Nigeria Centre for Disease Control

Protecting the health of Nigerians

Monkeypox in Nigeria: Epidemiology, Response Efforts

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Introduction

- Nigeria has a 50-year history with Monkeypox (MPX)
- There was an intervening silent period of about 40yrs
- Recent resurgence in the last 5yrs has led to a robust response using a multisectoral one-health approach
- There have been many successes and lessons learned, however, numerous challenges and areas of uncertainty remain
- The National Monkeypox Emergency Operations Centre(EOC) was activated on Thursday 26th May 2022

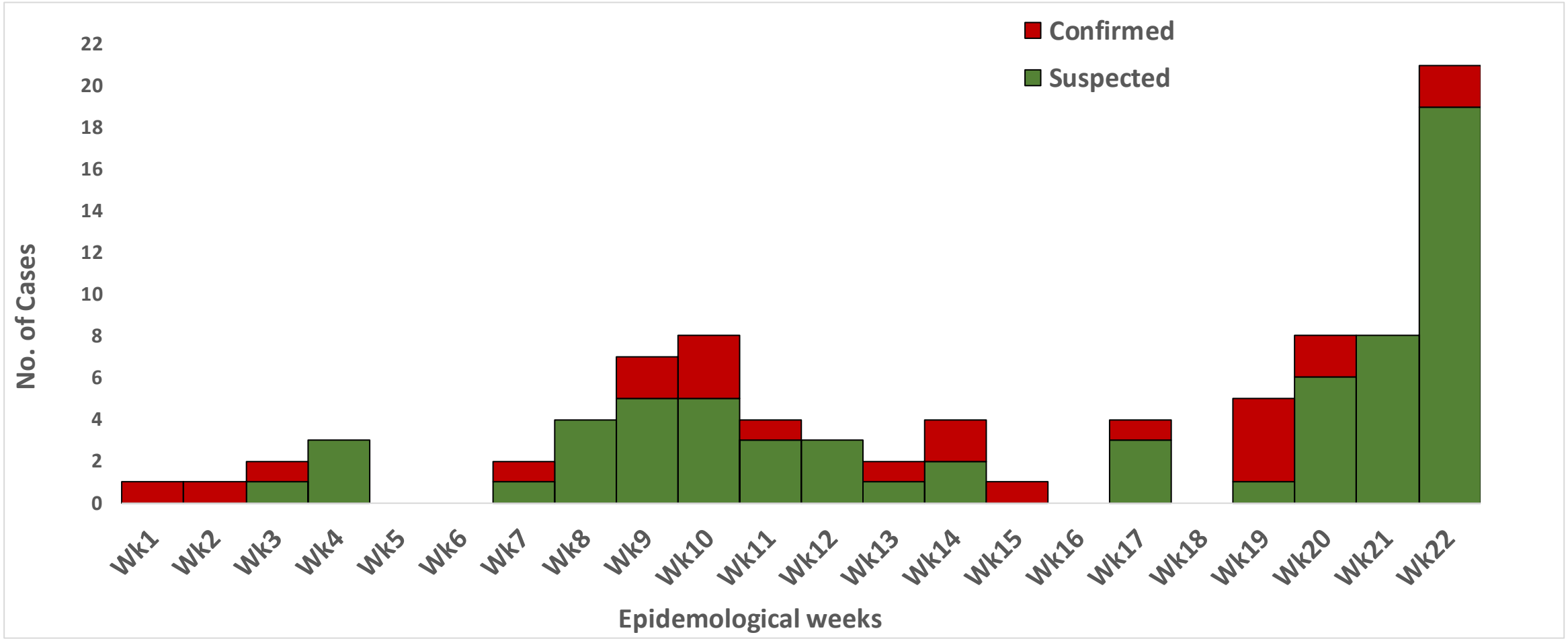
Epidemiology of Monkeypox in Nigeria

Key Indicators	Number
Total reported cases from January 1st to June 2nd, 2022	88
Total confirmed cases from January 1st to June 2nd, 2022	23
Total deaths from January 1st to June 2nd, 2022 (CFR)	1 (4.3%)
Cumulative reported cases from Sept. 2017 to June 2nd, 2022	600
Cumulative confirmed cases from Sept. 2017 to June 2nd, 2022	249
Total deaths from Sept. 2017 to June 2nd, 2022 (CFR)	9 (3.6%)

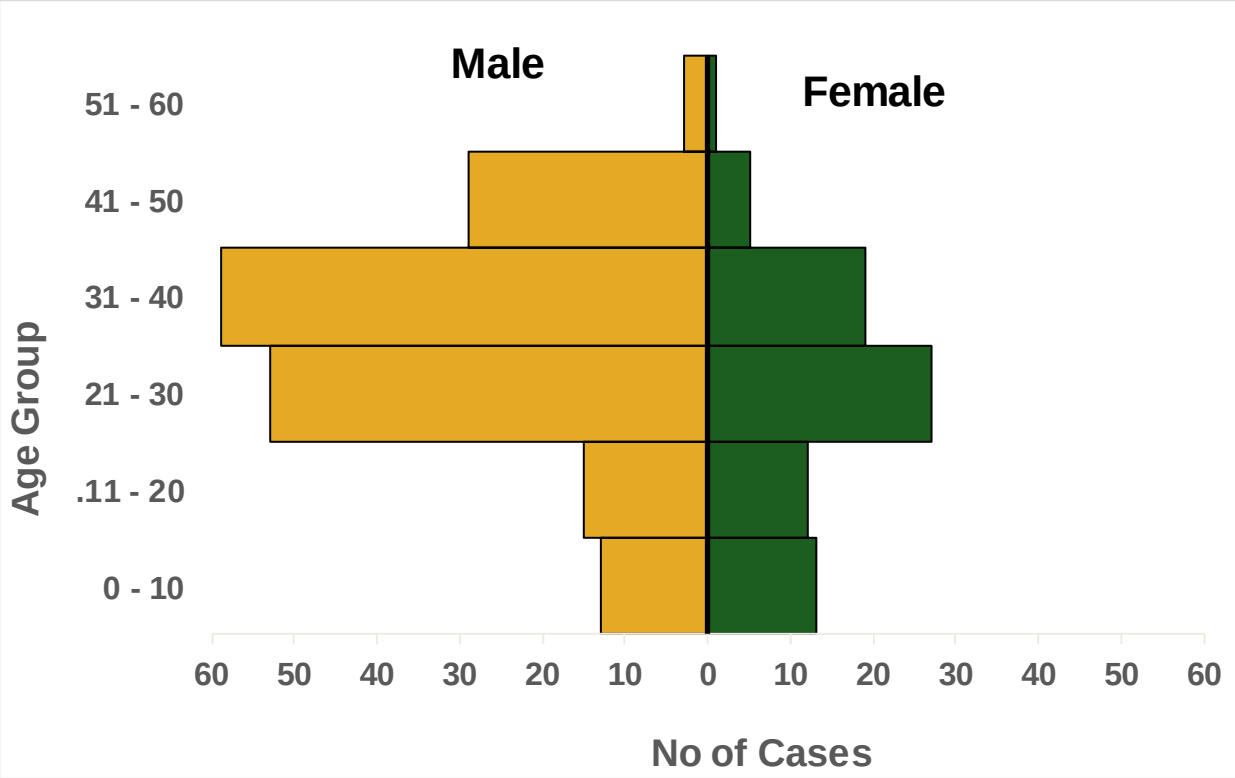
MPX Case Distribution and test positivity 2017-2022

Year	Suspected	Confirmed	Test Positivity Rate (TPR %)
2017	198	88	44.4
2018	116	49	42.2
2019	65	47	72.3
2020	35	8	22.8
2021	98	34	35.0
2022	88	23	26.1

Epicurve Curve of suspected and Confirmed cases from Jan 2022 till June 2nd 2022

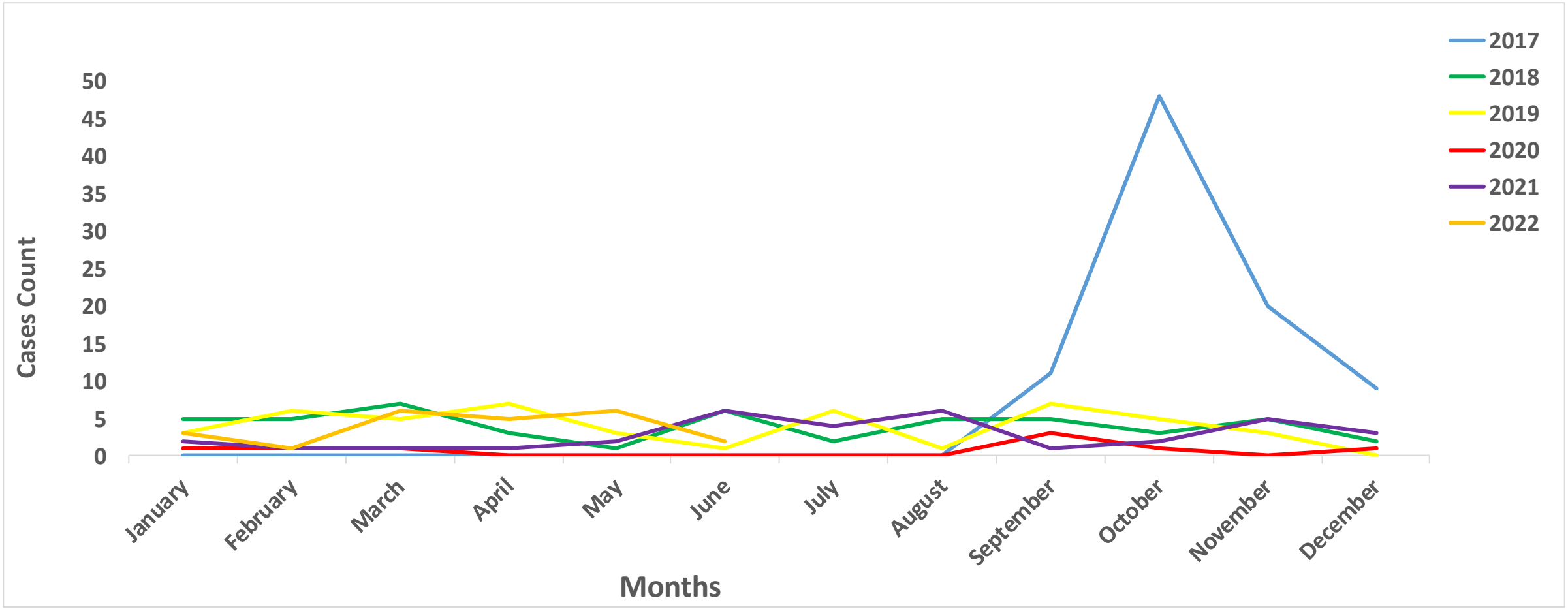


Age and sex distribution of Nigeria confirmed monkeypox cases September 2017 – 2nd June 2022



Age and sex distribution of Nigeria confirmed monkeypox cases January 1st – 2nd June 2022

Trend of confirmed Monkeypox cases September 2017- 2nd June, 2022 in Nigeria



Summary of Epidemiological Findings

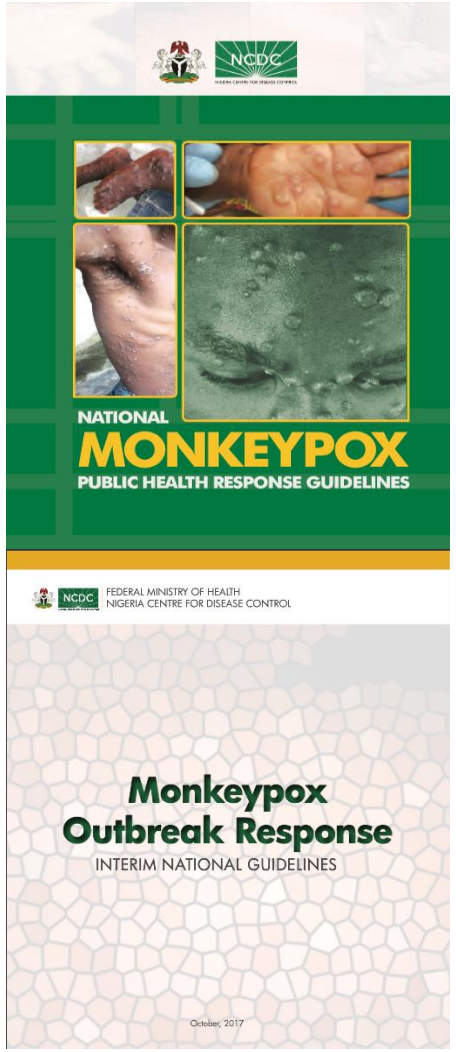
- No observed change in disease transmissibility
- No documented evidence of sexual transmission in Nigeria
- Genomic sequencing of all positive samples ongoing-this has shown that all our positive cases are the west African Clade
- Clinical manifestations have remained the same (symptoms profile, virulence)
- No animal reservoir confirmed/identified

Priority Research Questions

1. Disease Transmission
    1. Animal reservoir for infection
    2. Cumulative population exposure
    3. Genomics for transmission chains
    4. Identify/confirm all modes of transmission
    5. Correlates of susceptibility/protection
    6. Lifetime immunity post-recovery
    7. Latency/sanctuary areas

Specific Response activities

- Development of MPX specific guidelines
- Real-time reporting with SORMAS
- Technical support to high burden states (surveillance strengthening, sample management)
- National Reference Lab optimization for MPX PCR



- Enhanced Monkeypox surveillance project carried out in selected high reporting states (Delta, Bayelsa and Rivers States) in 2021
  - ➢ Engaged personnel were also trained on case detection and reporting of other priority diseases (integrated disease approach)
  - ➢ Recruited and trained surveillance facilitators and community informants to support case identification and reporting

Priority Questions for Diagnostics

- What specimens are collected for diagnostics (In Nig- we do crust and swab with RT PCR; serology sample is sent to CDC Atlanta for ELISA)
- Is there an existing mechanism for sample transportation and management (TRANEX)
- What are the steps GoN is doing to scale up diagnostic capacity in-country
- Availability of point of care diagnostics- RDT
- Availability of commercial assays that are available off-market

Main challenges

- Low-risk perception due to low fatality
- Poor awareness within the community
- Lack of sustainable funding for MPX surveillance activities
- Minimal dedicated funding for research activities
- Gaps in knowledge about MPX e.g. reservoir patterns, transmission mechanism, post-infection immune competence
- The response is largely driven from the National level

Conclusion

- MPX is endemic in some parts of Nigeria
- The epidemiology has been mostly stable over the last 5yrs since the resurgence
- Much progress has been made in improving prevention, detection and response
- Genomic sequencing is ongoing-results will be published
- Challenges and gaps remain
  - Need for sustained MPX preparedness and response efforts with the support of all stakeholders and partners
  - Access to medical countermeasures – vaccines and therapeutics

NCDC

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Thank you