Epidemiological trends of Lassa fever at a new hotspot in North-Central Nigeria, 2018–2024

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Outline

1 Introduction

2 Objective

3 Methods

4 Results

5 Conclusion & Recommendation

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Introduction

Viral hemorrhagic fever caused by the Lassa virus

Transmitted through contact with infected rodents or bodily fluids of infected individuals (Awoyale et al., 2022)

Endemic in Nigeria, with significant public health challenges due to high mortality rates (Dalhat et al., 2022; Ojo et al., 2021)

An increase in the disease burden has been observed in Benue State between 2018 and 2024 (NCDC, 2024)

Objective

To describe the epidemiological trends of lassa fever in Benue State, Nigeria from 2018 to 2024

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Methods

- We investigated the cases of lassa fever in Benue State from 2018 to 2024
- Case definitions of lassa fever as obtained from the Nigeria Centre for Disease Control was used
- Data were extracted from Surveillance Outbreak Response Management and Analysis System (SORMAS)
- Frequencies and percentages were used to determine the epidemiological trends of lassa fever in Benue State from 2018 to 2024

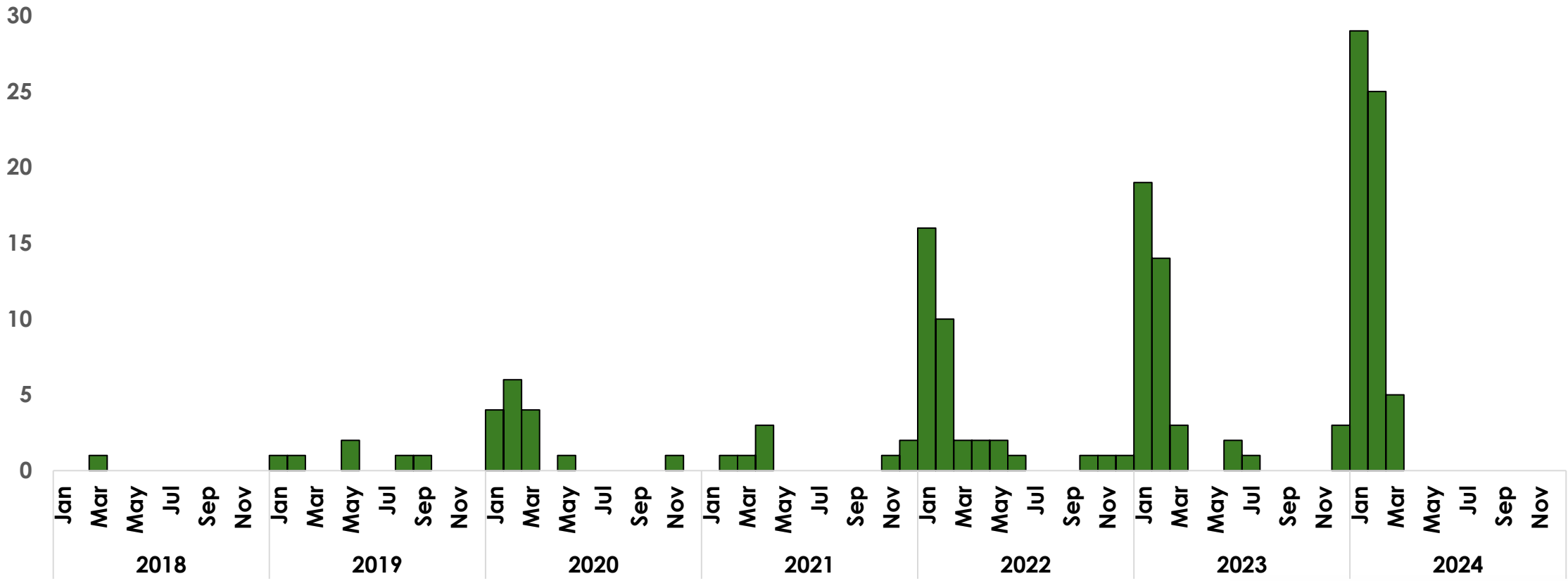
Case definitions

Suspected case
Any individual presenting with one or more of the following: malaise, fever, headache, sore throat, cough, nausea, vomiting, diarrhoea, myalgia, chest pain, hearing loss
and either
a. History of contact with excreta or urine of rodents
b. History of contact with a probable or confirmed Lassa fever case within a period of 21 days of onset of symptoms OR Any person with inexplicable bleeding/hemorrhage.

Probable case
A suspected case (see definition above) who died or absconded without collection of specimen for laboratory testing.

Confirmed case
A suspected case with laboratory confirmation (positive IgM antibody, PCR or virus isolation)

Epi-curve of monthly distribution of lassa fever cases in Benue State, Nigeria. 2018–2024.



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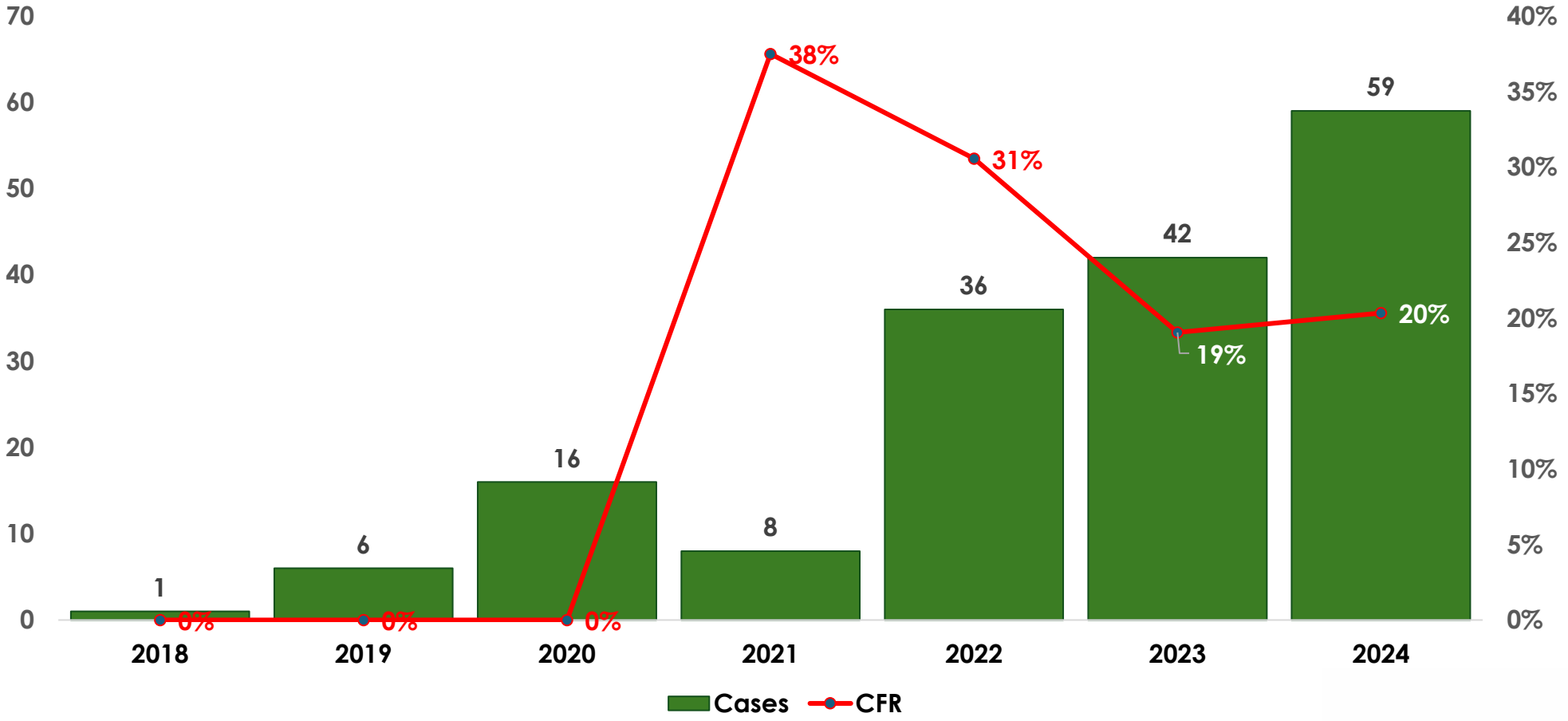
Yearly trend of confirmed cases, and case fatality rates, 2018–2024.



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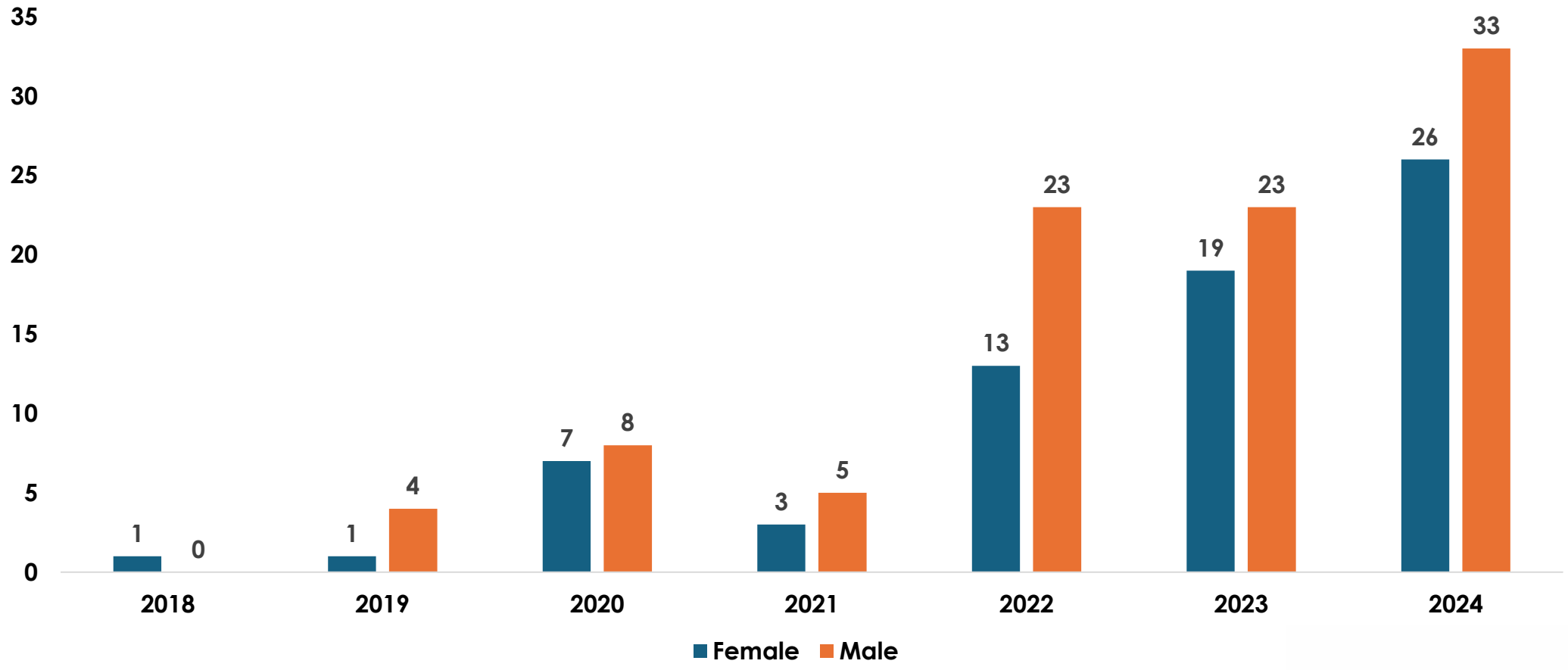
Trend of sex distribution of confirmed cases of lassa fever in Benue State, Nigeria. 2018–2024.



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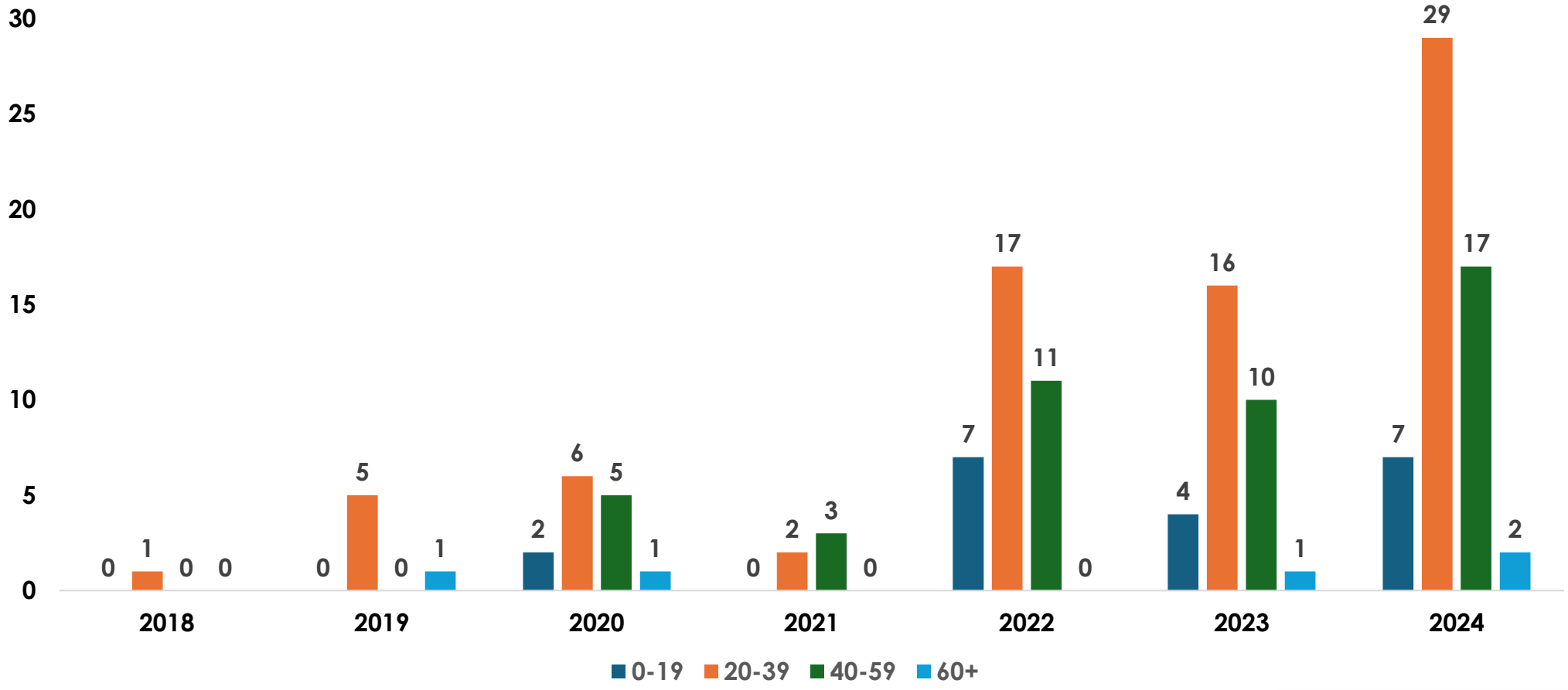
Trend of age distribution of confirmed cases of lassa fever in Benue State, Nigeria. 2018–2024.



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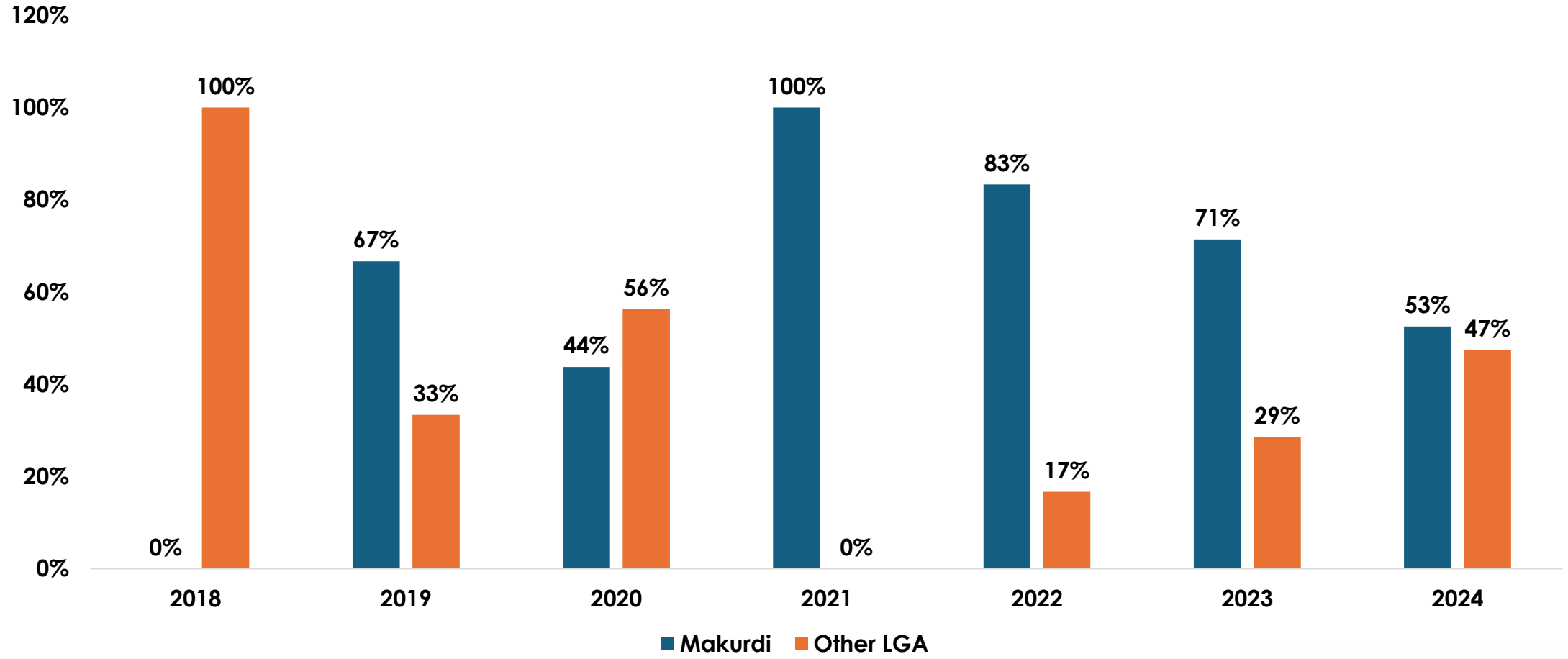
Trend of LGA distribution of confirmed cases of lassa fever in Benue State, Nigeria. 2018–2024.



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Conclusion and recommendation

- The increasing trend of Lassa fever cases calls for a comprehensive, multi-faceted public health approach.

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Acknowledgements

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