

# DIPHTHERIA SITUATION REPORT

Serial Number 01

Data as of Epi-week 03 2023



## HIGHLIGHTS

### Background

- NCDC was notified of suspected diphtheria outbreaks in Kano and Lagos states on 1<sup>st</sup> December 2022
- In response to the notification, Rapid Response Teams (RRTs) were deployed to both states to confirm the outbreak and support response activities
- Diphtheria outbreaks were confirmed in both States and NCDC has been supporting response activities in both States in responding

### Outbreak Summary: Epi-week 01 – 03, 2023

- A total of 132 suspected cases were reported from two (2) States: Kano 130 (98.5%); Yobe 2 (1.5%)
- Of the suspected cases reported, 89 (67.4%) were confirmed (clinically compatible), 6 (4.5%) were discarded & 37 (28.0%) are pending classification
- Confirmed cases were all from 12 LGAs in Kano State
- Nine (9) deaths were recorded from all the confirmed cases (CFR: 10.1%).

### Cumulatively: Epi-week 19 2022 – Epi-week 03 2023

- A total of 253 suspected cases were reported: Kano (169), Yobe (78), Lagos (5) and Osun (1) States
- Of the suspected cases reported, 111 (42.1%) were confirmed (8 lab confirmed & 103 clinically compatible), 18 (7.1%) were discarded, 40 (15.3%) are pending classification while 84 (33.2%) were unknown
- Majority (91.9%) of the confirmed cases occurred in those aged **2 – 14 years**.
- A total of 22 deaths (CFR = 19.8%) were recorded among confirmed cases
- Only 12 (10.8%) out of 111 confirmed cases were fully vaccinated with a diphtheria toxin-containing vaccine

## SITUATION UPDATES

Wk 19 2022 – Wk 03 2023

### TOTAL SUSPECTED CASES

**253**

*Suspected Cases [wk 1-3 2023]*

**132**

### STATE WITH SUSPECTED CASES

**4**

*New State with Suspected Cases  
[wk 1-3 2023]*

**0**

### TOTAL CONFIRMED CASES

**111**

*Confirmed Cases [wk 1-3 2023]*

**89**

### STATE WITH CONFIRMED CASES

**4**

*New State with Confirmed Cases  
[wk 1-3 2023]*

**0**

### TOTAL DEATHS AMONG CONFIRMED CASES (CFR)

**22 (19.8%)**

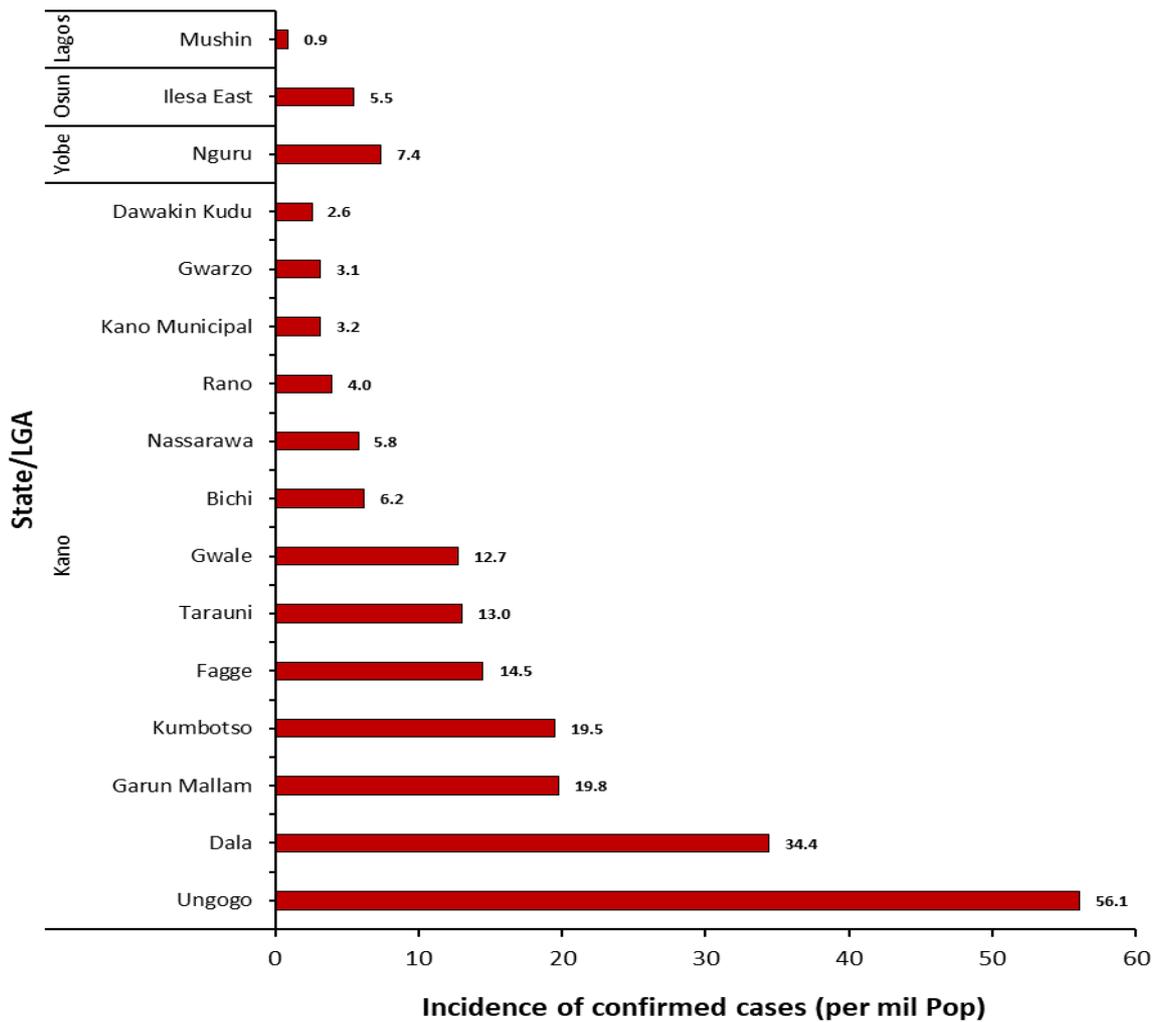
*Deaths among Confirmed Cases  
[wk 1-3 2023] (CFR)*

**9 (10.1%)**

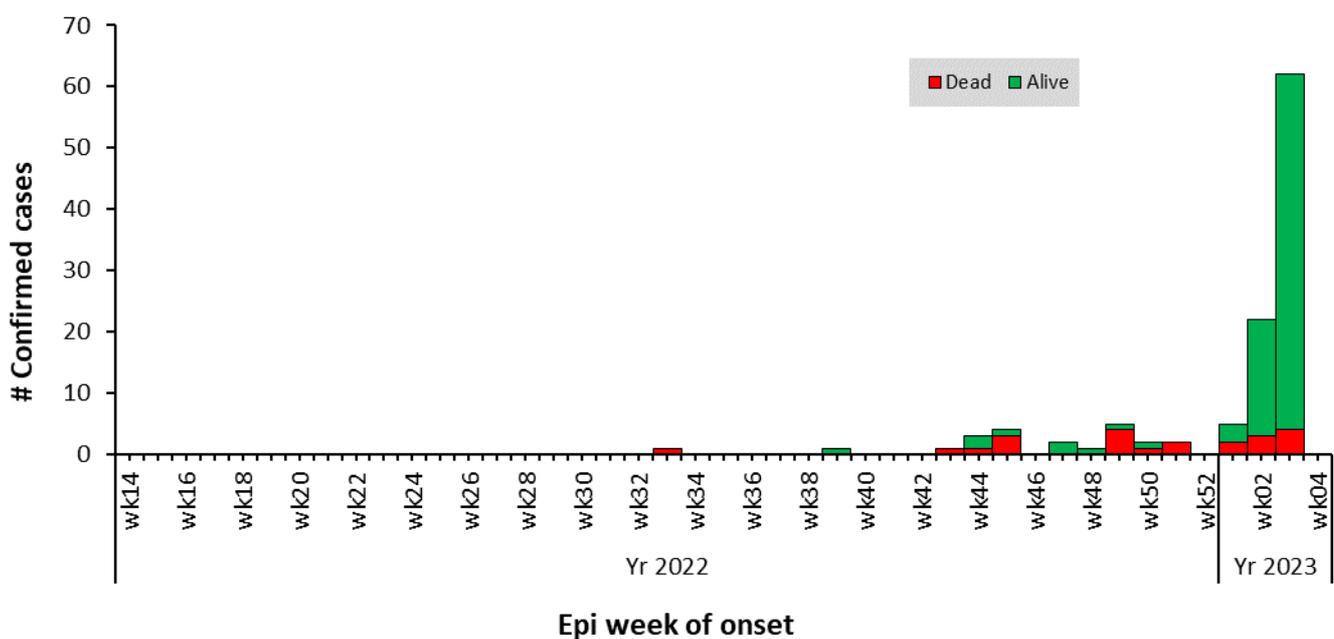
## Description of diphtheria cases by states in Nigeria, epi-week 19 2022 – epi-week 03 2023

Description of Cases	Kano State	Lagos State	Osun State	Yobe State	National
<b># Suspected cases</b>	<b>169</b>	<b>5</b>	<b>1</b>	<b>78</b>	<b>253</b>
▪ LGAs with suspected case(s)	14	2	1	2	19
▪ # Sample collected (SCR)	53 (31.4%)	5 (100.0%)	1 (100.0%)	9 (1.2%)	68 (26.9%)
<b># Cases with sample collected</b>	<b>53</b>	<b>5</b>	<b>1</b>	<b>9</b>	<b>68</b>
▪ Culture positive samples	23 (43.4%)	1 (20.0%)	1 (100.0%)	3 (33.0%)	28 (41.2%)
▪ Culture negative samples	8 (15.1%)	4 (80.0%)	0	6 (66.7%)	18 (26.5%)
▪ Pending samples	22 (41.5%)	0	0	0	22 (32.4%)
▪ Samples not tested	0	0	0	0	0
<b># Isolates from positive culture</b>	<b>23</b>	<b>1</b>	<b>1</b>	<b>3</b>	<b>28</b>
▪ Toxin production positive	6 (26.1%)	1 (100.0%)	1 (100.0%)	0	8 (28.6%)
▪ Toxin production negative	0	0	0	0	0
▪ Pending toxin test	17 (73.9%)	0	0	1 (33.3%)	18 (64.3%)
▪ Toxin test not done	0	0	0	2 (66.7%)	2 (7.1%)
<b># Suspected cases</b>	<b>169</b>	<b>5</b>	<b>1</b>	<b>78</b>	<b>253</b>
<b># Confirmed cases</b>	<b>107 (63.3%)</b>	<b>1 (20.0%)</b>	<b>1 (100.0%)</b>	<b>2 (2.6%)</b>	<b>111 (42.1%)</b>
▪ <i>Lab confirmed (LC)</i>	6	1	1	0	8
▪ <i>Epidemiologically linked (EL)</i>	0	0	0	0	0
▪ <i>Clinically compatible (CC)</i>	101	0	0	2	103
<b># Discarded</b>	<b>8 (4.7%)</b>	<b>4 (80.0%)</b>	<b>0</b>	<b>6 (7.7%)</b>	<b>18 (7.1%)</b>
<b># Pending</b>	<b>39 (23.1%)</b>	<b>0</b>	<b>0</b>	<b>1 (1.3%)</b>	<b>40 (15.3%)</b>
<b># Unknown</b>	<b>15 (8.9%)</b>	<b>0</b>	<b>0</b>	<b>69 (88.5%)</b>	<b>84 (33.2%)</b>
<b># Confirmed cases (LC+EL+CC)</b>	<b>107</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>111</b>
▪ LGAs with confirmed case(s)	13	1	1	1	16
▪ Death among confirmed case (CFR)	21 (19.6%)	1 (100.0%)	0	0	22 (19.8%)

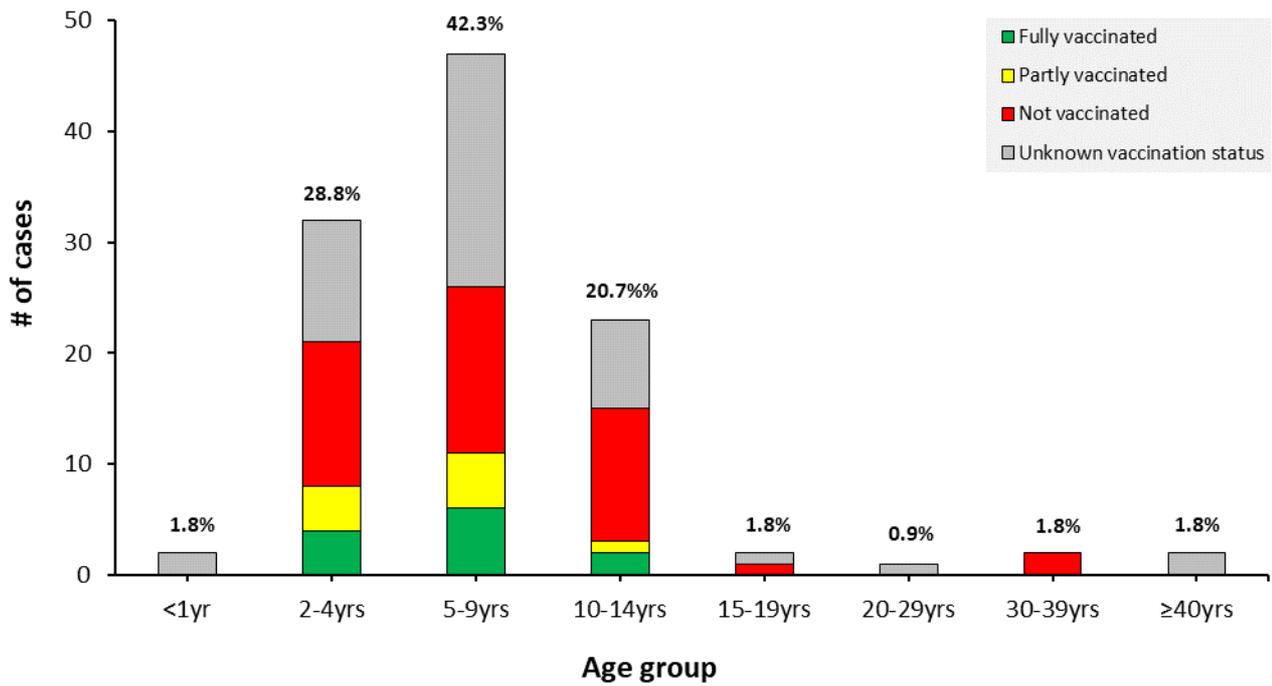
- **Lab confirmed (LC):** a person with *Corynebacterium spp.* isolated by culture and positive for toxin production, regardless of symptoms
- **Epidemiologically linked (EL):** a person that meets the definition of a suspected case and is linked epidemiologically to a laboratory-confirmed case
- **Clin compatible (CC):** a person that meets the definition of a suspected case and lacks both a confirmatory laboratory test result and epidemiologic linkage to a laboratory confirmed case
- **Confirmed case = LC + EL + CC**



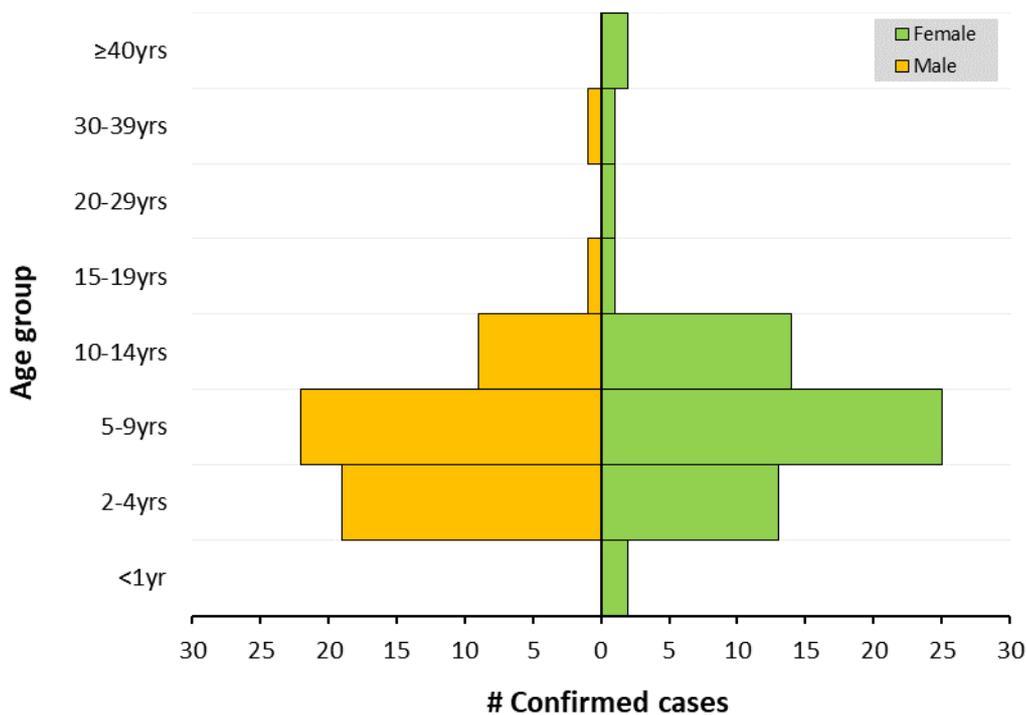
**Figure 1: Incidence of confirmed diphtheria cases (LC+EL+CC) by LGA in Nigeria, epi-week 19 2022 – epi-week 03 2023**



**Figure 2: Epi-curve of confirmed diphtheria cases (LC+EL+CC) in Nigeria, epi-week 19 2022 – epi-week 03 2023**



**Figure 3: Age distribution and vaccination status of confirmed diphtheria cases (LC+EL+CC) in Nigeria, epi-week 19 2022 – epi-week 03 2023**



**Figure 4: Age-sex distribution of confirmed diphtheria cases (LC+EL+CC) in Nigeria, epi-week 19 2022 – epi-week 03 2023**