0
Algeria	2811	93	392	8	Community transmission	0
Cameroon	1163	0	43	1	Clusters of cases	1
Ghana	1042	0	9	0	Clusters of cases	2
Côte d'Ivoire	916	37	13	3	Clusters of cases	0
Guinea	688	66	6	1	Community transmission	0
Niger	657	2	20	0	Clusters of cases	0
Burkina Faso	581	5	38	2	Community transmission	0
Nigeria	541	0	19	0	Community transmission	2
Senegal	412	35	5	0	Clusters of cases	0
Democratic Republic of the Congo	359	9	25	0	Clusters of cases	0
Mauritius	328	0	9	0	Community transmission	2
Kenya	296	15	14	0	Clusters of cases	0
Mali	258	12	14	0	Clusters of cases	0
United Republic of Tanzania	255	0	10	0	Clusters of cases	1
Congo	165	5	6	0	Clusters of cases	0
Gabon	156	36	1	0	Clusters of cases	0
Rwanda	150	3	0	0	Clusters of cases	0
Madagascar	121	0	0	0	Clusters of cases	2
Ethiopia	114	3	3	0	Clusters of cases	0

Liberia	101	2	8	0	Clusters of cases	0
Togo	86	2	6	1	Clusters of cases	0
Equatorial Guinea	79	0	0	0	Clusters of cases	3
Zambia	70	5	3	0	Sporadic cases	0
Cabo Verde	67	12	1	0	Sporadic cases	0
Uganda	56	1	0	0	Sporadic cases	0
Benin	54	0	1	0	Sporadic cases	1
Guinea-Bissau	50	0	0	0	Sporadic cases	4
Sierra Leone	50	7	0	0	Clusters of cases	0
Eritrea	39	0	0	0	Sporadic cases	3
Mozambique	39	4	0	0	Sporadic cases	0
Chad	34	1	0	0	Sporadic cases	0
Zimbabwe	28	3	3	0	Sporadic cases	0
Angola	24	0	2	0	Sporadic cases	1
Eswatini	24	0	1	0	Sporadic cases	1
Botswana	20	0	1	0	Sporadic cases	2
Malawi	18	1	2	0	Sporadic cases	0
Namibia	16	0	0	0	Sporadic cases	16
Central African Republic	14	2	0	0	Sporadic cases	0
Burundi	11	5	1	0	Sporadic cases	0
Seychelles	11	0	0	0	Sporadic cases	15
Gambia	10	0	1	0	Sporadic cases	1
Mauritania	7	0	1	0	Sporadic cases	11
São Tomé and Príncipe	4	0	0	0	Sporadic cases	15
South Sudan	4	0	0	0	Sporadic cases	10
Territories[**]						
Réunion	410	2	0	0	Clusters of cases	0
Mayotte	311	27	4	0	Clusters of cases	0
Subtotal for all Regions	**2470424**	**73920**	**168993**	**6058**		
International conveyance (Diamond Princess)	712	0	13	0	Not Applicable[††]	37
Grand total	**2471136**	**73920**	**169006**	**6058**		

[*]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.

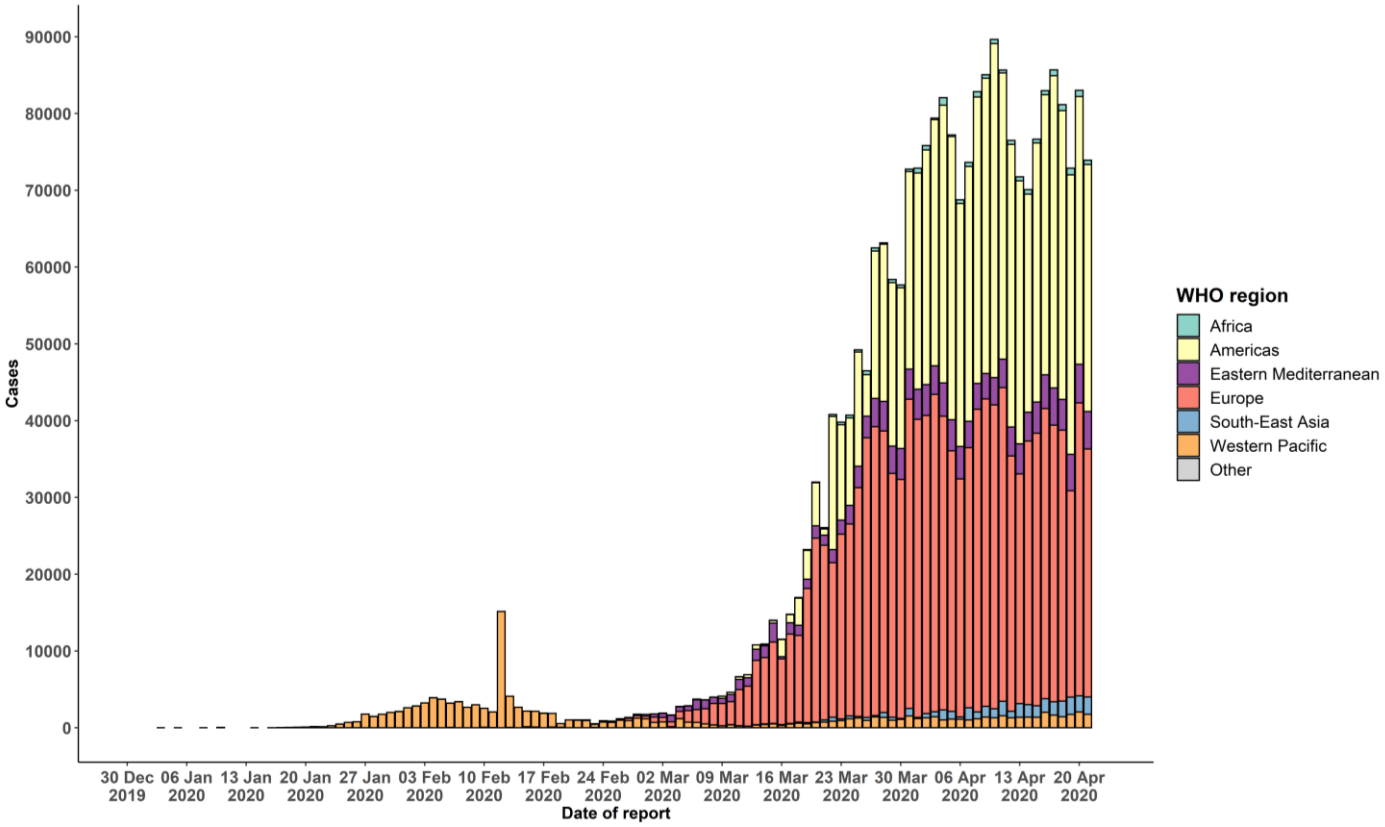
Terms:

- **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 4. Epidemic curve of confirmed COVID-19, by date of report and WHO region through 22 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 equipment[1]; 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.

Definition of COVID-19 death

COVID-19 death is defined for surveillance purposes as a death resulting from a clinically compatible illness in a probable or confirmed COVID-19 case, unless there is a clear alternative cause of death that cannot be related to COVID disease (e.g. trauma). There should be no period of complete recovery between the illness and death.

Further guidance for certification and classification (coding) of COVID-19 as cause of death is available here.

[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