

Coronavirus disease 2019 (COVID-19) Situation Report – 82

Data as received by WHO from national authorities by 10:00 CET, 11 April 2020

HIGHLIGHTS

- Yemen reported its first case of COVID-19 in the past 24 hours.
- WHO has developed the following definition for reporting COVID deaths: a 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.
- WHO Director-General Dr. Tedros, in a press conference held yesterday, highlighted the issue of planning the transition out of stay-at-home restrictions: “WHO wants to see restrictions lifted as much as anyone. At the same time, lifting restrictions too quickly could lead to a deadly resurgence.” For more information, please see [here](#).
- WHO has updated its Q&A page on COVID-19 to provide information of how the virus spreads and how it is affecting people worldwide. For more details, please see [here](#).
- To date, there are a limited number of publications and national situation reports that provide information on the number of healthcare worker (HCW) infections. Understanding infection in HCWs is critical to informing the specific infection prevention and control measures needed to protect HCWs from infection. For more details, please see ‘Subject in Focus’ below.

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

Globally

1 610 909 confirmed (89 657)
99 690 deaths (6892)

European Region

839 257 confirmed (39 561)
70 565 deaths (4352)

Region of the Americas

536 664 confirmed (43 491)
19 294 deaths (2256)

Western Pacific Region

118 549 confirmed (1302)
4017 deaths (39)

Eastern Mediterranean Region

92 226 confirmed (3569)
4771 deaths (164)

South-East Asia Region

14 161 confirmed (1183)
617 deaths (48)

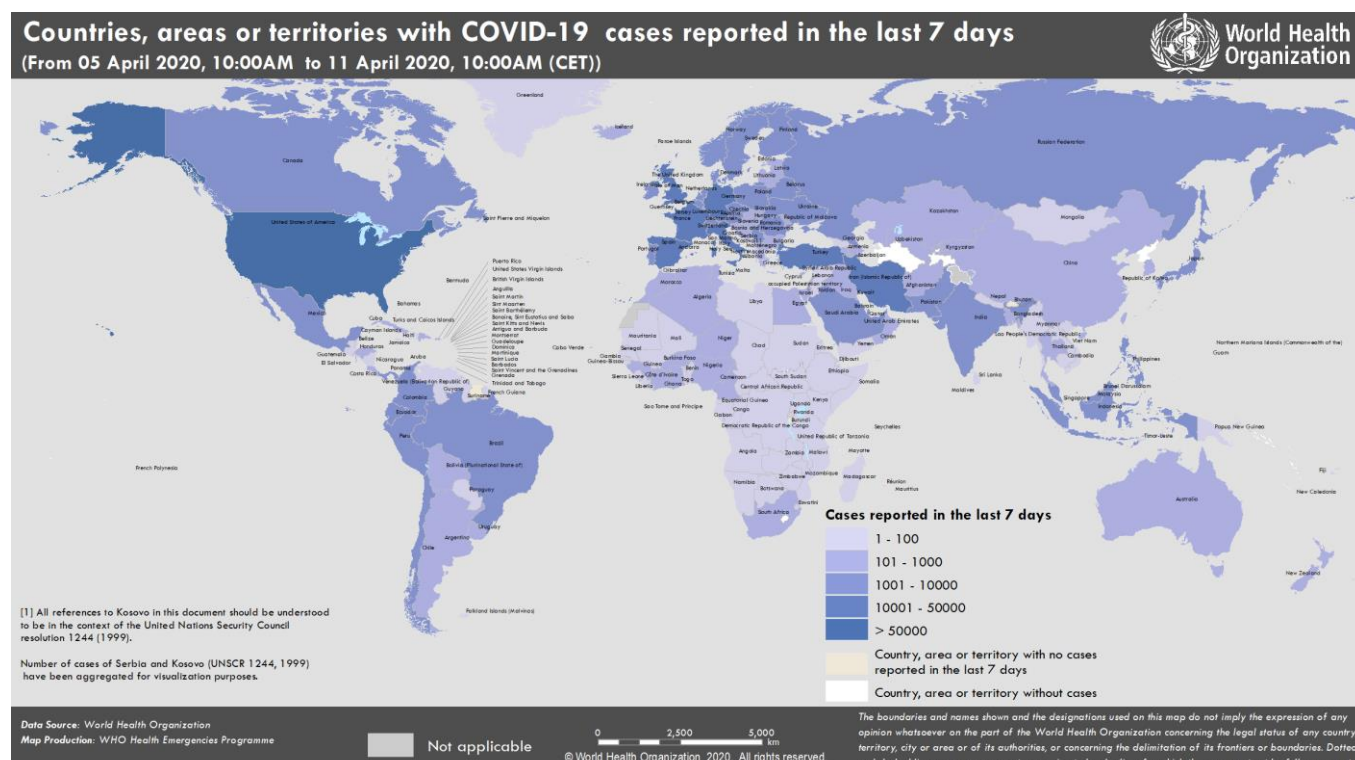
African Region

9340 confirmed (551)
415 deaths (33)

WHO RISK ASSESSMENT

Global Level Very High

Figure 1. Countries, territories or areas with reported confirmed cases of COVID-19, 11 April 2020



SUBJECT IN FOCUS: Infection in health care workers

Healthcare workers (HCWs) play an essential role at the front lines, providing care for patients. In the context of COVID-19 and during routine health services, they provide critical care to patients and ensure that infection prevention and control (IPC) measures are implemented and adhered to in healthcare facilities in order to limit healthcare-associated infections.

As of 8 April 2020, 22 073 cases of COVID-19 among HCWs from 52 countries had been reported to WHO. However, at the present time, there is no systematic reporting of HCW COVID-19 infections to WHO and therefore this number probably under-represents the true number of COVID-19 HCW infections globally.

To date, there are a limited number of publications and national situation reports that provide information on the number of HCW infections. For example, a publication from China CDC on 44 672 confirmed cases as of 17 February 2020 indicated 1688 (3.8%) infections were among HCWs, including five deaths.¹ In Italy, a situation report from 10 April 2020 reported 15 314 infections among HCW, representing 11% of all infections at that time.² Further publications have described the epidemiological and clinical characteristics of infections among HCWs.³⁻⁷ While many infections are indicated as mild, severe outcomes, including deaths, among HCWs have also been reported.

Understanding infection in HCWs is critical to informing the specific IPC measures needed to protect HCWs from infection. A limited number of publications have identified risk factors for infection among HCWs. Preliminary results suggest HCWs are being infected both in the workplace and in the community, most often through infected family members.⁸ In healthcare settings, factors associated with HCW infection have included: late recognition or suspicion of COVID-19 in patients, working in a higher-risk department, longer duty hours, sub-optimal adherence to IPC measures such as hand hygiene practices, and lack of or improper use of personal protective equipment (PPE).⁹⁻¹⁰ Other factors have also been documented, such as inadequate or insufficient IPC training for respiratory pathogens, including the COVID-19 virus, as well as long exposure in areas in healthcare facilities where large numbers of COVID-19 patients were being cared for.

To prevent infection in healthcare settings, WHO recommends the use of contact and droplet precautions by HCWs caring for patients with COVID-19.¹¹ WHO also recommends that airborne precautions be applied in settings in which procedures and support treatments that generate aerosols are performed.¹¹ In this context, the correct use of PPE is critical, in particular wearing appropriate PPE for the clinical setting, paying special attention to procedures to put on and remove PPE correctly, and adhering to hand hygiene and other IPC measures. When these precautions are applied correctly and consistently, alongside standard precautions and administrative, engineering and environmental controls, the risk for HCW infections is substantially reduced or avoided altogether.

WHO has also developed a risk assessment tool for exposed HCWs in a healthcare facility¹² and a sero-epidemiological protocol to determine risk factors for infection among HCW,¹³ and is finalizing an in-depth epidemiological surveillance tool for HCW infections. A number of countries are currently using these tools and protocols, and this information will be essential to understand the extent of infection among HCWs, the extent of transmission within healthcare facilities and the best approaches to protect HCWs against infection.

Finally, as HCWs caring for patients with COVID-19 are subject to long working hours, fatigue, occupational burn-out, stigma, physical and psychological violence, and back injury from patient handling, it is important that efforts be made to maintain the physical and mental health of HCWs and the quality of care. Therefore, WHO recommends that IPC measures be complemented by occupational safety and health measures, psycho-social support, adequate staffing levels, and clinical rotation, to reduce the risk of burn-out, for safe and healthy working environments and to respect the rights of health workers to decent working conditions.¹

References

1. The Novel Coronavirus Pneumonia Emergency Response Epidemiology Team. The epidemiological characteristics of an outbreak of 2019 Novel Coronavirus Diseases (COVID-19) – China, 2020. <http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51>
2. Integrated surveillance of COVID-19 in Italy : 10 April 2020. https://www.epicentro.iss.it/en/coronavirus/bollettino/Infografica_10aprile%20ENG.pdf
3. Kluytmans M, Buiting A, Pas S, et al. SARS-CoV-2 infection in 86 healthcare workers in two Dutch hospitals in March 2020. medRxiv. 2020:2020.03.23.20041913. doi: 10.1101/2020.03.23.20041913.
4. Liu M, He P, Liu HG, et al. [Clinical characteristics of 30 medical workers infected with new coronavirus pneumonia]. Zhonghua Jie He He Hu Xi Za Zhi. 2020 Mar 12;43(3):209-14. doi: 10.3760/cma.j.issn.1001-0939.2020.03.014. PMID: 32164090.
5. Liu J, Ouyang L, Guo P, et al. Epidemiological, Clinical Characteristics and Outcome of Medical Staff Infected with COVID-19 in Wuhan, China: A Retrospective Case Series Analysis. medRxiv. 2020:2020.03.09.20033118. doi: 10.1101/2020.03.09.20033118.
6. McMichael TM, Currie DW, Clark S, et al. Epidemiology of Covid-19 in a Long-Term Care Facility in King County, Washington. New England Journal of Medicine. 2020doi: 10.1056/NEJMoa2005412.
7. Wang C, Liu L, Hao X, et al. Evolving Epidemiology and Impact of Non-pharmaceutical Interventions on the Outbreak of Coronavirus Disease 2019 in Wuhan, China. medRxiv. 2020:2020.03.03.20030593. doi: 10.1101/2020.03.03.20030593.
8. World Health Organization. Report of the WHO-China Joint Mission on Coronavirus Disease 2019 (COVID-19) 16-24 February 2020 [Internet]. Geneva: World Health Organization; 2020 <https://www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf>
9. Ran L, Chen X, Wang Y, et al. Risk Factors of Healthcare Workers with Corona Virus Disease 2019: A Retrospective Cohort Study in a Designated Hospital of Wuhan in China. Clin Infect Dis. 2020 Mar 17doi: 10.1093/cid/ciaa287. PMID: 32179890.
10. Lai J, Ma S, Wang Y, et al. Factors Associated With Mental Health Outcomes Among Health Care Workers Exposed to Coronavirus Disease 2019. JAMA Netw Open. 2020 Mar 2;3(3):e203976. doi: 10.1001/jamanetworkopen.2020.3976. PMID: 32202646.
11. 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)
12. World Health Organization. Risk assessment and management of exposure of health care workers in the context of COVID-19. https://apps.who.int/iris/bitstream/handle/10665/331496/WHO-2019-nCov-HCW_risk_assessment-2020.2-eng.pdf
13. World Health Organization. Protocol for assessment of potential risk factors for 2019-novel coronavirus (2019-nCoV) infection among health care workers in a health care setting. [https://www.who.int/publications-detail/protocol-for-assessment-of-potential-risk-factors-for-2019-novel-coronavirus-\(2019-ncov\)-infection-among-health-care-workers-in-a-health-care-setting](https://www.who.int/publications-detail/protocol-for-assessment-of-potential-risk-factors-for-2019-novel-coronavirus-(2019-ncov)-infection-among-health-care-workers-in-a-health-care-setting)
14. World Health Organization. Coronavirus disease (COVID-19) outbreak: rights, roles and responsibilities of health workers, including key considerations for occupational safety and health, World Health Organization, Interim guidance 19 March 2020 [https://www.who.int/publications-detail/coronavirus-disease-\(covid-19\)-outbreak-rights-roles-and-responsibilities-of-health-workers-including-key-considerations-for-occupational-safety-and-health](https://www.who.int/publications-detail/coronavirus-disease-(covid-19)-outbreak-rights-roles-and-responsibilities-of-health-workers-including-key-considerations-for-occupational-safety-and-health)

SURVEILLANCE

Table 1. Countries, territories or areas with reported laboratory-confirmed COVID-19 cases and deaths. Data as of 11 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	83369	64	3349	4	Clusters of cases	0
Republic of Korea	10480	30	211	3	Clusters of cases	0
Australia	6238	86	54	2	Clusters of cases	0
Japan	6005	658	94	6	Clusters of cases	0
Malaysia	4346	118	70	3	Clusters of cases	0
Philippines	4195	119	221	18	Clusters of cases	0
Singapore	2108	198	7	0	Clusters of cases	0
New Zealand	1035	20	4	3	Sporadic cases	0
Viet Nam	257	2	0	0	Clusters of cases	0
Brunei Darussalam	136	1	1	0	Sporadic cases	0
Cambodia	120	2	0	0	Sporadic cases	0
Fiji	16	1	0	0	Sporadic cases	0
Lao People's Democratic Republic	16	1	0	0	Sporadic cases	0
Mongolia	16	0	0	0	Sporadic cases	2
Papua New Guinea	2	0	0	0	Sporadic cases	2
Territories**						
Guam	130	2	4	0	Clusters of cases	0
French Polynesia	51	0	0	0	Sporadic cases	2
New Caledonia	18	0	0	0	Sporadic cases	8
Northern Mariana Islands (Commonwealth of the)	11	0	2	0	Pending	2
European Region						
Spain	157022	4576	15843	605	Pending	0
Italy	147577	3951	18851	570	Pending	0
Germany	117658	4133	2544	171	Pending	0
France	89683	4332	13179	987	Pending	0
The United Kingdom	70276	5195	8958	980	Pending	0
Turkey	47029	4747	1006	98	Community transmission	0
Belgium	26667	1684	3019	496	Pending	0
Switzerland	24228	733	805	49	Community transmission	0
Netherlands	23097	1335	2511	115	Pending	0
Portugal	15472	1516	435	26	Pending	0
Russian Federation	13584	1667	106	12	Clusters of cases	0
Austria	13560	312	319	24	Pending	0
Israel	10095	340	92	13	Pending	0
Sweden	9685	544	870	77	Pending	0

Ireland	8089	696	287	24	Pending	0
Norway	6244	84	92	4	Pending	0
Poland	5955	380	181	7	Pending	0
Denmark	5819	184	247	10	Pending	0
Czechia	5732	163	119	7	Pending	0
Romania	5467	265	257	28	Pending	0
Luxembourg	3223	108	54	2	Pending	0
Serbia	3105	238	71	6	Pending	0
Finland	2769	164	48	6	Pending	0
Ukraine	2511	308	73	4	Clusters of cases	0
Greece	2011	56	90	4	Pending	0
Belarus	1981	915	19	6	Clusters of cases	0
Iceland	1675	27	7	1	Pending	0
Croatia	1495	88	21	1	Pending	0
Republic of Moldova	1438	149	29	0	Pending	0
Hungary	1310	120	85	8	Pending	0
Estonia	1258	51	24	0	Pending	0
Slovenia	1160	36	45	2	Pending	0
Lithuania	999	44	17	2	Pending	0
Azerbaijan	991	65	10	1	Clusters of cases	0
Armenia	937	0	11	0	Clusters of cases	1
Bosnia and Herzegovina	901	26	37	1	Community transmission	0
Kazakhstan	859	57	10	1	Pending	0
Slovakia	715	14	2	0	Pending	0
North Macedonia	711	48	32	2	Clusters of cases	0
Bulgaria	635	11	25	1	Pending	0
Uzbekistan	624	0	3	0	Clusters of cases	1
Latvia	612	23	2	0	Pending	0
Andorra	602	13	26	0	Community transmission	0
Cyprus	595	31	15	0	Pending	0
Albania	416	0	23	0	Clusters of cases	1
Malta	350	13	2	0	Pending	0
San Marino	344	0	34	0	Community transmission	1
Kyrgyzstan	339	41	5	0	Pending	0
Montenegro	255	3	2	0	Clusters of cases	0
Georgia	233	3	3	0	Clusters of cases	0
Liechtenstein	80	1	1	0	Pending	0
Monaco	54	0	0	0	Sporadic cases	2
Holy See	8	0	0	0	Sporadic cases	2
Territories**						
Kosovo ^[1]	250	23	7	0	Community transmission	0
Guernsey	191	10	5	0	Pending	0
Isle of Man	190	25	1	0	Pending	0
Faroe Islands	184	0	0	0	Pending	3
Jersey	183	13	4	1	Pending	0
Gibraltar	113	0	1	0	Pending	3

Greenland	11	0	0	0	Pending	5
South-East Asia Region						
India	7447	1035	239	40	Clusters of cases	0
Indonesia	3512	0	306	0	Clusters of cases	1
Thailand	2518	45	35	2	Clusters of cases	0
Bangladesh	424	94	27	6	Clusters of cases	0
Sri Lanka	197	7	7	0	Clusters of cases	0
Myanmar	28	1	3	0	Clusters of cases	0
Maldives	19	0	0	0	Clusters of cases	8
Nepal	9	0	0	0	Sporadic cases	6
Bhutan	5	0	0	0	Sporadic cases	8
Timor-Leste	2	1	0	0	Sporadic cases	0
Eastern Mediterranean Region						
Iran (Islamic Republic of)	68192	1972	4232	122	Community transmission	0
Pakistan	4788	187	71	5	Clusters of cases	0
Saudi Arabia	3651	364	47	3	Clusters of cases	0
United Arab Emirates	3360	370	16	2	Pending	0
Qatar	2512	136	6	0	Pending	0
Egypt	1794	95	135	17	Clusters of cases	0
Morocco	1448	71	107	10	Clusters of cases	0
Iraq	1280	48	71	2	Clusters of cases	0
Bahrain	998	111	6	1	Clusters of cases	0
Kuwait	993	83	1	0	Clusters of cases	0
Tunisia	671	28	25	0	Community transmission	0
Lebanon	609	27	20	1	Clusters of cases	0
Oman	546	62	3	0	Clusters of cases	0
Afghanistan	521	0	15	0	Clusters of cases	1
Jordan	372	0	7	0	Clusters of cases	1
Djibouti	150	10	1	0	Clusters of cases	0
Libya	24	0	1	0	Clusters of cases	1
Syrian Arab Republic	19	0	2	0	Community transmission	5
Sudan	17	2	2	0	Sporadic cases	0
Somalia	12	0	1	0	Sporadic cases	2
Yemen	1	1	0	0	Pending	0
Territories**						
occupied Palestinian territory	268	2	2	1	Clusters of cases	0
Region of the Americas						
United States of America	461275	35386	16596	1931	Community transmission	0
Canada	21226	1467	531	70	Community transmission	0
Brazil	17857	1930	941	141	Community transmission	0
Ecuador	7161	2196	297	25	Community transmission	0
Chile	6501	529	65	8	Community transmission	0

Peru	5256	914	138	17	Community transmission	0
Mexico	3441	260	194	20	Community transmission	0
Panama	2752	224	66	3	Community transmission	0
Dominican Republic	2349	0	118	0	Community transmission	1
Colombia	2223	169	69	14	Community transmission	0
Argentina	1929	134	79	12	Community transmission	0
Cuba	564	49	15	0	Clusters of cases	0
Costa Rica	539	37	3	0	Clusters of cases	0
Uruguay	473	17	7	0	Clusters of cases	0
Honduras	382	39	23	0	Clusters of cases	0
Bolivia (Plurinational State of)	268	4	19	1	Clusters of cases	0
Venezuela (Bolivarian Republic of)	171	5	9	2	Clusters of cases	0
Paraguay	129	5	6	1	Clusters of cases	0
Guatemala	126	31	3	0	Clusters of cases	0
El Salvador	117	14	6	1	Clusters of cases	0
Trinidad and Tobago	109	0	8	0	Clusters of cases	1
Barbados	66	3	4	1	Clusters of cases	0
Jamaica	63	0	4	0	Clusters of cases	2
Bahamas	41	1	8	1	Clusters of cases	0
Guyana	37	0	6	0	Clusters of cases	1
Haiti	30	0	2	0	Clusters of cases	1
Antigua and Barbuda	19	0	2	0	Clusters of cases	2
Dominica	16	1	0	0	Clusters of cases	0
Saint Lucia	14	0	0	0	Sporadic cases	5
Grenada	12	0	0	0	Clusters of cases	6
Saint Vincent and the Grenadines	12	4	0	0	Sporadic cases	0
Saint Kitts and Nevis	11	0	0	0	Sporadic cases	2
Belize	10	1	1	0	Sporadic cases	0
Suriname	10	0	1	0	Sporadic cases	7
Nicaragua	7	1	1	0	Pending	0
Territories**						
Puerto Rico	725	42	39	6	Clusters of cases	0
Martinique	154	0	6	0	Clusters of cases	1
Guadeloupe	143	2	8	0	Clusters of cases	0
Aruba	86	4	0	0	Clusters of cases	0
French Guiana	84	1	0	0	Clusters of cases	0
Sint Maarten	50	7	9	1	Sporadic cases	0
United States Virgin Islands	50	4	1	0	Clusters of cases	0
Bermuda	48	9	4	1	Clusters of cases	0
Cayman Islands	45	0	1	0	Clusters of cases	2
Saint Martin	32	0	2	0	Sporadic cases	1

Curaçao	14	0	1	0	Sporadic cases	2
Montserrat	9	1	0	0	Sporadic cases	0
Turks and Caicos Islands	8	0	1	0	Sporadic cases	3
Saint Barthélemy	6	0	0	0	Sporadic cases	11
Falkland Islands (Malvinas)	5	0	0	0	Sporadic cases	2
Anguilla	3	0	0	0	Sporadic cases	7
British Virgin Islands	3	0	0	0	Sporadic cases	10
Bonaire, Sint Eustatius and Saba	2	0	0	0	Sporadic cases	7
Saint Pierre and Miquelon	1	0	0	0	Sporadic cases	3
African Region						
South Africa	2003	69	24	6	Community transmission	0
Algeria	1761	95	256	21	Community transmission	0
Cameroon	803	73	10	0	Clusters of cases	0
Côte d'Ivoire	480	96	3	0	Clusters of cases	0
Burkina Faso	443	29	19	0	Clusters of cases	0
Niger	438	28	11	0	Clusters of cases	0
Ghana	378	65	6	0	Clusters of cases	0
Mauritius	318	4	9	2	Clusters of cases	0
Nigeria	305	17	7	0	Clusters of cases	0
Senegal	265	15	2	0	Clusters of cases	0
Democratic Republic of the Congo	215	0	20	0	Clusters of cases	1
Guinea	194	0	0	0	Clusters of cases	1
Kenya	189	5	7	0	Clusters of cases	0
Rwanda	118	5	0	0	Sporadic cases	0
Madagascar	95	0	0	0	Clusters of cases	1
Mali	74	15	7	0	Sporadic cases	0
Togo	73	0	3	0	Sporadic cases	1
Ethiopia	65	9	2	0	Sporadic cases	0
Congo	60	0	5	0	Clusters of cases	2
Uganda	53	0	0	0	Sporadic cases	2
Gabon	44	0	1	0	Sporadic cases	1
Zambia	40	1	2	1	Sporadic cases	0
Liberia	37	6	5	1	Sporadic cases	0
Guinea-Bissau	35	0	0	0	Sporadic cases	1
Eritrea	33	0	0	0	Sporadic cases	2
United Republic of Tanzania	32	7	3	2	Sporadic cases	0
Benin	30	0	1	0	Sporadic cases	1
Mozambique	20	3	0	0	Sporadic cases	0
Angola	19	0	2	0	Sporadic cases	2
Equatorial Guinea	18	0	0	0	Sporadic cases	1
Namibia	16	0	0	0	Sporadic cases	5
Botswana	13	0	1	0	Sporadic cases	1
Eswatini	12	0	0	0	Sporadic cases	2

Central African Republic	11	1	0	0	Sporadic cases	0
Chad	11	0	0	0	Sporadic cases	1
Seychelles	11	0	0	0	Sporadic cases	4
Zimbabwe	11	0	3	0	Sporadic cases	3
Malawi	9	1	1	0	Sporadic cases	0
Cabo Verde	7	0	1	0	Sporadic cases	4
Mauritania	7	1	1	0	Sporadic cases	0
Sierra Leone	7	0	0	0	Sporadic cases	2
Gambia	4	0	1	0	Sporadic cases	8
São Tomé and Príncipe	4	0	0	0	Pending	4
Burundi	3	0	0	0	Sporadic cases	7
South Sudan	3	0	0	0	Pending	1
Territories**						
Réunion	382	6	0	0	Clusters of cases	0
Mayotte	191	0	2	0	Clusters of cases	1
Subtotal for all Regions	1610197	89657	99679	6892		
International conveyance (Diamond Princess)	712	0	11	0	Pending	26
Grand total	1610909	89657	99690	6892		

*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

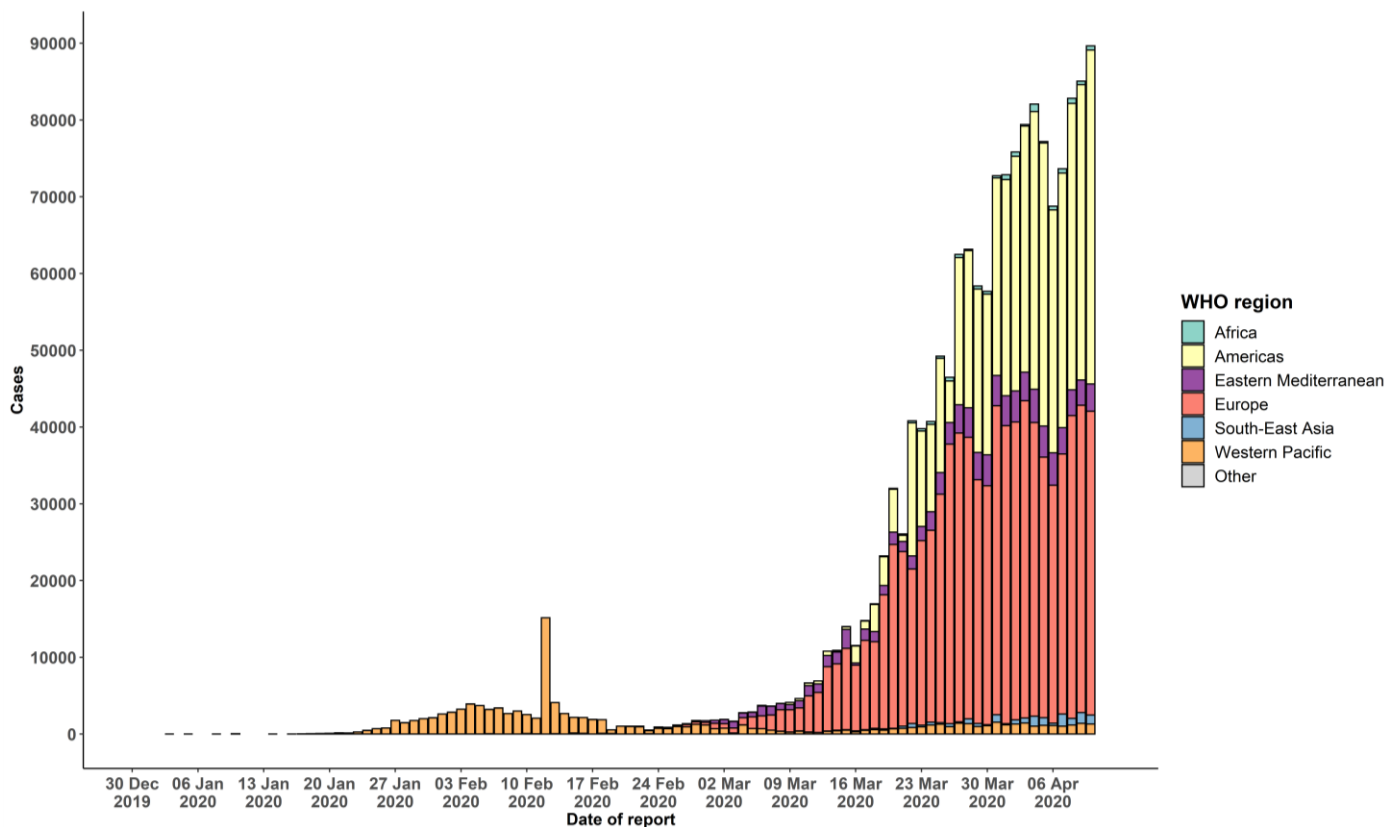
** "Territories" include territories, areas, overseas dependencies and other jurisdictions of similar status

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

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 1. Epidemic curve of confirmed COVID-19, by date of report and WHO region through 11 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 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](#) 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)