Resurgence of diphtheria epidemics in Africa: is Cameroon prepared to respond?

Poster number

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In the context of **resurgence of diphteria** outbreaks and other emerging and re-emerging diseases, **detection and notification** performances and **laboratory capacities** need to be strengthened in **Cameroon**.

BACKGROUND

- Diphteria is a deadly respiratory disease preventable with vaccination
- As of 26 May 2024, 49,929 suspected cases, 27,511 confirmed cases (67.2%) and 1,174 deaths (2.3%) were declared in African countries (**Nigeria**, Niger, Guinea, Mauritania, Algeria, Cameroon and Gabon) since 2023
- These outbreaks were classified grade 2 public health emergency by the WHO
- Cameroon:
 - shares a long land border with Nigeria
 - diphteria was not a prioritic disease under surveillance
 - managed its first suspected case of diphtheria in November 2023.
- Aim: to assess detection, notification and response times and to identify bottlenecks and enablers to the response put in place.

METHODS

- An early action review was conducted using the 7-1-7 evaluation grid
- The patient medical file and investigation report were consulted, health care workers involved in the patient management chain and the surveillance system were interviewed.
- The collected data were:
 - Onset, detection and notification dates
 - Date and type of the early response
 - Faced difficulties and strengths during the response.

RESULTS



Figure 1. Sequence from onset of disease until early response to the suspected case of diphteria, Cameroon, november 2023

Other response measures:

- Elaboration of a readiness plan in december 2023
- Sample transportation in South-Africa for confirmation in January 2024.

Table 1. Timeliness measures

Time interval	Calculation	Timeliness	Target	Target reached?
Detection	Delay from onset to detection	14	7	No
Notification	Delay from detection to notification	7	1	No
Response	Delay from notification to response	2	7	Yes

RESULTS CONTINUED

Table 2. Enablers and bottlenecks

Interval	Enablers	Bottlenecks
Detection	Clinician expertise	Delay of consultation Unknown case definition No lab capacities
Notification	Existing notification circuit	No notification tool Lack of training in IDSR
Response	Available rapid response team Toolkit for rapid investigations	Resource mobilisation

CONCLUSIONS

- The surveillance performances of this reemergent disease were poor while the response teams were easily deployed
- This rapid assessment of the response to this alert highlighted the fact that surveillance and lab capacities need to be strengthened to prepare for an effective response to diphtheria and all emerging and re-emerging diseases in Cameroon.





Picture 1. Suspected diphteria case, Cameroon; November 2023

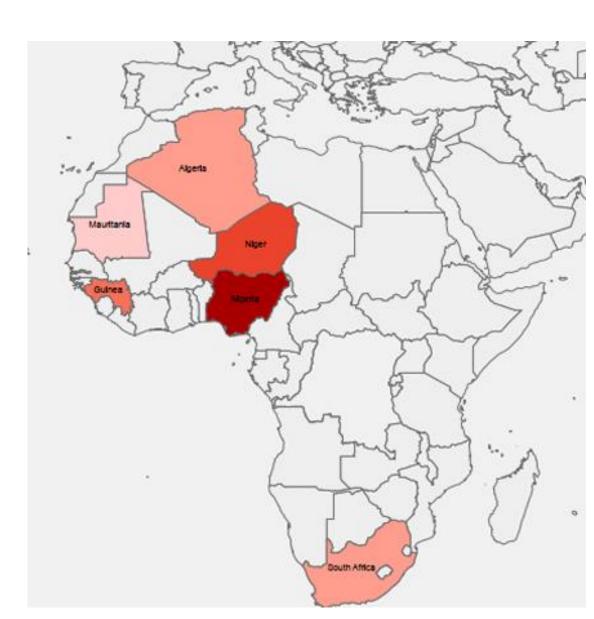


Figure 2. Countries with diphteria Outbreaks in November 2023 (WHO)

ADDITIONAL KEY INFORMATIONS

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