

A call to action for earlier global responses to  
neglected tropical and ancient diseases such as  
mpox –  
Perspective from Nigeria and beyond

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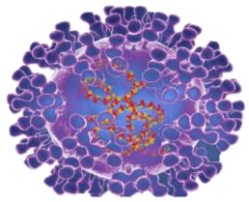
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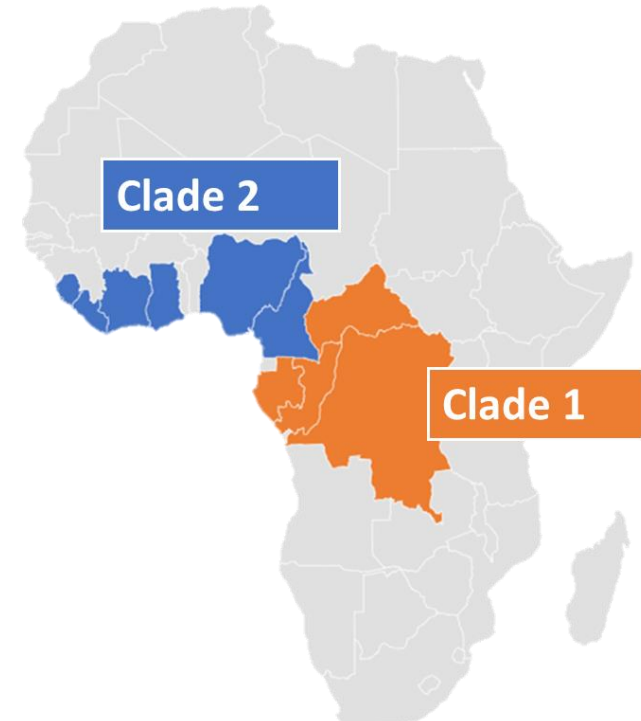
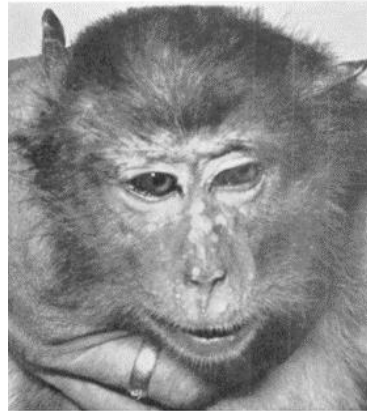
# Disclosure of interest

- Chair, WHO Emergency IHR Committee on Mpox Upsurge 2024

# The monkeypox virus



DNA virus  
Double stranded  
Orthopoxvirus



Clades of monkeypox virus



First outbreak of monkeypox in animals  
1958 Denmark

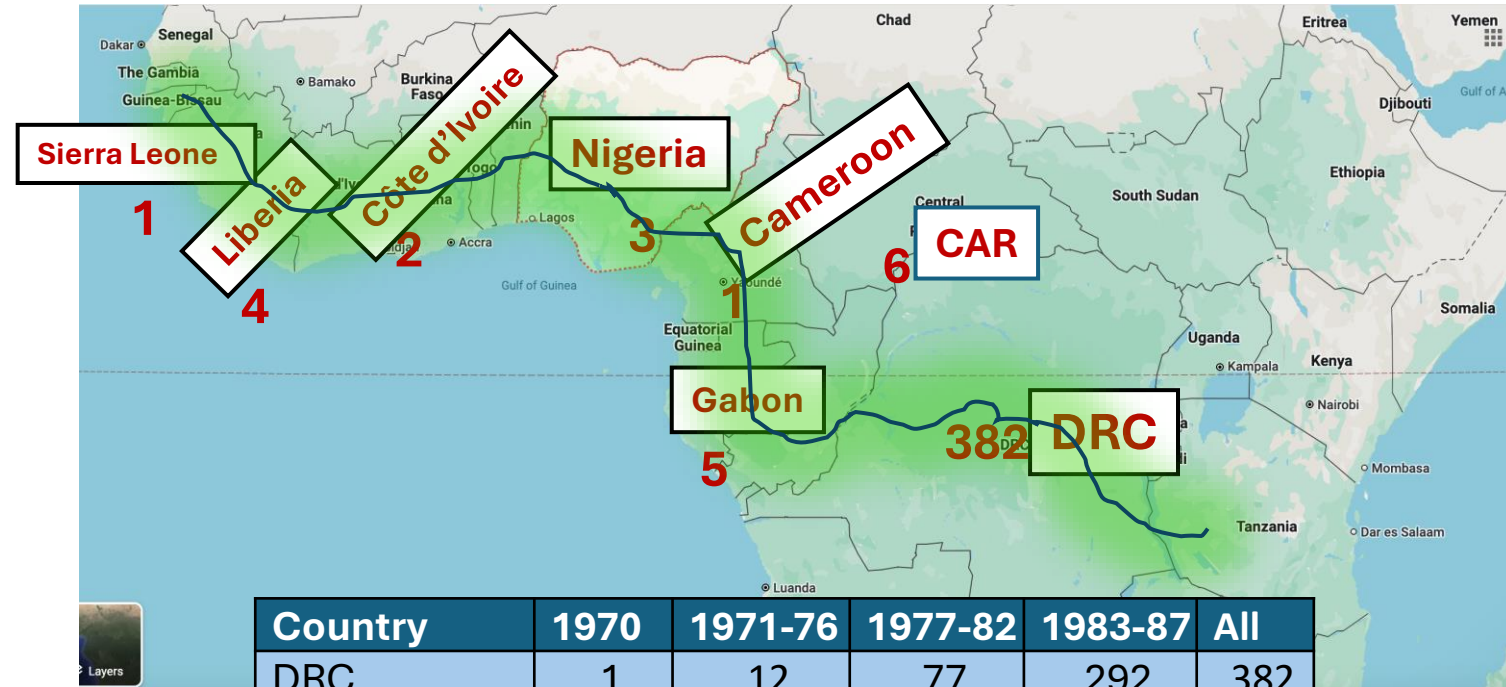


Basankusu district  
Rainforest area of West and Central Africa

First human case of monkeypox in a  
9month old boy 1970

# Mpox-Tropical rainforest disease of West and Central Africa (1970-1987)

- **Ecological niche**
  - Restricted to tropical rainforest areas
- **Population group**
  - Rural settlements with population <5,000
- **Demographic**
  - Children <15 years most affected
  - M ≈ F
- **Exposure type**
  - 80% zoonotic origin;
  - 20% h2h household transmissions (not sustained)
- **Secondary attack rate**
  - 0.2%- smallpox vaccinated
  - 7.9% smallpox unvaccinated



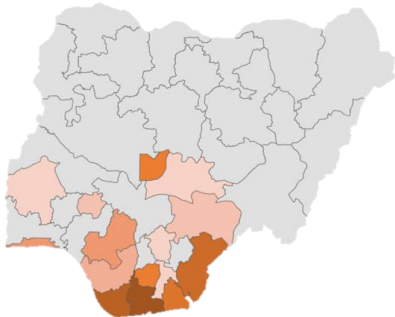
Country	1970	1971-76	1977-82	1983-87	All
DRC	1	12	77	292	382
CAR				6	6
Gabon				5	5
Liberia	4				4
Nigeria		2	1		3
Côte d'Ivoire		1	1		2
Cameroon			1		1
Sierra Leone	1				1

# Re-emergence of Mpox in Nigeria (2017-2019)

THE LANCET  
Infectious Diseases **Lancet Infect Dis- 2019 Aug;19(8):872-879**

## Outbreak of human monkeypox in Nigeria in 2017-18: a clinical and epidemiological report

Adesola Yinka-Ogunleye, Olusola Aruna, Mahmood Dalhat, Dimie Ogoina, Andrea McCollum, Yahyah Disu, Ibrahim Mamadu, Afolabi Akinpelu, Adama Ahmad, Joel Burga, Adolphe Ndoreraho, Edouard Nkuzimana, Lamin Manneh, Amina Mohammed, Olawunmi Adeoye, Daniel Tom-Aba, Bernard Silenou, Oladipupo Ipadeola, Muhammad Saleh, Ayodele Adeyemo, Ifeoma Nwadiutor, Neni Aworabhi, Patience Uke, Doris John, Paul Wakama, Mary Reynolds, Matthew R Mauldin, Jeffrey Doty, Kimberly Wilkins, Joy Musa, Asheena Khalakdina, Adebayo Adedeji, Nwando Mba, Olubunmi Ojo, Gerard Krause\*, Chikwe Ihekweazu\*, for the CDC Monkeypox Outbreak Team†



- Mpox among young urban dwellers
- Mpox in close settings
- Geographic dispersed outbreak

PLOS ONE

OPEN ACCESS PEER-REVIEWED  
RESEARCH ARTICLE

## The 2017 human monkeypox outbreak in Nigeria—Report of outbreak experience and response in the Niger Delta University Teaching Hospital, Bayelsa State, Nigeria

Dimie Ogoina, James Hendris Izibewule, Adesola Ogunleye, Ebi Ederiane, Uchenna Anebonam, Aworabhi Neni, Abisoye Oyeyemi, Ebimilita Nicholas Etebu, Chikwe Ihekweazu

Published: April 17, 2019 • <https://doi.org/10.1371/journal.pone.0214229>

it is noteworthy that a substantial number of our cases who were young adults in their reproductive age presenting with genital ulcers, as well as concomitant syphilis and HIV infection.

Although the role of sexual transmission of human monkeypox is not established, **sexual transmission is plausible in some of these patients through close skin to skin contact during sexual intercourse or by transmission via genital secretions.**



- Mpox associated with genital ulcers, syphilis and HIV; mostly males
- Mpox associated with sexual contact

OXFORD ACADEMIC Journals Books

## Clinical Infectious Diseases

JOURNAL ARTICLE

## Clinical Course and Outcome of Human Monkeypox in Nigeria

Dimie Ogoina, Michael Iroezindu, Hendris Izibewule James, Regina Oladokun, Adesola Yinka-Ogunleye, Paul Wakama, Bolaji Otike-odibi, Liman Muhammed Usman, Emmanuel Obazee, Olusola Aruna ... Show more

Clinical Infectious Diseases, Volume 71, Issue 8, 15 October 2020, Pages e210–e214, <https://doi.org/10.1093/cid/ciaa143>

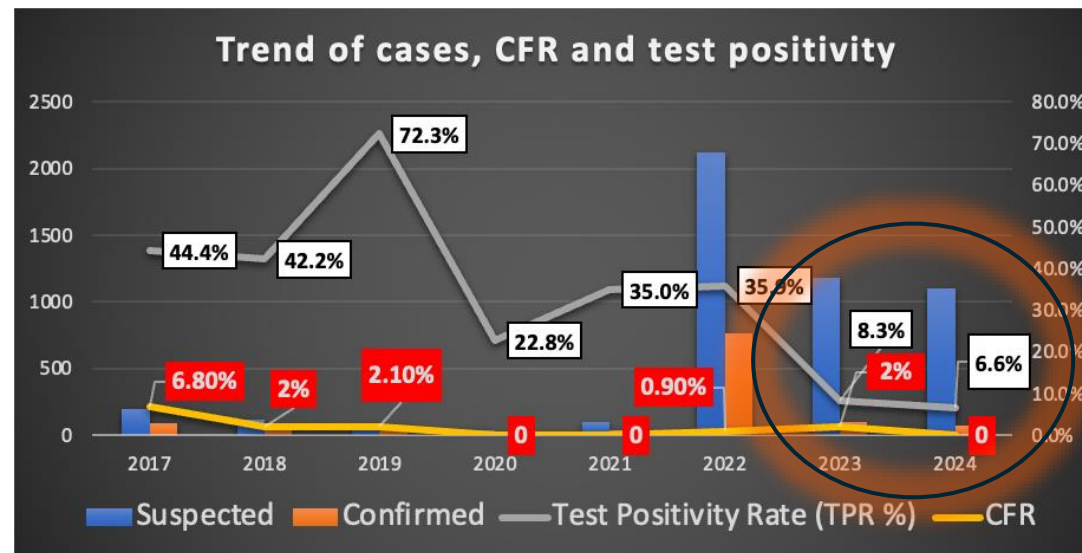
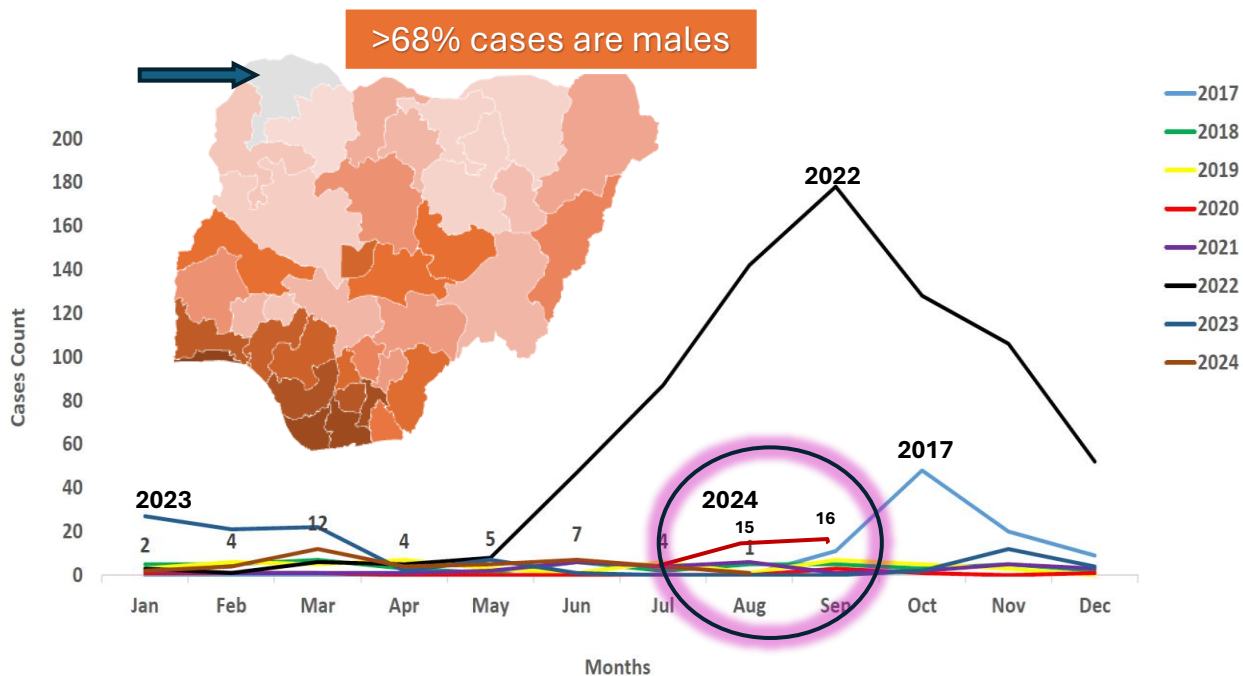
**Abstract**

In a retrospective review of hospital records of 40 human monkeypox cases from Nigeria, the majority developed fever and self-limiting vesiculopustular skin eruptions. Five deaths were reported. Compared to human immunodeficiency virus (HIV)-negative cases, HIV type 1-coinfected cases had more prolonged illness, larger lesions, and higher rates of both secondary bacterial skin infections and genital ulcers.

- Mpox associated with more severe diseases among PLHIV

# Trend of mpox in Nigeria (2017-2024)

Monthly trend of cases and geographical distribution of confirmed cases since 2017

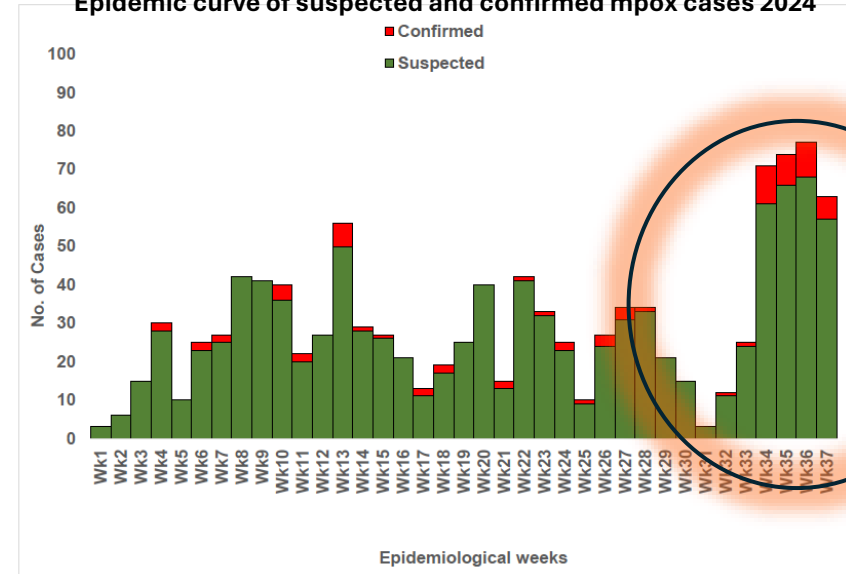


Distribution of cases by age group and year

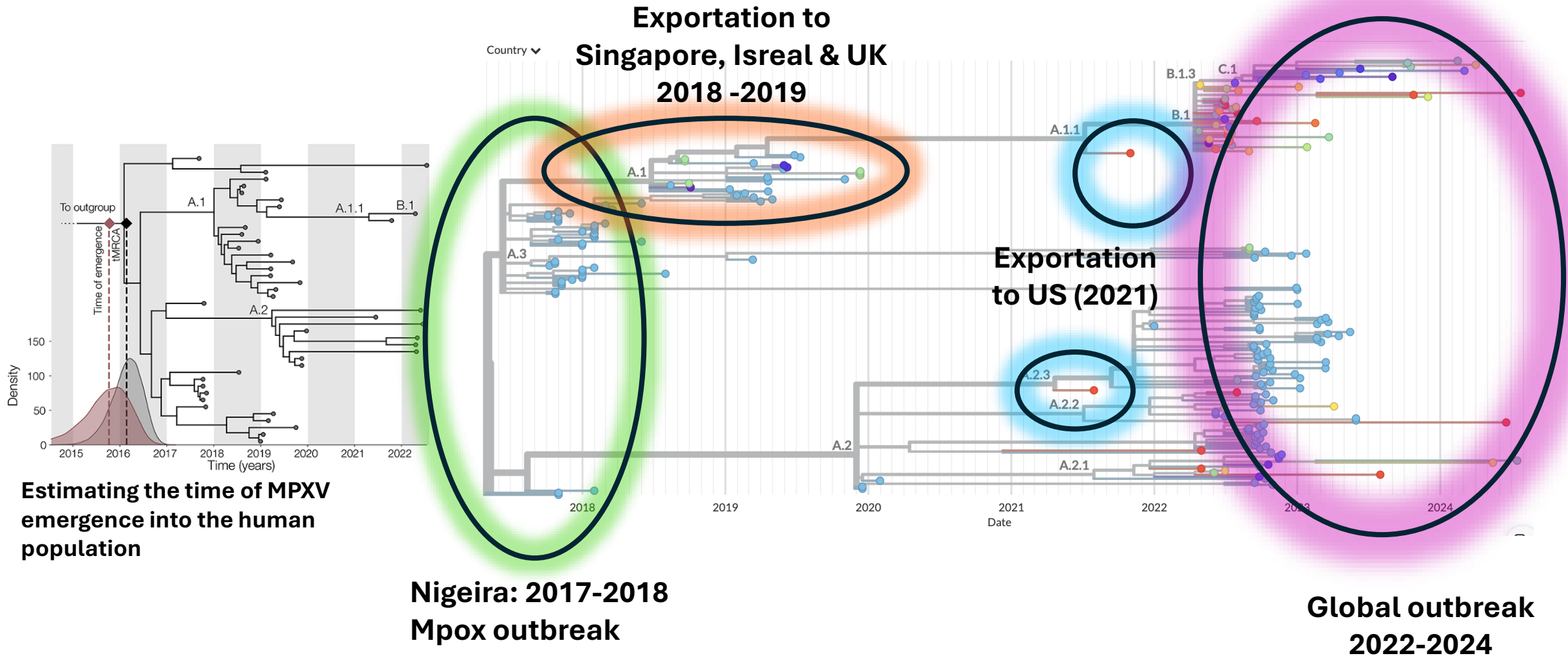
Age Group	2017	2018	2019	2020	2021	2022	2023	2024	Total
0-10 yrs	7	5	1	0	1	125	21	22	182
11-20 yrs	12	4	1	0	4	123	8	8	160
21-30 yrs	34	13	13	4	10	187	24	20	305
31-40 yrs	26	17	22	4	13	205	21	10	318
41-50 yrs	9	10	9	0	5	89	17	9	148
> 50 yrs	0	0	1	0	1	33	7	3	45
<b>Total</b>	<b>88</b>	<b>49</b>	<b>47</b>	<b>8</b>	<b>34</b>	<b>762</b>	<b>98</b>	<b>72</b>	<b>1158</b>

Source: NCDC

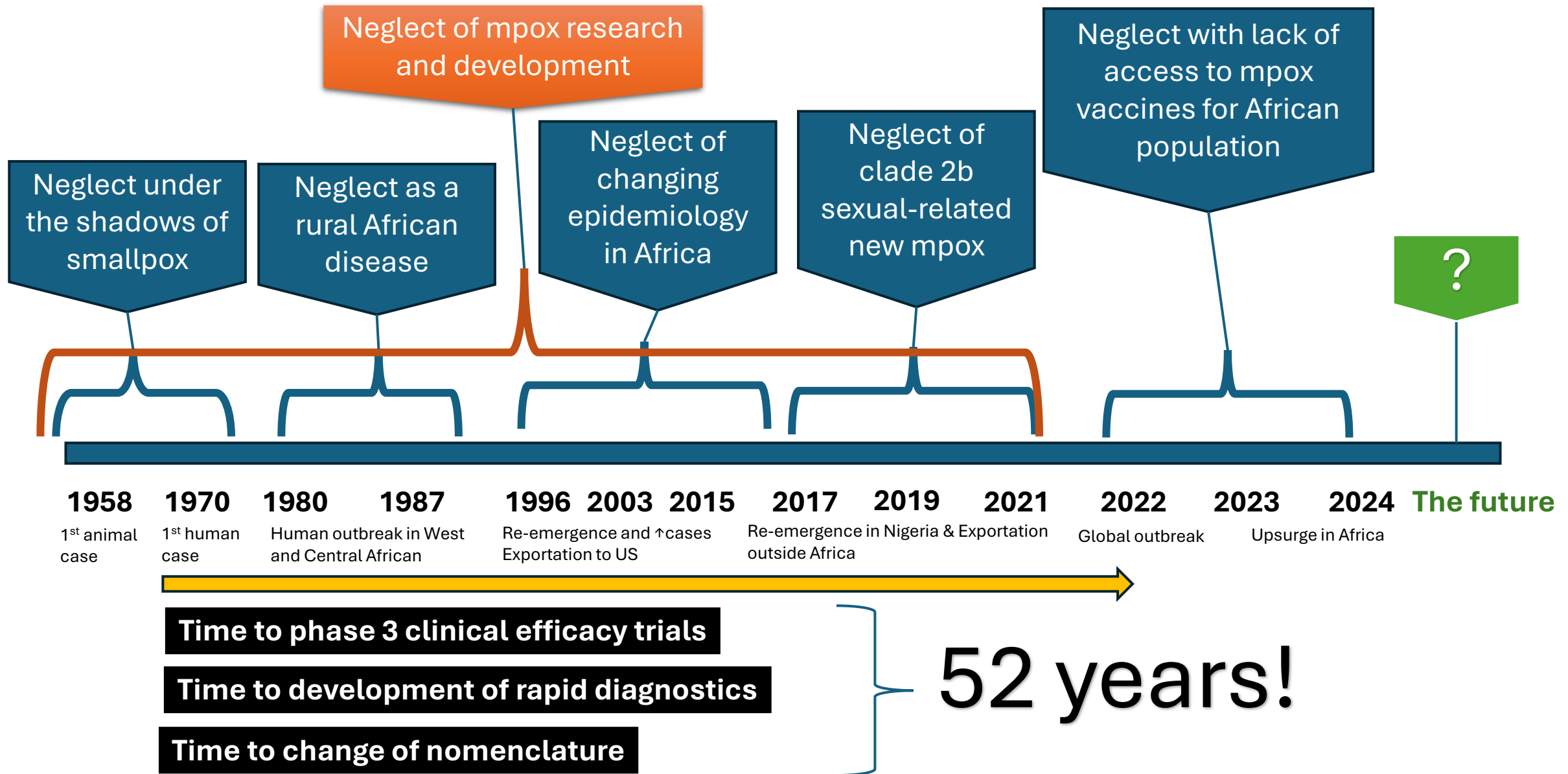
Epidemic curve of suspected and confirmed mpox cases 2024



# Link between Nigeria outbreak and global outbreak



# Historical trends of mpox neglect





# Way forward

1



Ownership and investment from Africa

2



Sustainable global partnerships

3



Research and development

Thank you for listening

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