

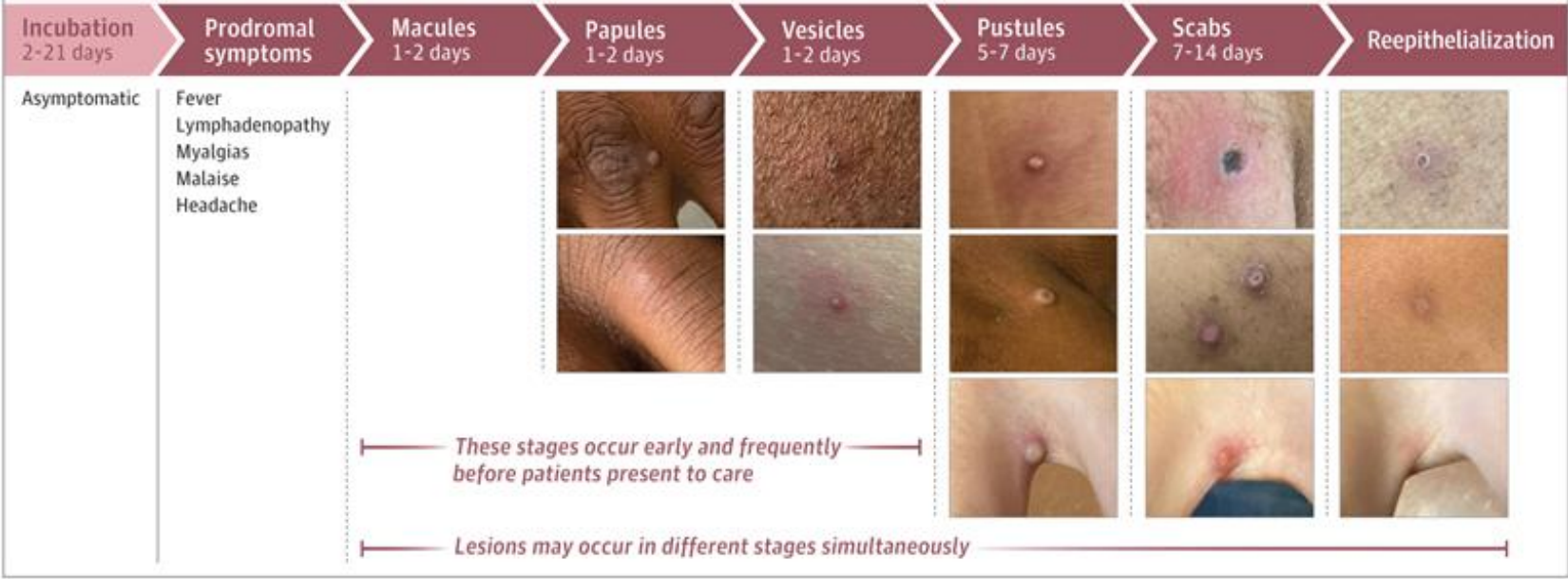
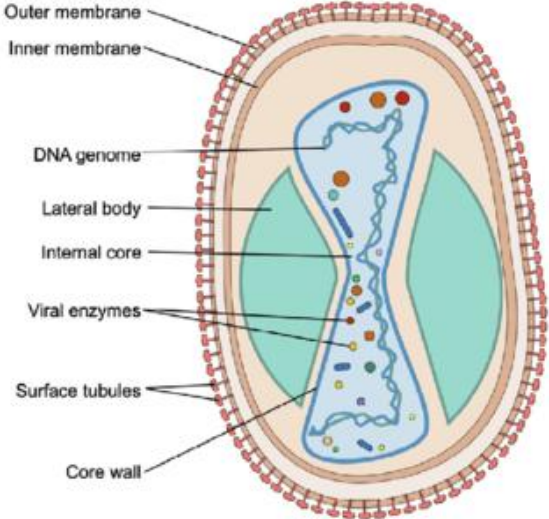
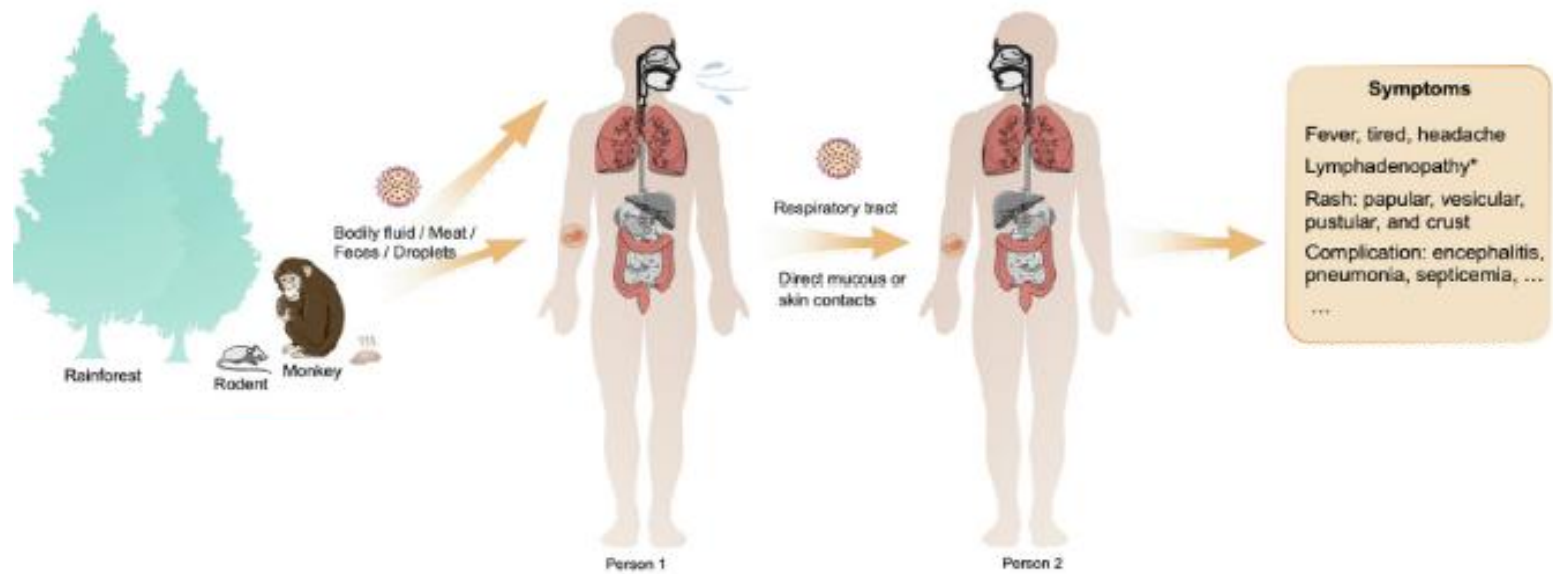
Mpox and STI testing in Victoria 2022 to 2024

Georgia McCluskey

Microbiology Registrar

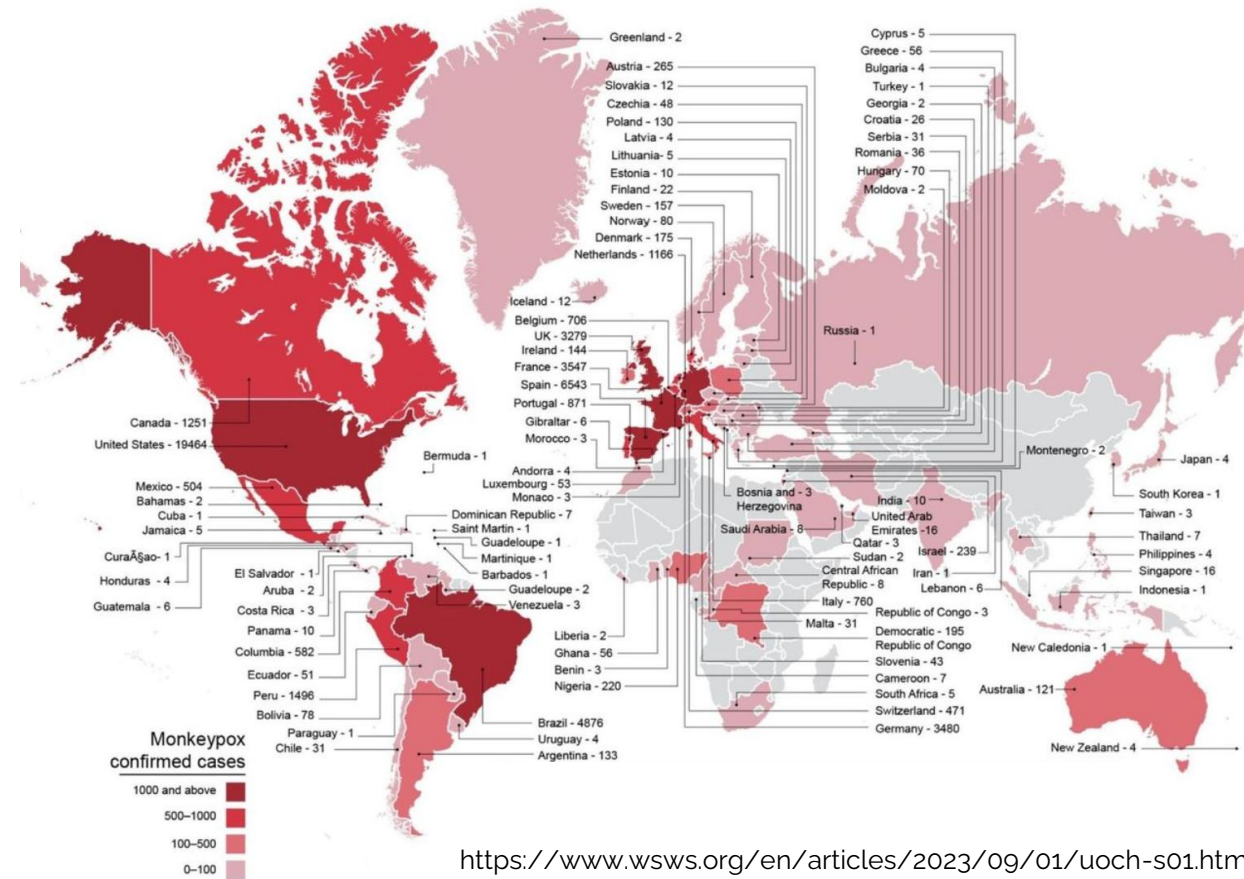
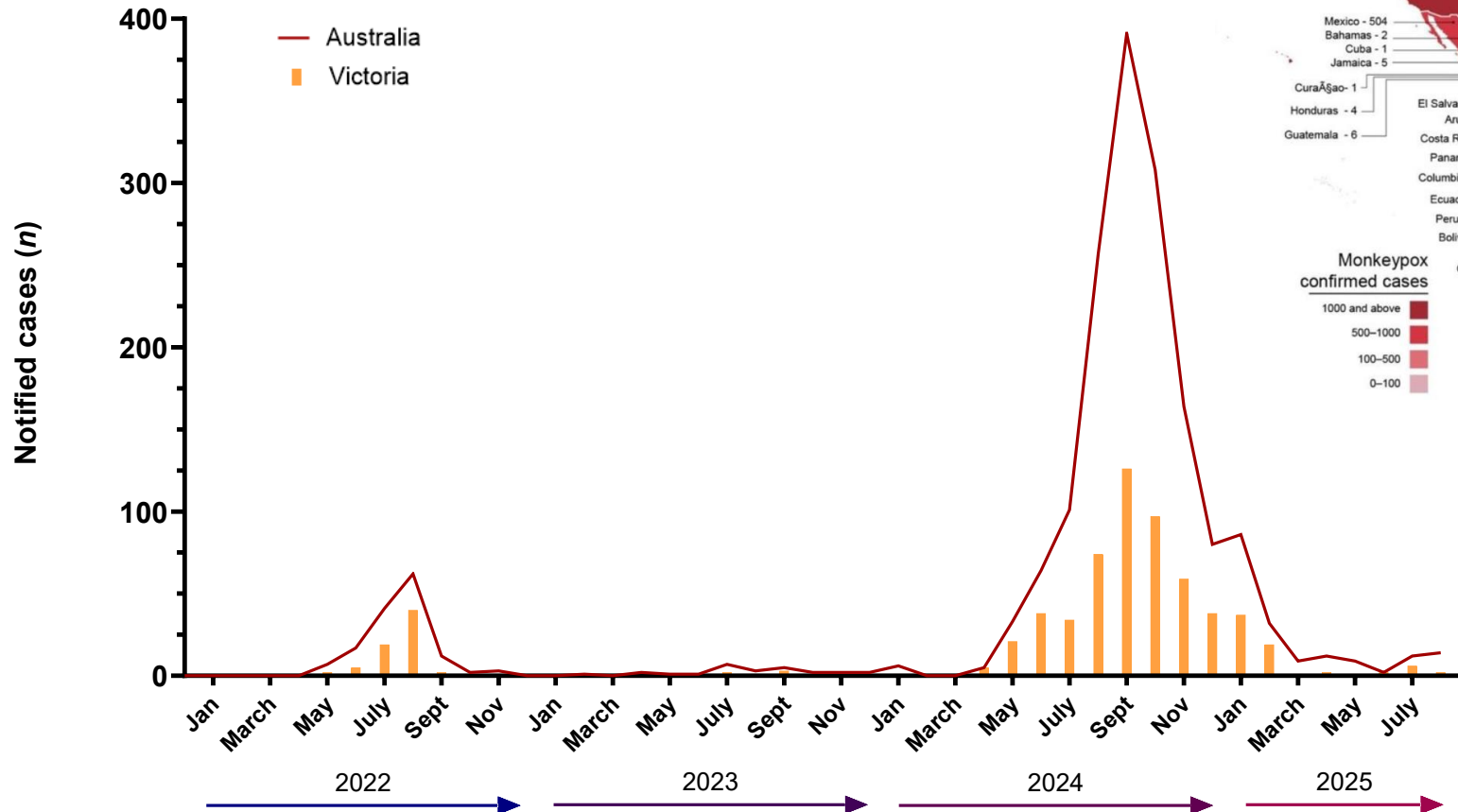
Victorian Infectious Diseases Reference Laboratory

Mpox



Titanji BK, Hazra A, Zucker J. JAMA. 2024;332(19):1652–1662. doi:10.1001/jama.2024.21091.
Lu Tianyu et al., Biosafety and Health. 2022;4(1). doi:10.1016/j.bsheal.2022.09.004.

Mpox outbreaks



<https://www.wsws.org/en/articles/2023/09/01/uoch-s01.html>

Testing centralised in Victoria at VIDRL

Study aims

1. To describe mpox testing trends in Victoria over three years during mpox outbreaks
2. To describe testing of other STIs during the same period
3. To determine co-infection rates of mpox with other STIs
4. To inform national and international mpox testing strategies

Methods

Data extraction

- Full years 2022, 2023, 2024
- Mpox, herpes multiplex (HSV1/2 and VZV), *Treponema pallidum* (TP), *Chlamydia trachomatis* (CT) and *Neisseria gonorrhoeae* (NG) nucleic acid amplification testing (NAAT)
- Metadata: referrer, gender, age, specimen type, site description

Refining

- Removed interstate, post-mortem and perinatal/neonatal requests
- Site categorisation (9 categories)

Analysis

- Microsoft Excel version (v. 2506) and Prism GraphPad (v. 10.5.4)
- Chi-square tests

Results

80,118 requests

- Male = 77%
- Female = 20%
- Trans/other/ U = 2.4%

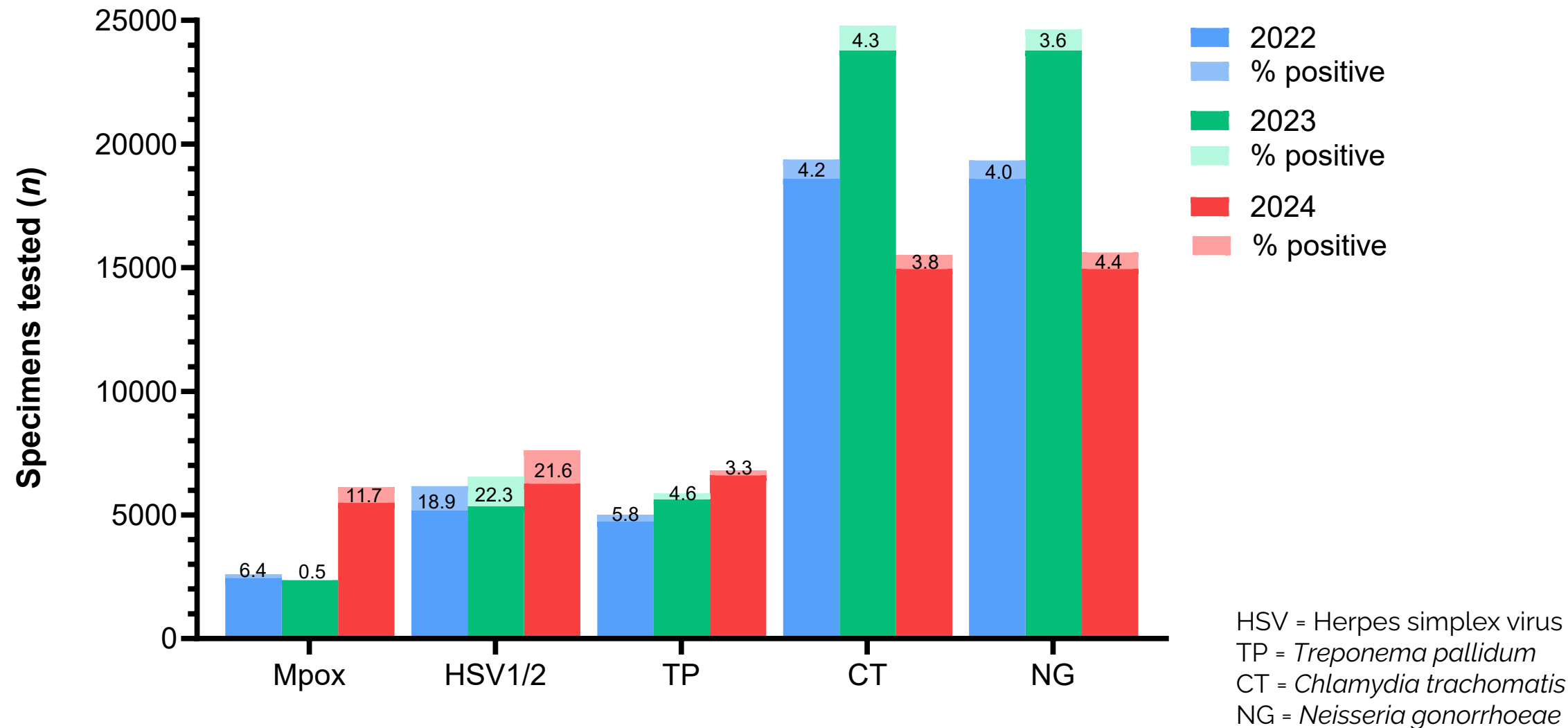
Median age (IQR) ≈33 years (27-42)

Referrers

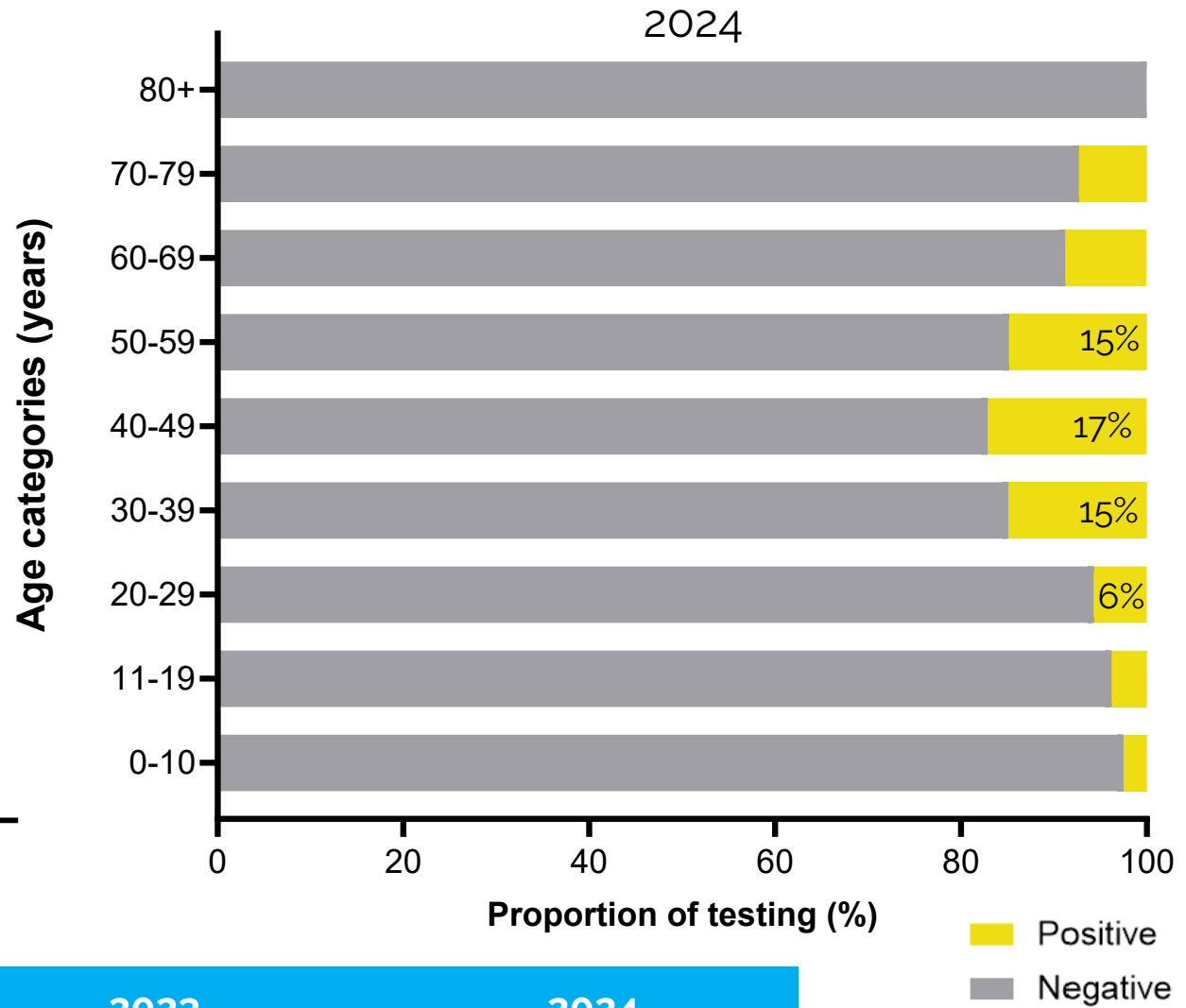
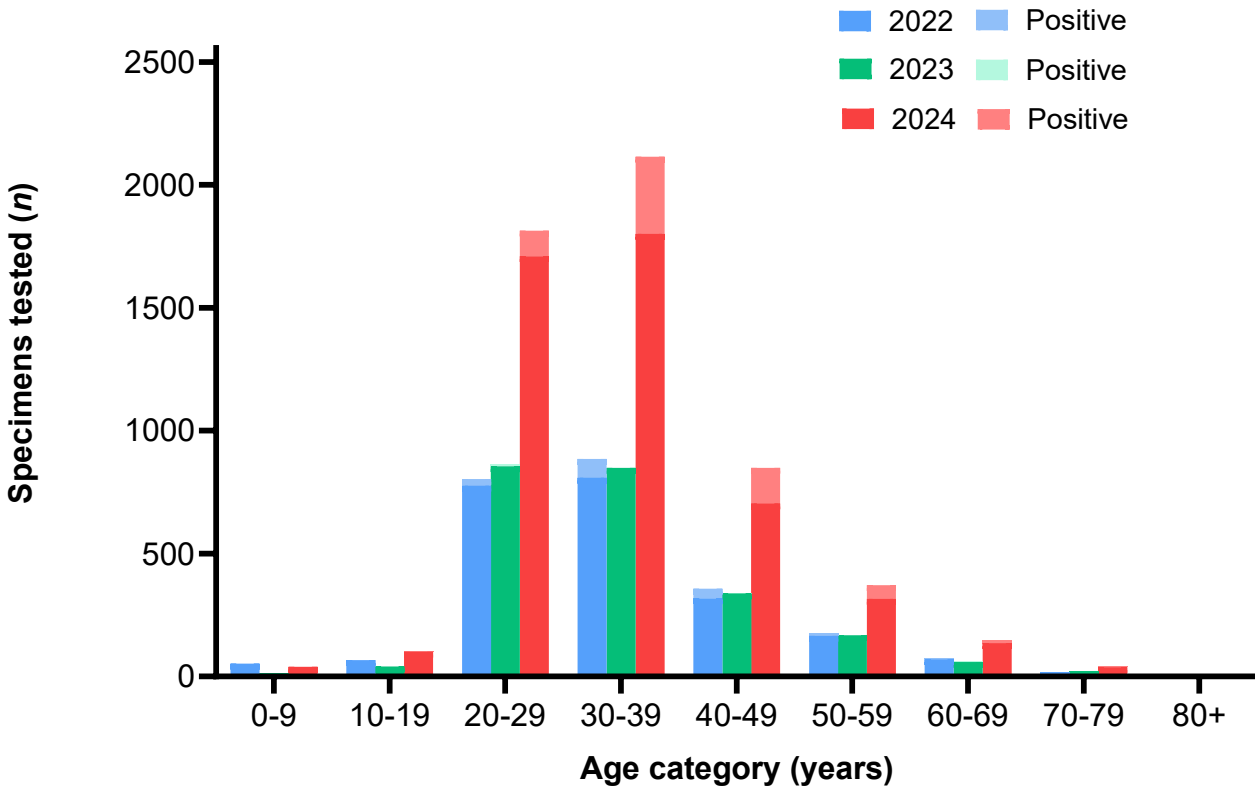
- Clinics = 89.6%
- Primary laboratories (hospital + community) = 10.4%



Results – all STIs



Results – mpox



Mpox Referrer	2022		2023			2024		
	Total	Positive	Total	Positive		Total	Positive	
Primary laboratory	649	32	5%	259	4 1.5%	1309	236	18%
Clinics	1790	123	7%	2101	7 0.3%	4183	404	10%
Total	2439	155	6%	2360	11 0.5%	5492	640	12%

*p<0.001

Results – 2024 subset

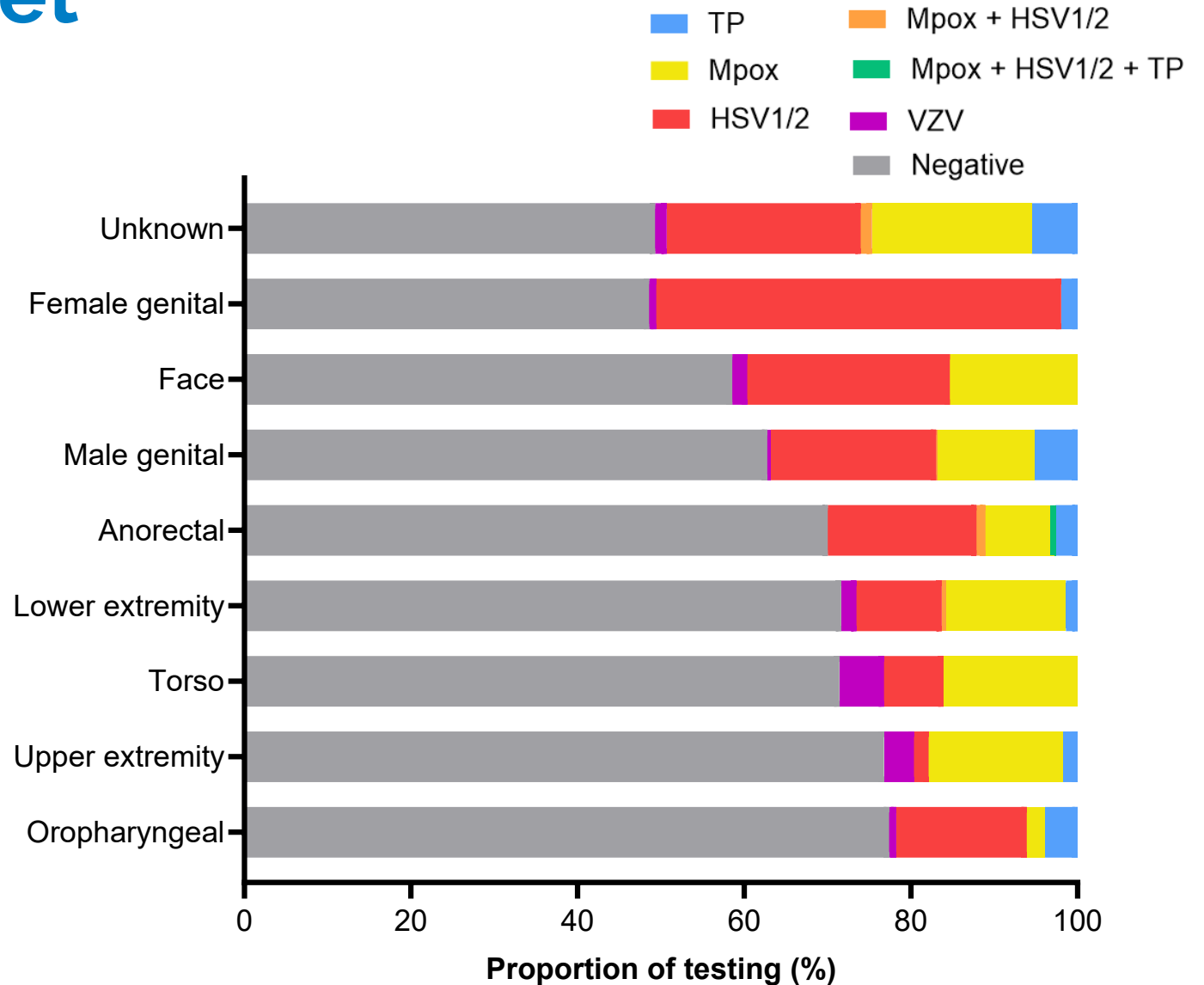
Specimens referred for mpox, herpes multiplex & *Treponema pallidum* ($n = 3917$)

Alternative diagnoses

- Female genital >50%
- VZV highest torso & upper extremity

Mpox co-infection

- Overall = 0.6%
- Anorectal 1.3%
 - Of those mpox positive, 12.6% had a second STI



Summary

- Mpox had highest number referrals in 2024 with ↑positivity
 - % positive highest in older age groups compare to HSV1/2
- Other STIs positivity stable across 3 years
- Subset analysis
 - Alternative diagnoses frequent
 - Co-infection 0.6% overall, 1.3% in anorectal specimens

Limitations

Incomplete data

- *Neisseria gonorrhoeae* / *Chlamydia trachomatis* and Herpes multiplex
- Tested elsewhere
- Not requested

Likely high MSM population

No epidemiological data / vaccination / HIV information

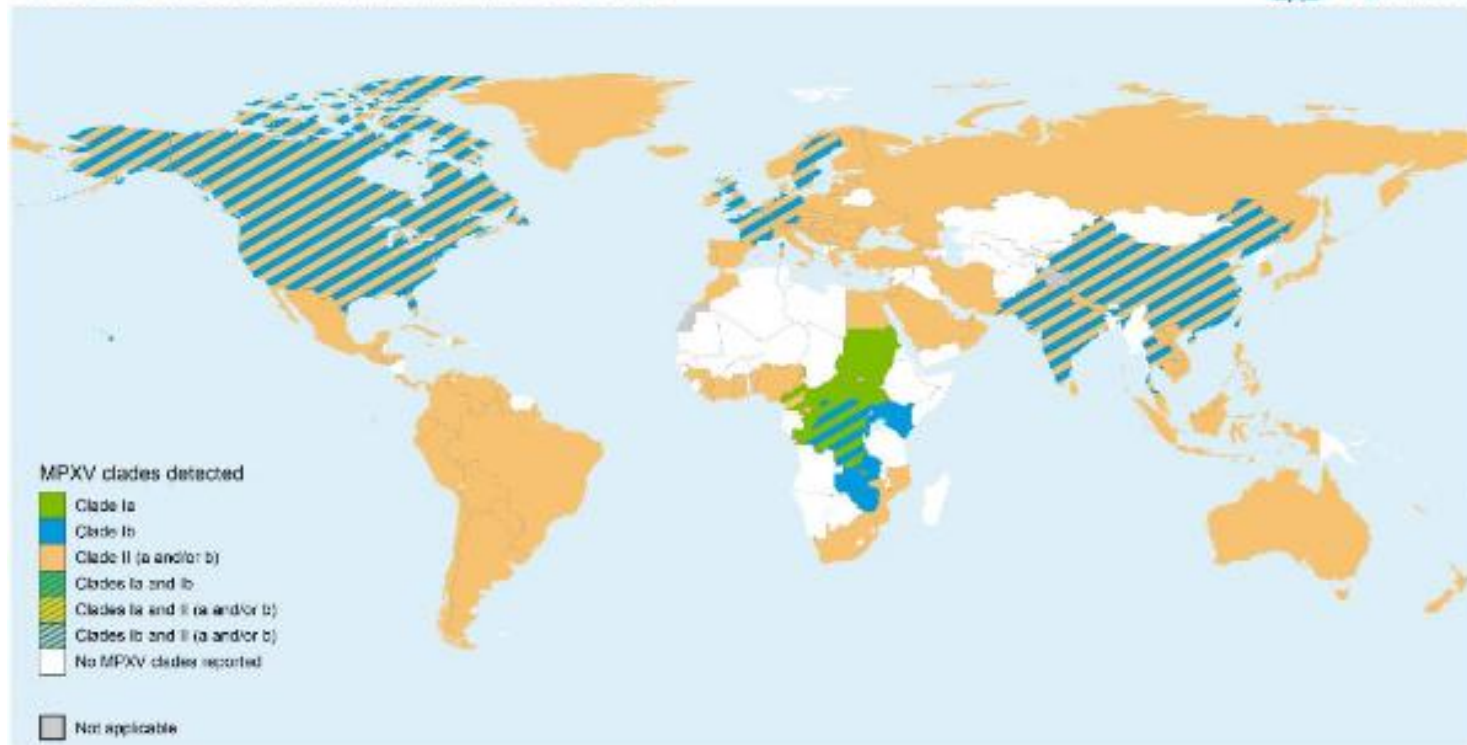
Discussion

Mpox continues to circulate

Role multiplex STI testing that include an mpox target?

MPXV clades detected globally

includes imported cases; known distribution as of 05 Jan 2025



Mpox: Multi-country External Situation Report no.57, World Health Organisation. August 2025.



Diagnostic testing and testing strategies for mpox: interim guidance. World Health Organisation. Nov 2024.

Acknowledgments

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- Bacto scientists

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