

Exploring the resurgence of a neglected disease:

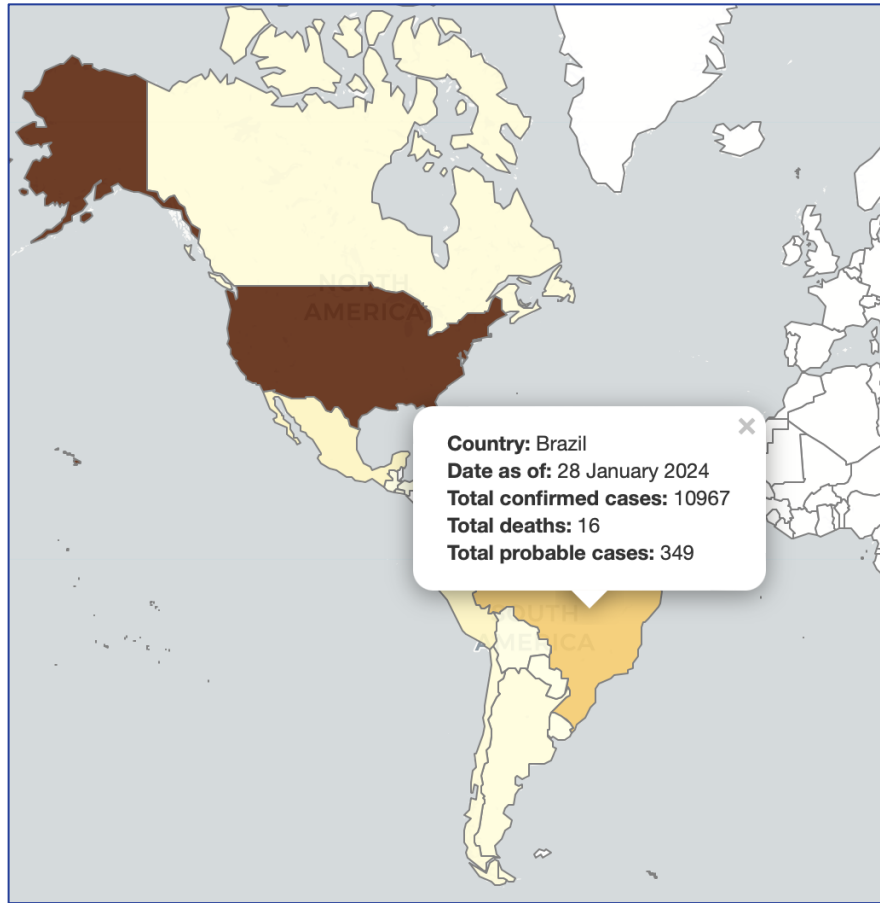
Lessons from the 2023-2024 mpox outbreak in Brazil

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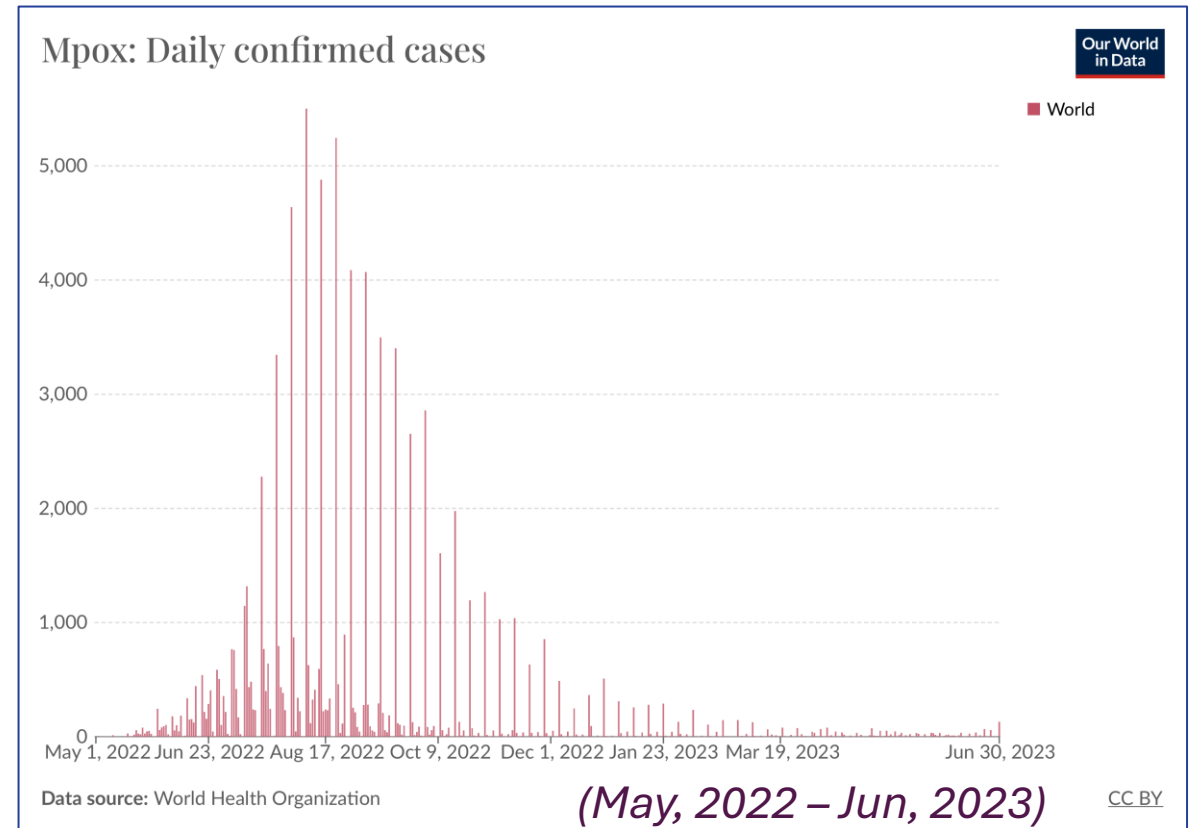
Background

Cumulative mpox diagnoses



(PAHO, 2024)

Mpox: daily global diagnoses



(Our World in Data, 2024)

Mpox in 2024

News / Press Releases

Africa CDC Declares Mpox A Public Health Emergency of Continental Security, Mobilizing Resources Across the Continent



13 August 2024

Theme

Emergency Response and Preparedness

Region

Central Africa, Eastern Africa, Northern
Africa, Southern Africa, Western Africa

Diseases

Mpox

Tags

Mpox

Home / News / WHO Director-General declares mpox outbreak a public health emergency of international concern



WHO Director-General declares mpox outbreak a public health emergency of international concern

INI-Fiocruz Mpox Cohort



- Prospective cohort of persons with suspected Mpox since June, 2022.
- Current analysis aims to present initial evidence on the emerging Mpox second outbreak in Rio de Janeiro, Brazil.
- All persons with confirmed mpox were included.
- Comparison between:
 - 1st outbreak: 12th Jun 2022 – 31st May 2023;
 - 2nd outbreak: 26th Sept 2023 – 20st Sep 2024.

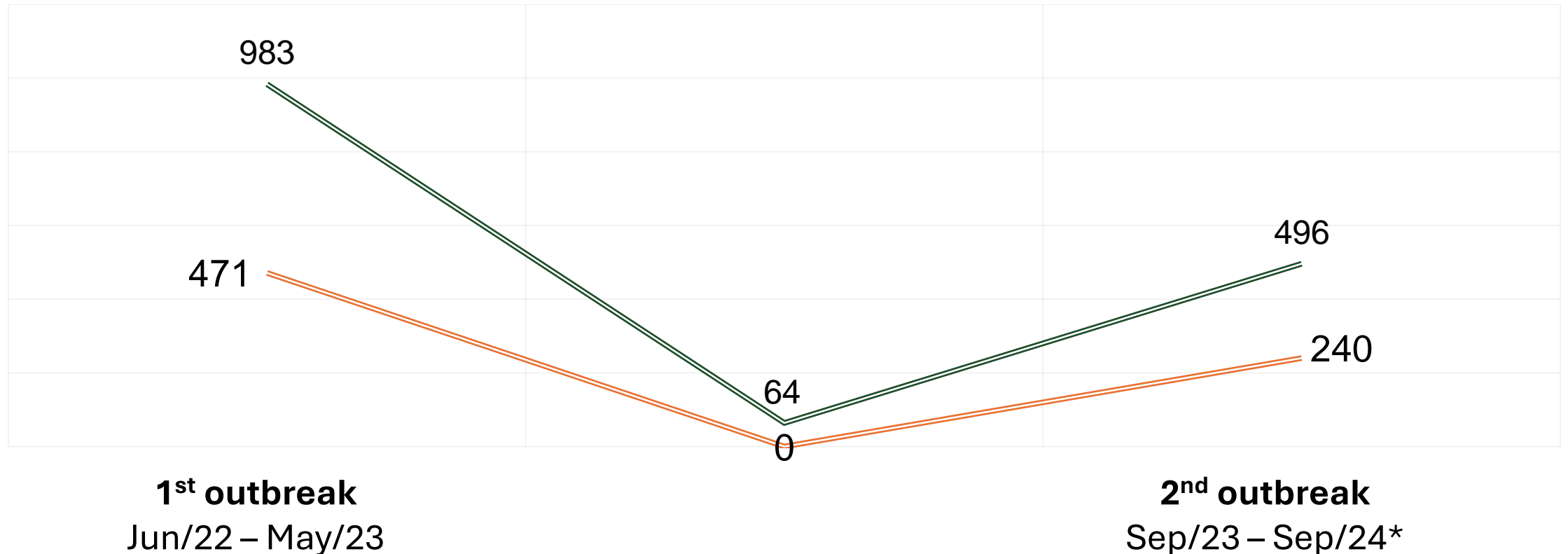


Results

Number of persons with suspected and confirmed mpox according to time of diagnosis

■ Persons with suspected mpox

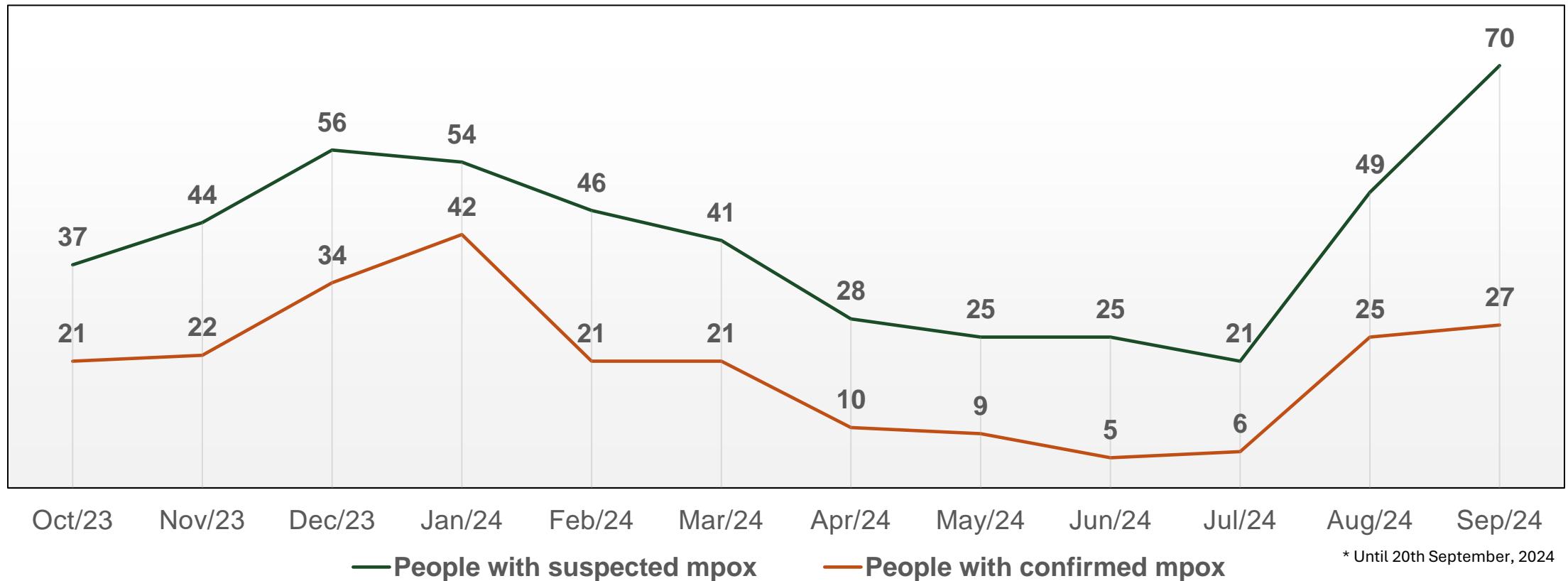
▲ Persons with confirmed mpox



* Until 20th September, 2024

Results

People with suspected and confirmed mpox assessed at INI-Fiocruz during the last 12 months



Results

		1 st Outbreak (N=471)	2 nd Outbreak (N=240)	p-value
Age (years)	<18	3 (0.6%)	1 (0.4%)	0.83
	18-24	53 (11.3%)	33 (14%)	
	25-29	96 (20.4%)	50 (21%)	
	30-39	195 (41.4%)	100 (42%)	
	≥ 40	124 (26.3%)	56 (23%)	
Gender identity	Cismen	421 (90%)	225 (94.1%)	0.05
	Ciswomen	35 (7.1%)	10 (4.2%)	
	Non-binary	0	1 (0.4%)	
	Transwomen	15 (2.9%)	3 (1.3%)	
	Transmen	0	0	

Results

		1 st Outbreak (N=471)	2 nd Outbreak (N=240)	p-value
Race	White	152 (39.1%)	86 (36.6%)	0.79
	Indigenous	3 (0.8%)	1 (0.4%)	
	Black/ <i>Pardo</i>	234 (60.1%)	148 (63%)	
Educational level	Primary	34 (8.5%)	12 (5.1%)	0.27
	Secondary	134 (33.4%)	78 (33.2%)	
	Post-Secondary	233 (58.1%)	145 (61.7%)	
Men who have sex with men		363/400 (90.8%)	216/224 (96.4%)	0.04
More than 1 sex partner¹		171 (53%)	147 (68%)	<0.01
Reported anal sex¹		195 (68.4%)	201 (87%)	<0.01
Current PrEP use		74 (32.3%)	57 (50.9%)	0.01
PLHIV		237 (52%)	124 (52%)	0.91

¹ In the last 30 days prior to symptoms onset

Results

		1 st Outbreak (N=471)	2 nd Outbreak (N=240)	p-value
Bacterial STI	Syphilis	93 (21.6%)	46 (19%)	0.50
	Gonorrhoeae	32 (8.3%)	24 (11%)	0.26
	Chlamydia	34 (8.8%)	19 (8.8%)	>0.99
	Any	146 (38%)	72 (33%)	0.20
Current/past HCV infection		26 (6%)	18 (7.6%)	0.44
Any systemic signs or symptoms		380 (85.4%)	185 (80%)	0.09
Pharyngitis and/or odynophagia		121 (26.7%)	49 (21%)	0.10
Proctitis		105 (22.6%)	63 (27%)	0.19
Time from symptoms onset to enrollment (days) (Median, IQR)		6 (4,10)	7 (5,11)	0.02
Hospitalization during follow-up		49 (10%)	22 (9.2%)	0.60

Among PLHIV...

	1 st Outbreak (N=237)	2 nd Outbreak (N=124)	p-value
HIV-RNA viral load > 200 copies/mL	36 (15.4%)	16 (13.5%)	0.50
Lymphocyte T CD4+ ≤ 350 cells/mm ³	28 (13%)	19 (12%)	0.43
Concomitant opportunistic infections	4 (1.7%)	6 (8.3%)	0.01
Suspected mpox-associated immune reconstitution inflammatory syndrome	3 (1.3%)	3 (2.4%)	0.15

Conclusions

- A new and ongoing mpox outbreak emerged in Rio de Janeiro, Brazil, following a period with no signs of sustained transmission.
- Crucial need to enhance sustained surveillance strategies to detect emergent STIs within the context of HIV care and prevention services.
- Insights in mpox surveillance and prevention in the context of the 2024 mpox public health emergency of international concern: beyond the Global North.
- Implementation of routine mpox vaccination in LMICs targetting the most affected populations is critical.

Gratidão!



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