

Ruth Diavita¹, Eugene Bangwen², Elise De Vos², Patrick Mpoyo¹, Emile Malembi³, Soledad Colombe², Isabel Brosius², Wim Van Damme², Placide Mbala¹, Laurens Liesenborghs²

1. Department of Epidemiology, Institut National de Recherche Biomédicale, Kinshasa, DRC
 2. Institute of Tropical Medicine, Antwerp, Belgium
 3. Ministère de la Santé Publique, Hygiène et Prévention des maladies, Kinshasa, DRC

1

Introduction

The Democratic Republic of the Congo (DRC) notifies more than 2000 suspected mpox cases every year since 2010 and incidence is rising¹. Infections are caused by clade 1 of the monkeypox virus (MPXV), the most severe clade, with case fatalities up to 11%².

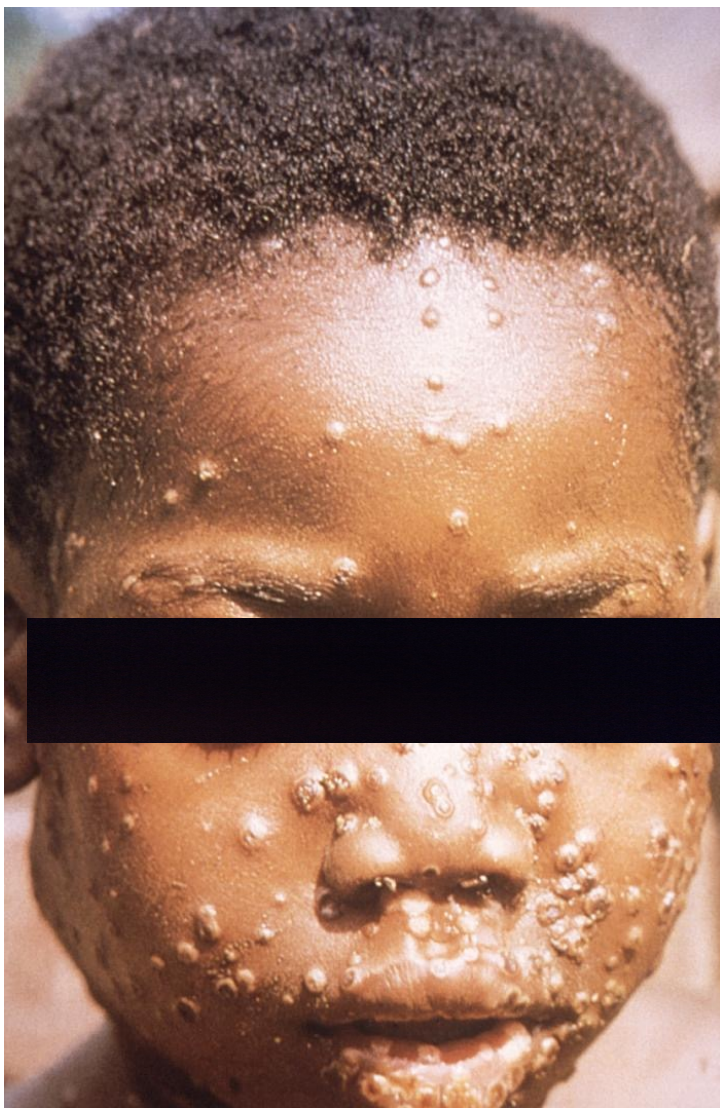


Fig 1 and 2: mpox patients (source: CDC.org, plcaidembala/kole/dcrc)

We describe a mpox outbreak that started in October 2021 in Tunda health zone, a remote area of Maniema province where no outbreaks had been reported previously.

2

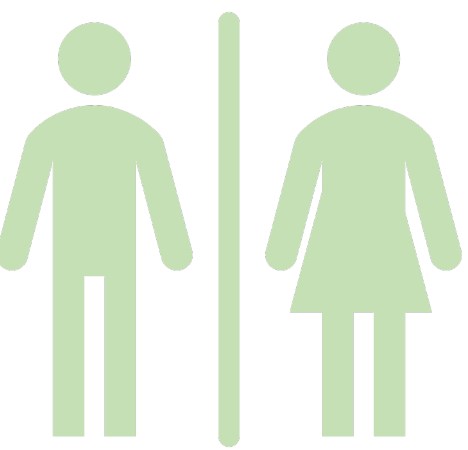
Methods

We analyzed mpox surveillance data collected in Tunda since the beginning of the outbreak. In addition, we set up prospective investigations of cases notified within the health zone.

3

Results

Between October 2021 and March 2023, overall, 394 suspected cases were enlisted.



male 211 (53%)

female 182 (46%)



60% children under 15yo

CFR=9.9%

[CFR among children 11.7%]

90 out of 394 cases were tested, of whom 34 were positive (40% positivity rate).

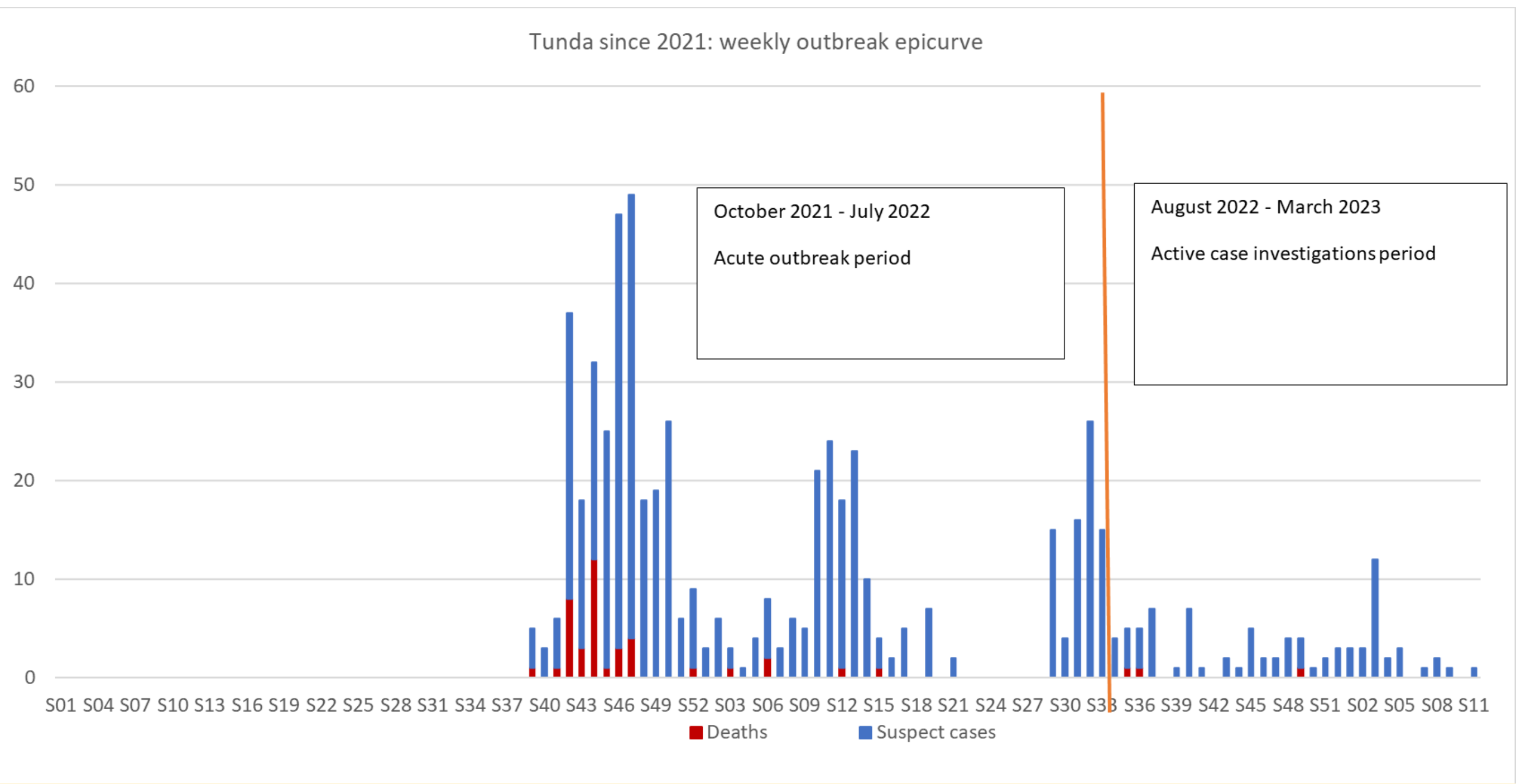


Fig 3 Weekly epicurve from the start of the outbreak to March 2023 . The curve shows a high number of case notifications at the start of the outbreak, followed by more sporadic notifications, with patterns suggesting a possible evolution towards endemicity.

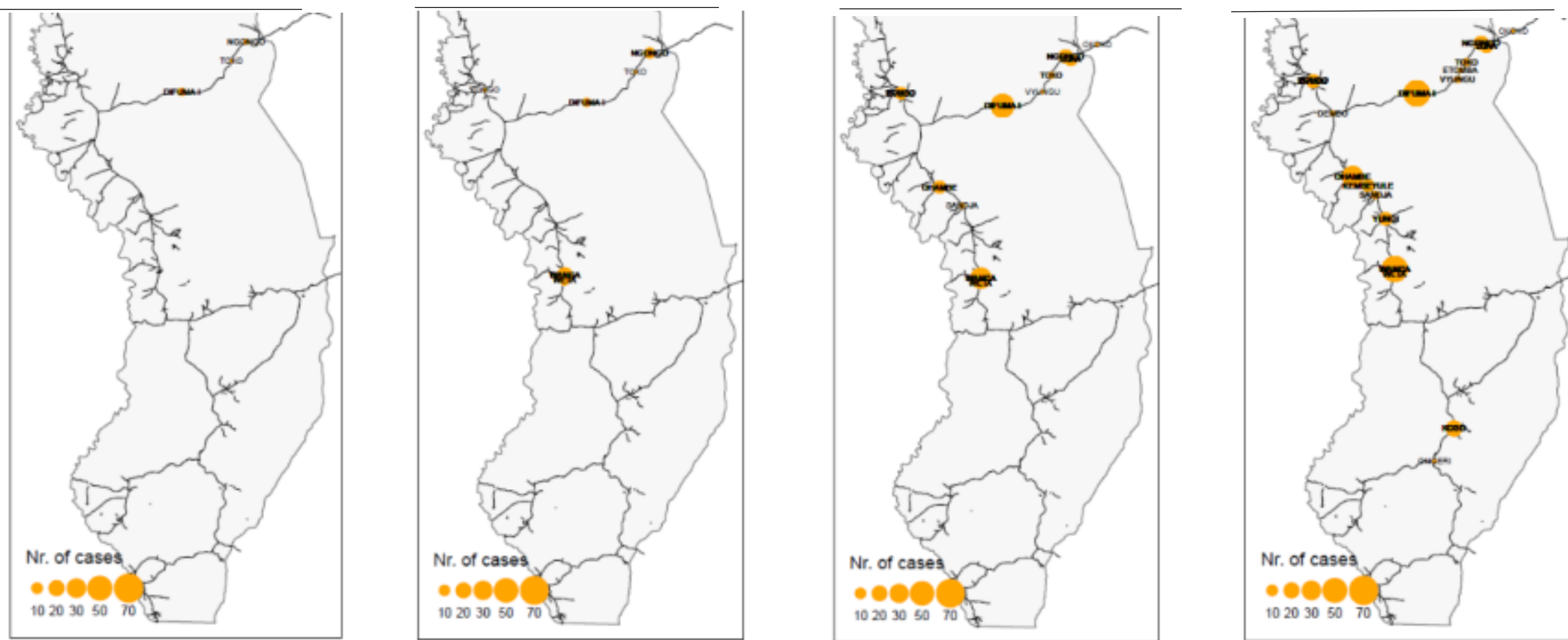


Fig 4: Time cluster analysis revealed a spread of the outbreak to neighbouring villages along major roads, suggesting extended human-to-human transmission.

4

Conclusion

Mpox remains a major public health problem in the DRC, and isolated unaffected communities are now being touched by the disease through extensive human-to-human transmission.

References

- Rimoin AW, Mulembakani PM, Johnston SC, Lloyd Smith JO, Kisalu NK, Kinkela TL, et al. Major increase in human monkeypox incidence 30 years after smallpox vaccination campaigns cease in the Democratic Republic of Congo.
- Rimoin AW, Kisalu N, Kebela-Ilunga B, Mukaba T, Wright LL, Formenty P, et al. Endemic Human Monkeypox, Democratic Republic of Congo, 2001–2004.