

## Coronavirus Disease 2019 outbreak: preparedness and readiness of countries in the Eastern Mediterranean Region

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On 31 December 2019, a cluster of acute respiratory illness was reported from China and later confirmed as novel coronavirus on 7 January 2020 (1). This virus is the same member of the coronavirus family that caused the severe acute respiratory syndrome (SARS-CoV) reported in China 2003, and Middle East respiratory syndrome (MERS-CoV) reported in Saudi Arabia in 2012. The initial cases have been linked to a live seafood market in Wuhan, China, and the specific animal source is yet to be determined (2). The detection of this new virus in humans without knowing the source of the infection has raised greatly heightened concerns not only in China, but also internationally. To date, the outbreak has spread to most provinces in China and 25 other countries within a relatively short period. Consequent to its spread, Dr Tedros Ghebreyesus, Director General of the World Health Organization (WHO), declared the outbreak a Public Health Emergency of International Concern (PHEIC) on 30 January 2020 (3).

As of 15 February 2020, a total of 50 580 cases and 1526 deaths were reported in China and another 25 countries. However, 99% of cases and 99.9% of deaths are centered in China (4). So far, the number of confirmed cases and associated deaths by the coronavirus disease outbreak has surpassed overall cases and deaths from the SARS epidemic.

As the situation evolves, many details regarding the epidemiological profile of Coronavirus Disease 2019 (COVID-19) have yet to be elucidated. Current information indicates that cases present with symptoms of an acute respiratory illness, such as cough, fever and difficulty breathing, and these symptoms range from mild to severe. Human-to-human transmission among close contacts has occurred, including in health care workers, although large nosocomial outbreaks have been avoided so far. Significant knowledge gaps remain regarding: 1) clinical course; 2) route of transmission other than contact and droplet; 3) period of infectiousness and asymptomatic transmission; 4) tertiary and quaternary transmission; and 5) vaccines and therapeutic agents, including whether antiviral agents may have a role, as possible improvement with oseltamivir and antiretrovirals has been noted in some cases (5). Sources have indicated that the COVID-19 shares 88–96% of its genome with

coronavirus originating in bats, but there is possibly an intermediate host, as was the case with SARS and MERS-CoV (6,7).

In the Eastern Mediterranean Region, as of 15 February 2020, eight cases were reported from the United Arab Emirates (UAE), of which six cases belong to two families and one case was reported from Egypt.

The incident management system has been activated at the WHO Regional Office for the Eastern Mediterranean (WHO/EMRO) in Cairo, Egypt, in order to better coordinate and support the preparedness, readiness and response activities at country and regional levels. WHO has categorized the risk of the COVID-19 outbreak globally as high, including the Eastern Mediterranean Region, because of the direct and indirect international travel from to and from China. In addition, many countries in the Region are experiencing or recovering from complex emergencies with fragile health systems.

To enhance response activities and prioritization of resources, WHO/EMRO has conducted an analysis of the risk of introduction of the virus into its countries, as well as their capacity to manage a COVID-19 outbreak. Countries in the Region have been working on developing and enhancing their preparedness and response capacities as required under IHR (2005) since they came into force in 2007 (8). The implementation of national action plans for health security, which were developed following the conduct of joint external evaluation in 18 countries between 2016 and 2019, is ongoing but with varied rates of progress among countries (9,10). WHO is actively offering support to accelerate operational readiness for COVID-19 in countries.

In addition, the Organization is strengthening laboratory diagnostic capacities by providing essential supplies and technical guidance to national laboratories. Currently, there is no vaccine or cure for the COVID-19; however, WHO/EMRO is advising health ministries on the appropriate management of patients who are diagnosed with the virus, as well as providing guidance on infection prevention and control to prevent spread within health facilities. Through the WHO regional logistics hub in Dubai, supplies have been pre-positioned and procurement initiated for personal protective

equipment and laboratory supplies to support COVID-19 preparedness and response efforts in countries.

Via its event-based surveillance, WHO is also detecting media signals related to COVID-19 and verifying them with the concerned countries. Furthermore, countries have been advised to report to WHO any COVID-19 suspected or confirmed cases in a timely manner, and COVID-19 verifications and reporting are effectively implemented through the national IHR focal points and existing influenza surveillance platforms (11).

While evidence shows that body temperature detection as an entry screening measure for travellers may not be effective, since travellers may be incubating the disease or concealing symptoms, many countries in the Region are implementing such screening. Meanwhile, WHO is advising countries on how to improve their effectiveness by disseminating health updates and collecting data on passengers' exposure history when arrive directly or indirectly from China.

WHO has advised against unnecessary restrictions on travel and trade. However, countries in the Region have assessed the risk of importation of COVID-19 and its onwards transmission in order to inform their decision. While some countries have made no changes, other countries have put additional measures that may significantly interfere with travel and trade. For the latter, WHO is working with such countries in order to share

justification of these measures in accordance with Article 43 of the IHR (2005). Additionally, a number of countries have decided to repatriate their nationals from China, who are subsequently kept in quarantine for 2 weeks in order to minimize the likelihood of transmission. WHO is working with these countries to prepare them for containment, including active surveillance, early detection, isolation and case management, contact tracing, as highlighted in the statement of the IHR emergency committee (12).

To date, WHO is leading global efforts to minimize the threat of COVID-19 and addressing the knowledge gaps through research and innovation to develop vaccines, therapeutics and diagnostics. The COVID-19 outbreak is another test of whether countries in the Eastern Mediterranean Region are adequately prepared for the prevention, detection and management of another public health emergency. Therefore, it is important for countries in the Region to continue their efforts to implement IHR (2005) capacities and allocate needed resources so that coordinated, timely and effective actions are evident to prevent importation of cases and potential local transmission. The continued success by WHO in preventing, detecting and containing this outbreak depends upon sustained global solidarity, especially in transparency and information sharing, in order to best understand the extent of the outbreak and its potential for further spread and any resultant consequences.

## References

1. World Health Organization. Novel coronavirus (2019-nCoV). Situation report 1. Geneva: World Health Organization; 2020 (<https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200121-sitrep-1-2019-ncov.pdf?sfvrsn=>)
2. Li Q, Guan X, Wu P, Wang X, Zhou L, Tong Y, et al. Early transmission dynamics in Wuhan, China, of novel coronavirus-infected pneumonia. *New Engl J Med*. 29 Jan. 2020:1–9.
3. World Health Organization. WHO Director-General's statement on IHR Emergency Committee on novel coronavirus (2019-nCoV). Geneva: World Health Organization; 2020 (<https://www.who.int/dg/speeches/detail/who-director-general-s-statement-on-ih-er-emergency-committee-on-novel-coronavirus-2019-ncov>)
4. World Health Organization. Novel coronavirus (2019-nCoV). Situation Report 19. Geneva: World Health Organization; 2020 Geneva: World Health Organization; 2020 ([https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200215-sitrep-26-covid-19.pdf?sfvrsn=a4cc6787\\_22](https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200215-sitrep-26-covid-19.pdf?sfvrsn=a4cc6787_22))
5. Wongcha-um, Panu. Cocktail of flu, HIV drugs appears to help fight coronavirus: Thai Doctors. Thomson Reuters, 3 February 2020 (<https://www.reuters.com/article/us-china-health-thailand/cocktail-of-flu-hiv-drugs-appears-to-help-fight-coronavirus-thai-doctors-idUSKBN1ZW0GQ>, accessed 4 February 2020)
6. Zhou P, Yang X, Wang X, Hu B, Zhang L, Zhang W, et al. A pneumonia outbreak associated with a new coronavirus of probable bat origin. *Nature*, 3 Feb. 2020, doi:10.1038/s41586-020-2012-7 (epub ahead of print).
7. Lu R, Zhao X, Li J, Niu P, Yang B, Wu H, et al. Genomic characterisation and epidemiology of 2019 novel coronavirus: implications for virus origins and receptor binding. *The Lancet*, 29 Jan. 2020:1–10.
8. Mahjour J, Alwan A. Emerging infections and global health security: the case (again) for strengthening all-hazards preparedness and response under IHR-2005. *East Mediterr Health J*. 2014;20(10):587–588 (<http://www.emro.who.int/emhj-vol-20-2014/vol-20-issue-10/editorial-emerging-infections-and-global-health-security-the-case-again-for-strengthening-all-hazards-preparedness-and-response-under-ih-2005.html>)
9. Samhoury D, Ijaz K, Rashidian A, Chungong S, Flahault A, Babich SM, et al. Analysis of Joint External Evaluations in the Eastern Mediterranean Region. *East Mediterr Health J*. 2018;24(5):477–87 ([http://applications.emro.who.int/emhj/v24/05/EMHJ\\_2018\\_24\\_05\\_477\\_487.pdf](http://applications.emro.who.int/emhj/v24/05/EMHJ_2018_24_05_477_487.pdf))
10. Samhoury D, Ijaz K, Thieren M, Flahault A, Babich SM, Jafari H, et al. WHO Joint External evaluations in the Eastern Mediterranean Region, 2016–17. *Health Secur*. 2018;16(1):69–76 (<https://www.ncbi.nlm.nih.gov/pubmed/29406822>)
11. Enhancing influenza surveillance in the Eastern Mediterranean Region: Eastern Mediterranean Acute Respiratory Infection Surveillance (EMARIS) network – third inter-country meeting. *East Mediterr Health J*. 2016;22(7):560–561
12. World Health Organization. Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV). Geneva: World Health Organization; 2020 ([https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-\(2005\)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-\(2019-ncov\)](https://www.who.int/news-room/detail/30-01-2020-statement-on-the-second-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-outbreak-of-novel-coronavirus-(2019-ncov)))