Elsevier has created a Monkeypox Information Center in response to the declared public health emergency of international concern, with free information in English on the monkeypox virus. The Monkeypox Information Center is hosted on Elsevier Connect, the company's public news and information website.

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Monkeypox exposure during pregnancy: what does UK public health guidance advise?

Pradip Dashraath and colleagues[1] give recommendations about monkeypox exposure during pregnancy that do not fully align with public health guidance in the UK.

We propose a revision of the flowchart (figure). As of August, 2022, the UK Health Security Agency no longer recommends self isolation for monkeypox contacts, although contacts at high risk (eg, after sexual exposure) are advised to avoid contact with clinically vulnerable people for 21 days.[2] Precautionary admission to hospital should be considered for any pregnant person with a positive monkeypox PCR, regardless of symptoms. There is no benefit from vaccination after a positive monkeypox PCR test.

Dashraath and colleagues[1] list three types of monkeypox exposure: contact with a person who has human monkeypox; travel to an affected country; and exposure to exotic animals. The risk of monkeypox associated solely with travel is low: before 2022, eight travel-associated cases had been reported.[3] Similarly, no zoonotic cases of monkeypox have been reported outside Africa since 2003.[4]

PCR testing of an oropharyngeal swab was recommended for asymptomatic, monkeypox-exposed pregnant women.[1] In the UK, however, testing after exposure is not recommended unless symptoms are present.[2] Oropharyngeal swabs are not 100% sensitive in early disease.[3] If testing after exposure is done, orthopoxvirus serology tests should also be considered, if available.

In their proposed management plan for women who have been admitted to hospital, Dashraath and colleagues[1] recommended prophylactic amoxicillin (systemic) and chloramphenicol (eye drops). We are unaware of evidence supporting prophylaxis against bacterial superinfection. In the analogous situation of chickenpox in pregnancy, prophylactic antibiotics are not recommended.[5] The microbiome health of both mother and baby should be considered in this scenario, in addition to routine antimicrobial stewardship concerns.

Finally, we encourage the prospective documentation and analysis of all maternal and fetal outcomes after monkeypox exposure or illness in pregnancy, including the response to any antiviral therapies.

We declare no competing interests.

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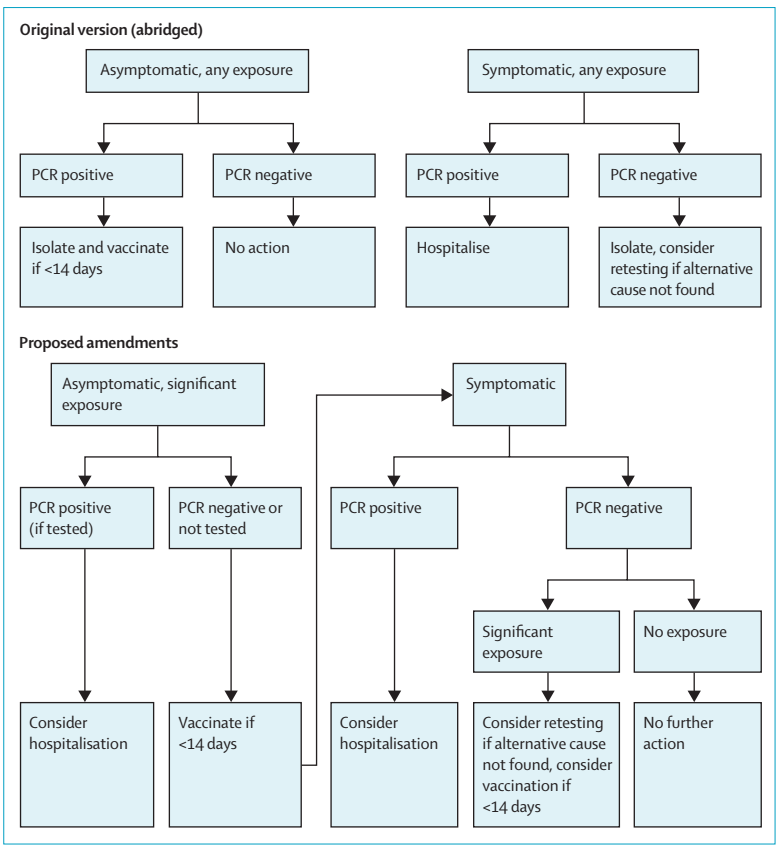

Figure: **Abridged screening flowchart proposed by Dashraath and colleagues[1] and proposed amendments to flowchart to align with UK public health recommendations**
The UK Health Security Agency recommends avoiding contact with immunosuppressed individuals, children younger than 5 years, and pregnant women for 21 days after significant exposure (direct monkeypox virus exposure to broken skin or mucous membranes), but does not recommend complete self isolation.[2]

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Authors' reply

We welcome Hugh Adler and Rachel Taggart's critique of our proposed clinical algorithm.[1] Anticipatory guidance that is provided early

during infectious disease outbreaks of emerging and re-emerging pathogens needs to be sufficiently broad to account for worst-case scenarios, particularly for populations at high risk.

Guidelines defining suspected cases from the US Centers for Disease Control and Prevention (CDC) and health authorities in Switzerland and Singapore include travel to countries with reported infections or exposure to exotic pets within 21 days of the onset of illness as epidemiological criteria. In 2003, 43 monkeypox infections in the USA were due to contact with pet prairie dogs, which were infected after being housed in a facility with five different rodent species from Ghana. In 2022, human-to-dog transmission of the virus (reverse zoonosis)[2] and the importation of a new monkeypox virus strain into the UK after travel were reported.[3] Albeit uncommon, cross-species and travel-associated risks of infection are not only possible, but unpredictable.

Although the UK Health Security Agency recommends self-isolation for anyone with high-risk exposure to monkeypox,[4] other countries (including Switzerland) do not follow this recommendation. Admission of pregnant women with monkeypox needs to remain an individual decision. Systematic hospitalisation of patients who test positive for monkeypox, who might remain asymptomatic or have mild symptoms,[5] could overwhelm health systems in epidemic scenarios, while potentially contributing to increases in nosocomial spread to patients and medical staff. COVID-19 showed that monitoring patients safely at home with telehealth assistance (eg, telephone or online consultations) is feasible.

The statement that there is no role for monkeypox immunisation after positive PCR results conflicts with CDC guidelines, which advise vaccination within 4 days of exposure to prevent disease and within 2 weeks to reduce disease severity.

WHO lists oropharyngeal swabs as the main diagnostic alternative in the absence of skin or genital lesions. A lower threshold for screening is needed in pregnancy: because of the potential for adverse fetal outcomes,[6] positive PCR results should prompt heightened antenatal surveillance even in asymptomatic women. The sensitivity and specificity of orthopoxvirus serology has not been validated and might be difficult to interpret in people previously vaccinated against smallpox.

We advocate that prophylactic antibiotics be limited to pregnant women at risk for cellulitis or secondary bacterial infection. Any infection during pregnancy can increase the risk of preterm birth; interventions to reduce this risk are warranted until more data are available.

We agree that all pregnancy outcomes after monkeypox infection should be documented to inform evidence-based management—the PoxPreg registry, for example, has been created to quantify maternal and fetal risks.[7] Until then, as we had previously concluded, all recommendations are subject to rapid change.

We declare no competing interests. The PoxPreg registry can be contacted via pox-preg@chuv.ch.

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For **WHO COVID-19 data from Nauru** see https://covid19.who.int/region/wpro/country/nr

Pandemic solidarity across national borders saved lives

Shortfalls in the equitable supply of COVID-19 vaccines to low-income and middle-income countries, as discussed by David Durrheim,[1] is an abysmal failure of global health governance. We must, however, also recognise that some nations extended assistance across borders in selfless acts of humanity.

The Pacific island nation of Nauru—which registered its first COVID-19 case only in April, 2022—is a testament to such solidarity.[2] By late 2021, Nauru had recorded a 96% rate of double-dose COVID-19 vaccinations in adults, with efforts underway to immunise everyone 18 years of age and younger.[2] All vaccines and associated vaccination devices supporting this effort were donations from the Governments of Australia, India, New Zealand, and Taiwan, who also bore the costs of safe disposal containers and freight, all while navigating the pandemic in their own countries.

The high immunisation rate before COVID-19 came onshore was decisive in averting a catastrophe. Comorbidities in Nauru include the highest rates