

# Mpox clade II in France in 2023-2024: an endemic situation?

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## BACKGROUND

- WHO declared the end of Clade IIb mpox virus (MPV) emergency on 11 May 2023. Since then, few cases have been reported in Europe. Third-generation smallpox vaccination (MVA-BN) for at-risk population helped decreasing the number of new cases but lack of data on long-term vaccine effectiveness and vaccination coverage, especially for those living with HIV (PLWHIV), raise concerns about persistent circulation of MPV. The aim of this study was to describe cases of MPV in France since August 2023.

### STUDY MAIN OBJECTIVE:

- This study describes mpox cases diagnosed in France and identified through the National Society for Infectious Diseases' mailing list between August 2023 and August 2024. All cases were confirmed by PCR on skin and/or genital swab samples.

## METHODS

- This was a national, multicentre, observational study.
- Demographic, clinical and virological characteristics of PCR-confirmed cases of mpox since August 2023 were collected from a national call via Infectio-flash.
- Ethics Committee Approval Number: CER GHU-Nord APHP CER-2024-258.

## RESULTS

- Between August 2023 and June 2024, 36 confirmed cases of clade IIb MPV infection were identified in France.
- 33/36 were living in Paris and its suburban area.



- The number of cases was consistent throughout the year.

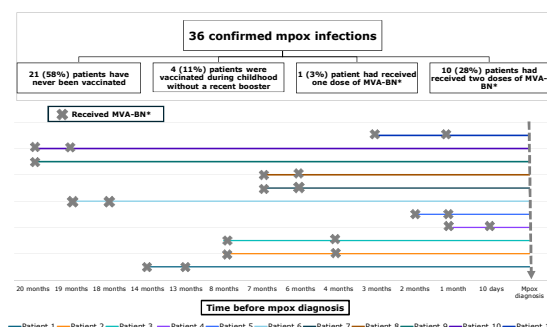


Table. Patients' characteristics at inclusion (n=36)

Median age [IQR]	32 [29-38]
Male - of whom MSM	32/36 28/32
N sexual partners during last month (median, IQR)	3 [1-5]
Prep users	13 (36%)
Chemsex users	3 (8%)
Travel abroad during last month with sexual intercourses during travel	10 (28%)
Europe, North and West Africa, South America, Middle East	
Sexual intercourse with a partner with symptoms suggestive of mpox	8 (22%)
Living with HIV	12 (33%)
- On ART with full viral suppression	9 (25%)
- Concomitant diagnosis of mpox and HIV infection	4 (11%)

- At diagnosis, 14 patients (39%) had typical genital lesions with facial, limb or trunk lesions, 19 (53%) had isolated genital or anal lesions and three (8%) had atypical lesions. Unvaccinated patients had a median of 7 lesions [IQR 2-11] compared to 4 [2-7] in vaccinated patients ( $t$ -test  $p = 0.15$ ). Only one was hospitalized for Kaposi's sarcoma and mpox lesions.
- No complications occurred.

Figure. Timeline of vaccination in relation to date of mpox diagnosis among those vaccinated. \* MVA-BN = Third-generation smallpox vaccine



- Unvaccinated patients had significantly more lesions compared to vaccinated patients (median [IQR] of 8 [3-14] vs 4 lesions [2-6]).
- Median number of lesions (7) was similar in vaccinated and unvaccinated PLWHIV.
- Regardless of vaccination, PLWHIV exhibited a median of 7 [IQR 3-10] lesions versus 4 [IQR 2-11] in HIV-negative patients. No patient showed critical complications.

## CONCLUSIONS

- This study shows persistent transmission of Clade IIb MPV in France, that could be explained by asymptomatic carriers and insufficient vaccination in high-risk MSM.
- Although all patients were at high-risk of mpox, only 42% received at least one vaccine dose.
- PLWHIV accounted for one third of mpox cases, including 11% with mpox revealing HIV infection, emphasizing the need for targeted prevention messages and vaccination for MSM PLWHIV.

REFERENCES: Rahi M et al, Lancet Regional Health Europe, 2024

