DIPHTHERIA OUTBREAK IN THE PREFECTURE OF SIGUIRI IN GUINEA, APRIL 2023 TO 31 AUGUST 2024

P3-B1

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THE SPREAD OF THE DIPHTHERIA OUTBREAK IS ENCOURAGED BY DELAYS IN DETECTION AND FAILURE TO VACCINATE. CHILDREN AGED 0-14 AND THE URBAN COMMUNITY ARE MOST AT RISK. THE RESPONSE IS ONGOING.

BACKGROUND

- Diphtheria: contagious infectious disease due C. diphtheriae
- July 09, 2023 : Suspicion of diphtheria (5 cases)
- Samples sent to INSP Lab: 1/ 5 was positive
- Investigation objectives: Determine the extent of the epidemic and take control and prevention measures in Siguiri, May 2024- 31 August 2024

METHODS

- **Study design and period**
  - Descriptive study
  - May 15, 2023 – 31 August date
- **At-risk population:** All Siguiri
- **Cases definitions:**
  - **Suspected Case**: Any person presenting with dysphagia, fever, red, swollen tonsil, false pearly or greyish membrane, cervical ganglion, etc.
  - **Confirmed Case**: suspected cases confirmed by culture and PCR
- **Active research:** Health Facilities and in the Community
- **Data cleaning and analysis:** Epi info, Excel
  - Proportion, median
- Lab procedure:
  - Nasopharyngeal samples sent to 2 laboratories: INSP, CERFIG
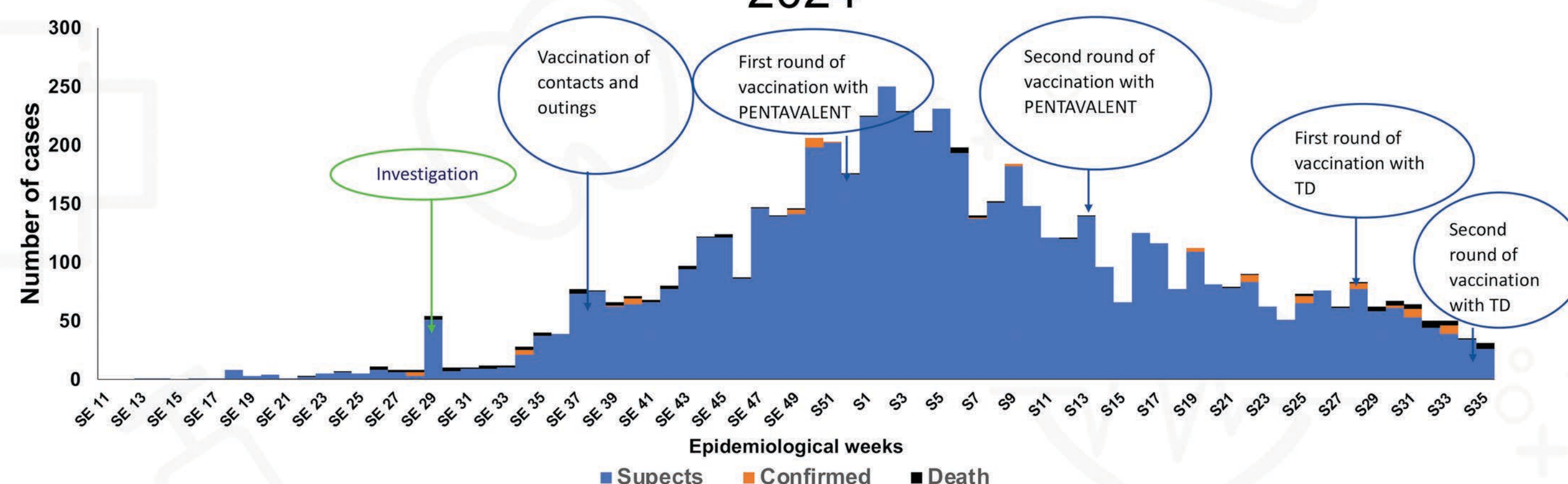 - Tests conducted : culture and PCR

RESULTS

- As of August 31, 2024:
  - 5951 suspected cases of diphtheria had been identified,
    - 721 (12%) were tested and 65 (1%) laboratory-confirmed.

Tableau 1: Clinical characteristics of diphtheria cases, Siguiri, May 2023-31 August 2024

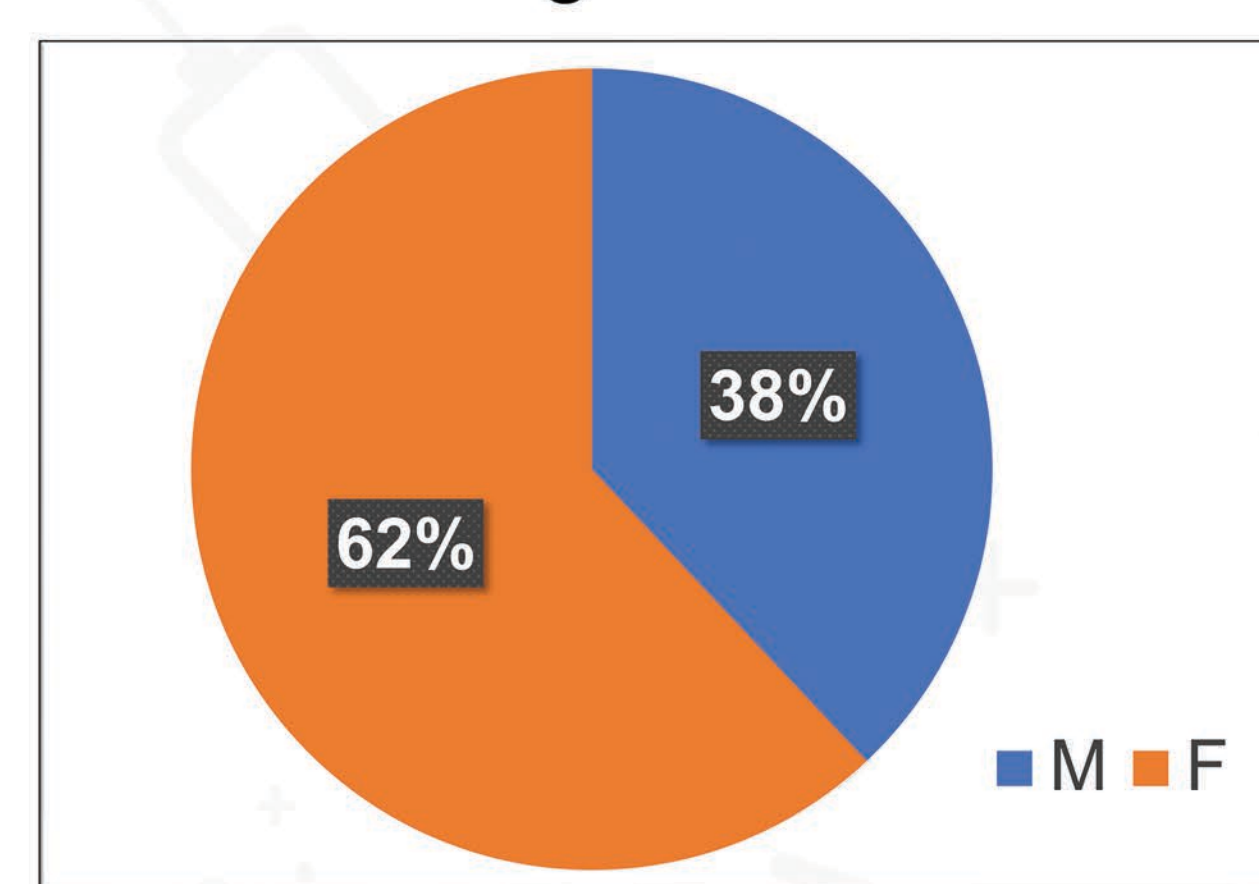| Clinical characteristics	n(%)
Suspected Cases	5951
Laboratory confirmed case	65(1)
Confirmed case epidemiological link	105(2)
Compatible clinical case	5523(93)
No case	258(4)
Hospitalization	5862(99)
Death	**119(2)**

RESULTS CONTINUED

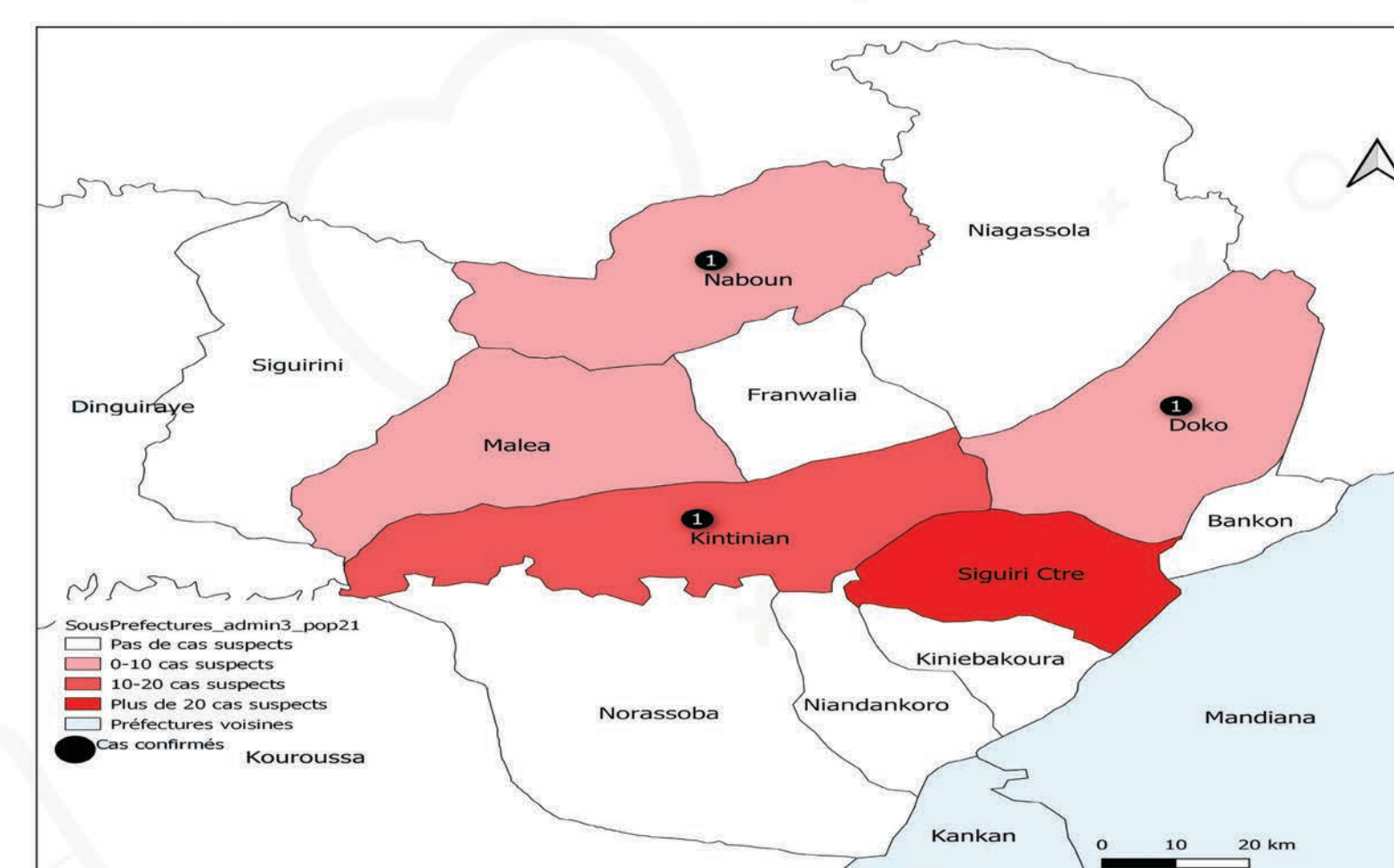Epidemic curve of Diphtheria cases, Siguiri, May 2023- 31 August, 2024

Attack rate and case fatality by age group of Diphtheria cases , Siguiri, May 2023- 31 August 2024

Age range	Attack rate per 100,000	Letality (%)
0 - 4 Yrs	488	6,61
5 - 9 Yrs	1070	2,69
10 - 14 Yrs	1093	2,25
≥15 Yrs	541	0,15

Distribution of cases by sex, Siguiri, May 2023, Siguiri, May 2023- 31 August 2024

Attack rate of Diphtheria cases by sub-prefecture, Siguiri, May 2023- 31 August 2024

LIMITS

- Inappropriate sampling kit at the start.

CONCLUSIONS

- Large-scale epidemic in regression
- The 0-14 age group and urban areas were the most affected
- Higher case-fatality rate among 0–4-year-olds

ACTIONS TAKEN

- Setting up diphtheria control committees
- Four rounds of vaccination
- Cases Diphtheria case management and contacts

ADDITIONAL KEY INFORMATION

No conflicts of interest to declare

AUTHOR CONTACT INFORMATION

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