



Letter to the Editor

Appropriate testing for clade Ib Mpox in non-endemic countries: Challenges and strategies[☆]

Dear Editor,

A recent discussion has revisited the core group theory in relation to clade Ib monkeypox virus (MPXV) circulation highlighting its implications for transmission and immunity dynamics and public health policies [1]. Unlike clade IIB MPXV, which disproportionately affected men who have sex with men (MSM), at the moment, clade Ib does not target a well-defined core group [2]. In a report from Democratic Republic of the Congo (DRC), clade Ib MPXV was equally detected in females and males, primarily linked to sexual contact, affecting adolescents and young adults, including professional sex workers [3]. This suggests that while sex work may be a core group characteristic, the sole sexual activity - regardless of specific behaviours - does not necessarily define a group membership. For these reasons, the association of intimate contact between men or other sexual activities with a higher risk of clade Ib acquisition appears to be unsubstantiated and stigmatising. The absence of or the mislabelling to a well-defined core group might have consequences on testing strategies and surveillance programs, in areas where clade Ib is neither endemic nor circulating, making them less effective.

On 14 August 2024, World Health Organization (WHO) declared mpox outbreak a public health emergency of international concern (PHEIC), with clade Ib representing one of the main reasons for this declaration: thousands of cases were reported in DRC and over 100 diagnoses were confirmed in Burundi, Kenya, Rwanda and Uganda [4]. <24 h after PHEIC declaration, the first clade Ib cases outside Africa were confirmed in Sweden and Thailand, in two adults both travelling from unnamed African countries [5,6]. While clade IIB mpox is still circulating around the world, additional clade I mpox cases, apparently travel-related, have been reported in the Central African Republic, the Republic of the Congo, India and Thailand [7]. Although there are no clear indications that clade Ib has a different transmission rate than clade Ia, in a recent risk assessment about clade Ib mpox, ECDC estimated a high risk of infection for European citizens travelling to affected countries and having close contact with affected communities. In fact, since the transmission rate of clade I was originally reported to be higher compared to clade II, for residents of the European area the likelihood of infection is considered potentially high after close contact (e.g. intimate, household, healthcare-associated contact) with a possible or confirmed imported case, even if the risk remains very low for the general population [8,9]. Whom to test outside Africa then? Currently, in the absence of a well-defined core group and with most cases observed in the DRC and neighbour countries, the identification of suspected cases outside Africa should be based on a 360-degree evaluation that considers clinical signs, symptoms, and, importantly, travel history with contact tracing, rather than focusing disproportionately on any particular group such as MSM communities. As of October 2024, US CDC only

recommends testing in presence of a rash consistent with mpox [10]. On the other hand, in absence of an increased circulation outside African endemic countries of mpox, specifically clade Ib, three months after the PHEIC declaration on August 2024, the suspicion of clade Ib mpox in a person with no recent travel history to endemic areas should be carefully evaluated. Therefore, testing protocols should also consider the aforementioned epidemiological risk factors. In addition, a potential sentinel testing strategy should include populations with high mobility or frequent contact with endemic regions, like frequent international travellers and healthcare workers, regardless of specific sexual behaviours.

CRediT authorship contribution statement

Alberto Rizzo: Writing – original draft, Conceptualization. **Davide Mileto:** Writing – review & editing. **Davide Moschese:** Supervision.

Declaration of interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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