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Monkeypox (MPX) is a viral zoonotic disease that is endemic in some countries of Central and Western Africa. Since 1 January 2022, cases of MPX have been reported to WHO by 74 Member States across all 6 WHO regions. As of 21 July 2022, a total of 15 328 laboratory confirmed cases and 72 probable cases, including 5 deaths, have been reported to WHO (1). Most (11 638/15 328, 76%) of the laboratory-confirmed cases were reported by countries of the WHO European Region, 22% (3316/15 328) by the Region of the Americas, 2% (301/15 328) by the African Region, less than 1% (53/15 328) by the Western Pacific Region, less than 1% (18/15 328) by the Eastern Mediterranean

Region (EMR) and less than 1% (2/15 328) by the Region of South-East Asia (1). All five deaths were reported by the African Region.

Due to this unforeseen widespread of MPX, WHO declared on 23 July 2022 that the global MPX outbreak represents a Public Health Emergency of International Concern (PHEIC) (2), signaling a stronger global response to MPX outbreak, which has spread to over 70 countries in just a few weeks.

Since 13 May 2022, a higher proportion of MPX cases has been reported by countries that previously had no documented monkeypox transmission. This is the first time that cases and sustained chains of transmission have been reported in countries without direct or immediate epidemiological links to West or Central Africa. Most of the confirmed cases have no travel history to Western or Central Africa, where the disease is endemic, but have travel history to non-endemic countries, mainly in Europe and North America. WHO assesses the risk in the European Region as high and at the global level as moderate, considering that this is the first time many monkeypox cases and clusters are reported concurrently in many countries in widely disparate WHO geographical areas, balanced against the fact that mortality has remained low in the current outbreak (1).

Most reported MPX cases, so far, have been identified while providing sexual health or other health care services in primary or secondary facilities and have involved mainly, but not exclusively, Men who have Sex with Men (MSM) (1,3,4). In general, human-to-human transmission of the MPX virus can occur through direct contact with infectious skin or lesions, including face-to-face or skin-to-skin contacts. In the current outbreak, transmission appears to be occurring primarily through close physical contact, including sexual contact (oral, vaginal, and anal) (3). More information is needed to better understand other possible modes of transmission such as contact with other body fluids (e.g. breastmilk, semen, vaginal fluid, amniotic fluid, or blood) and other less common transmission routes.

In the current outbreak, 95% of cases with available data are male, median age 34 years (IQR: 28-40) (1,3). Males between 18 and 44 years of age continue to be disproportionately affected by the outbreak, as they account for 77% of cases. Among cases with reported sexual orientation, 94% identified as MSM and among those with known HIV status, 59% were HIV-positive. Information about HIV status is not available for the majority of cases, and for those for which it is available, it is likely to be skewed towards those reporting positive HIV results. Of all reported types of transmission, sexual encounter was most commonly reported,

accounting for 248 of 269 (92%) of all reported transmission events. Of all settings in which cases were likely exposed, the most common was party setting, involving sexual contacts and accounting for 27 of 59 (46%) of all likely exposure categories. The predominant route of transmission and risk factors in the EMR are not yet fully understood and require further information.

Many cases in the newly affected areas do not present with the classically described clinical symptoms of MPX (fever, swollen lymph nodes, followed by centrifugal rash). Among cases that reported at least one symptom, 68% presented with any rash, referring to one or more rash symptoms (systemic, oral, genital, or unknown location), 44% presented with fever, 27% with any lymphadenopathy, referring to either general or local lymphadenopathy (1,3). Generally, severity has been low, with few reported hospitalizations and no recorded death outside the endemic countries. Cases are usually mild and self-limited, and most people recover within a few weeks without treatment. Nonetheless, MPX virus may cause severe disease in certain population groups (young children, pregnant women, immunosuppressed persons). Genomic sequencing of viral deoxyribonucleic acid (DNA) of the current outbreak of MPX virus is ongoing. Where available, preliminary data from polymerase chain reaction (PCR) assays indicate that the MPX virus detected is related to the West African clade (1).

In addition to enhanced collaboration with health authorities to prevent further spread of the disease, WHO/EMRO and its Member States have made notable progress in strengthening technical capacities to respond to MPX by leveraging lessons from the COVID-19 response, which has catalyzed more resilient health systems for preparedness and response to emergency events. For instance, through response to COVID-19, all 22 Member States in the Region now have the laboratory diagnostic and surveillance capacities to detect, investigate, and confirm MPX virus and provide other critical response interventions (5).

WHO continues to issue guidance to help countries enhance their surveillance, laboratory diagnosis, clinical care, infection prevention and control (IPC), and risk communication and community engagement (4,6-10) on MPX and other diseases (11-13). WHO is working closely with countries, institutions, and technical and financial partners, to strengthen early detection, preparedness, and response and to prevent further disease transmission.

Outcomes of the Emergency Committee

On 23 June 2022, the WHO convened the International Health Regulations (2005) Emergency Committee to discuss whether the current MPX situation constitutes a Public Health Emergency of International Concern

(PHEIC) (14) and the committee advised that the outbreak did not constitute a PHEIC at that stage. However, the MPX outbreak has continued to grow thereafter and WHO reconvened the Emergency Committee on 21 July 2022 to review the latest data and make recommendations accordingly. On this occasion, the Committee was unable to reach a consensus on whether the outbreak represents a PHEIC.

Under the International Health Regulations (IHR), WHO is required to consider the following 5 elements in deciding whether an outbreak constitutes a PHEIC:

1. The information provided by countries – which in this case shows that this virus has spread rapidly to many countries that have not had cases before.
2. The 3 criteria for declaring a PHEIC under the IHR, which have been met.
3. The advice of the Emergency Committee, which in this case could not reach consensus.
4. Scientific principles, evidence, and other relevant information – which are currently insufficient and leave us with many unknowns.
5. The risk to human health, international spread, and the potential for interference with international traffic.

While WHO assesses the risk in the European Region as high and at the global level as moderate, there is also a clear risk of further international spread, although the risk of interference with international traffic remains low for the moment. For these reasons, WHO declared that the global MPX outbreak represents a PHEIC on 23 July 2022 (2).

Accordingly, WHO has made a set of temporary recommendations for 4 different groups of States Parties, based on their epidemiological situation, patterns of transmission, and capacities (2). All temporary recommendations are expected to be implemented in full respect of established principles of human rights, inclusion, and the dignity of all individuals and communities.

Situation and response in the Eastern Mediterranean Region

In the WHO EMR, 5 countries have reported 18 confirmed cases (United Arab Emirates: 13, Kingdom of Saudi Arabia: 2, Morocco: 1, Lebanon: 1, Qatar: 1) with no reported deaths as of 21 July 2022 (1). The regional office and country offices continue to closely monitor the situation, and to support regional coordination and information sharing with and between Member States and partners. The Regional Director has activated the incident management system for MPX, to

effectively coordinate and support preparedness, readiness, and response activities for the outbreak at country and regional levels. At the same time, Member States have established their own multisectoral coordination mechanisms for comprehensive response, including case finding, contact tracing, laboratory investigation, isolation, clinical management, and implementation of IPC measures.

For instance, United Arab Emirates reported the first MPX case in a person who arrived from West Africa on 24 May 2022, and the country immediately took some public health measures to mitigate the outbreak and prevent further spread of the virus (15). These measures include the development of a national MPX epidemic plan, a risk assessment with periodic updates, active case finding, extensive contact identification and monitoring, strengthening of laboratory diagnostics, and ensuring the availability of IPC supplies and therapeutics for severe cases.

In the Kingdom of Saudi Arabia, the first MPX case was detected on 14 July 2022 in Riyadh in a person returning from outside the Kingdom (16). The Ministry of Health (MOH) stated that the case was under medical observation using the adapted health measures, in addition to contacts investigation. The country has been closely monitoring the situation, pledging to handle any detected cases transparently, highlighting its readiness to deal with any development of the disease. The MOH has called upon its citizens and residents to comply with the health guidelines, especially during travel, in cooperation with its official channels, and to contact the call center for any inquiries about the MPX disease.

WHO has extended technical support to priority countries in the Region for the development of their national case management guidance and testing protocols, followed by practical training. Through event-based surveillance, WHO, in collaboration with the Member States, can detect signals related to MPX and verify them in collaboration with the health authorities. Member States have been requested to report suspected, probable, and confirmed cases through the existing International Health Regulations (2005) channels (6), however, not all countries are currently reporting cases regularly.

Key WHO recommendations and way forward in EMR

In addition to the guidance and public health recommendations provided to Member States, WHO recommends that Member States:

Continue to enhance and sustain early warning surveillance, contact tracing, isolation, and laboratory capacities to detect and confirm circulating MPX virus in the community, while

sharing relevant data on suspected, probable, and confirmed cases with WHO in a timely manner. Rt-PCR and sequencing capacities for MPX should be maintained in all reference laboratories and essential test kits should be prepositioned.

Adapt and strengthen care pathways with appropriate clinical management and IPC practices at health care facilities and in the community to prevent transmission and improve patient outcomes.

Consider the context of the current multi-country outbreak of MPX and convene respective national immunization technical advisory groups to review available evidence and develop policy recommendations for the use of vaccines as relevant to the national context (8).

Emphasize the importance of effective risk communication to raise awareness and prevent stigmatization.

Ensure availability and accessibility of medical countermeasures (therapeutics and vaccines) under a research framework and regional/global collaboration and coordination to enhance the multi-country emergency response.

WHO/EMRO and its Member States are implementing comprehensive, evidence-based preparedness and response to control the current MPX outbreak. However, delayed or underreporting of suspected cases is of concern, considering the cultural sensitivities across the Region regarding the predominantly suspected and reported route of transmission, which is sexual contact among MSM. Risk communication and community engagement should be prioritized to reduce stigma and ensure that sexual and primary health care services are accessible and approachable to everyone affected. Further, due to the sensitivity of reporting a full list of sexual contacts, identification of all contacts of probable and confirmed cases has proven to be challenging to date, which may limit collective efforts in containing the virus and preventing further transmission across the Region.

WHO/EMRO is determined to provide full support to its Member States to tackle these challenges (11-13). As addressed in its Vision 2023 Eastern Mediterranean Region: health for all by all: a call for solidarity and action (17), success can be achieved by focusing on cross-cutting regional strategic priorities and transforming the way we address the challenges

while upholding WHO's principles of the right to health and the responsibility of governments for the health of their people.

These approaches are completely applicable to strengthen preparedness and response to the current MPX outbreak, and essential to successfully control the spread of the virus in the Region. WHO, once again, would like to emphasize the importance of implementing the WHO/EMRO regional strategic priorities in countries – particularly active surveillance, timely information sharing, laboratory confirmation, enhanced IPC and case management, risk communication and community engagement, and regional solidarity in preventing, detecting, and containing the MPX outbreak.

References

1. World Health Organization. Multi-Country Monkeypox Outbreak – Global trends. Geneva: World Health Organization; 2022. https://worldhealthorg.shinyapps.io/mpx_global/.

2. World Health Organization. Second meeting of the International Health Regulations (2005) (IHR) Emergency Committee regarding the multi-country outbreak of monkeypox. Geneva: World Health Organization; 23 July 2022. https://www.who.int/news/item/23-07-2022-second-meeting-of-the-international-health-regulations-(2005)-(ihr)-emergency-committee-regarding-the-multi-country-outbreak-of-monkeypox.

3. World Health Organization. Multi-country outbreak of monkeypox; External Situation Report 1. Geneva: World Health Organization; 6 July 2022. https://www.who.int/publications/m/item/multi-country-outbreak-of-monkeypox--external-situation-report--1---6-july-2022.

4. World Health Organization. Risk communication and community engagement (RCCE) for monkeypox outbreaks: Interim guidance. Geneva: World Health Organization; 24 June 2022. https://www.who.int/publications/i/item/WHO-MPX-RCCE-2022.1.

5. World Health Organization. Regional Office for the Eastern Mediterranean. COVID-19 strategic preparedness and response plan: sustaining an effective response to end the acute phase of the pandemic and transitioning to recovery in WHO's Eastern Mediterranean Region, 2022 edition/World Health Organization. Cairo: WHO Regional Office for the Eastern Mediterranean; 2022. https://applications.emro.who.int/docs/WHOEMCSR513E-eng.pdf?ua=1.

6. World Health Organization. Surveillance, case investigation and contact tracing for monkeypox: interim guidance. Geneva: World Health Organization; 24 June 2022. https://www.who.int/publications/i/item/WHO-MPX-Surveillance-2022.2.

7. World Health Organization. Clinical management and infection prevention and control for monkeypox: Interim rapid response guidance. Geneva: World Health Organization; 10 June 2022. https://www.who.int/publications/i/item/WHO-MPX-Clinical-and-IPC-2022.1.

8. World Health Organization. Laboratory testing for the monkeypox virus: Interim guidance. Geneva: World Health Organization; 23 May 2022. https://www.who.int/publications/i/item/WHO-MPX-laboratory-2022.1.

9. World Health Organization. Vaccines and immunization for monkeypox: Interim guidance.

Geneva: World Health Organization; 14 June 2022. https://www.who.int/publications/i/item/who-mpx-immunization-2022.1.

10. World Health Organization. Public health advice for gatherings during the current monkeypox outbreak. Geneva: World Health Organization; 28 June 2022. https://www.who.int/publications/i/item/WHO-MPX-Gatherings-2022.1.

11. Al-Mandhari A; Samhouri D; Abubakar A; Brennan R. Coronavirus Disease 2019: preparedness and readiness of countries in the Eastern Mediterranean Region. East Mediterr Health J. 2020;26(2):136–137. DOI: https://doi.org/10.26719/2020.26.2.136.

12. Al-Mandhari A. Coming together in the Region to tackle COVID-19. East Mediterr Health J. 2020;26(9):992-993. DOI: https://doi.org/10.26719/2020.26.9.992.

13. Al-Mandhari A; Marmot M; Ghaffar A; Hajjeh R; Allen J; Khan W; et al. COVID-19 pandemic: a unique opportunity to 'build back fairer' and reduce health inequities in the Eastern Mediterranean Region. East Mediterr Health J. 2021;27(3):217-219. DOI: https://doi.org/10.26719/2021.27.3.217.

14. World Health Organization. Meeting of the International Health Regulations (2005) Emergency Committee regarding the multi-country monkeypox outbreak. Geneva: World Health Organization; 23 June 2022. https://www.who.int/news/item/25-06-2022-meeting-of-the-international-health-regulations-(2005)-emergency-committee--regarding-the-multi-country-monkeypox-outbreak.

15. Ministry of Health & Prevention. UAE health system fully prepared to deal with monkeypox. Dubai: United Arab Emirates; 22 May 2022. https://mohap.gov.ae/en/media-center/news/22/5/2022/mohap-uae-health-system-fully-prepared-to-deal-with-monkeypox.

16. Ministry of Health. MOH: 1st Case of Monkeypox Reported in the Kingdom. Riyadh: Kingdom of Saudi Arabia; 14 July 2022. https://www.moh.gov.sa/en/Ministry/MediaCenter/News/Pages/News-2022-07-14-001.aspx.

17. World Health Organization. Vision 2023 Eastern Mediterranean Region: health for all by all: a call for solidarity and action. Cairo: World Health Organization Regional Office for the Eastern Mediterranean; 2018. https://apps.who.int/iris/handle/10665/326911.

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