

#### **Nigeria Centre for Disease Control**

Protecting the health of Nigerians

### Mapping of cholera hotspots in Nigeria: Methods, outcomes and challenges

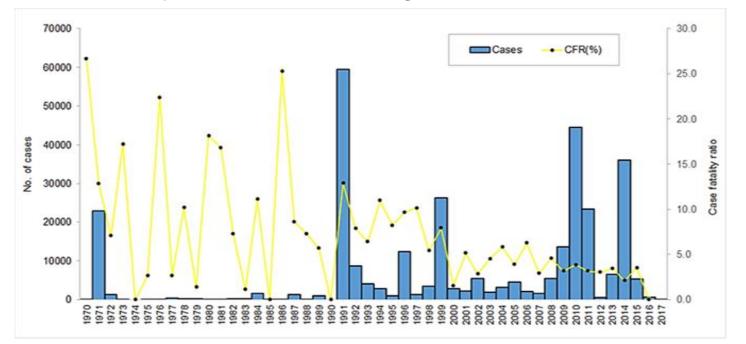
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# **Cholera burden in Nigeria**



• Endemicity of cholera in Nigeria



- 2018 outbreak: >40,000 cases and 836 deaths
- Targeting cholera hotspots with proven interventions is effective

### Partners and data sources



#### Partners —a collaborative and multi-agency effort

- Nigeria Centre for Disease Control (NCDC)
- World Health Organization
- Nigeria Primary Health Care Development Agency

#### Data sources

- NCDC
  - Routine data collected via the IDSR platform and line-list, 2012—2017
  - Data at the LGA level, standardised for statistical analysis and mapping
- National Population Commission
  - Projected population figures for each LGA, 2012—2017

### **Mapping indicators**



Cholera burden: mean annual incidence

Frequency of cholera outbreak

Contribution to first 50% of all reported cholera cases

Severity of cholera outbreak

WaSH conditions

Nature of settlements of the LGA

Ongoing cholera transmission

**Final score:** Weight of an indicator × LGA's score for an indicator

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# Mapping outcomes (1/1)



#### Cholera hotspots, 2012-2017

- 83 LGAs as cholera hotspots
  - Home to 23 million people –12% of Nigeria's population
  - 84% of total cholera cases (n=61,436) recorded nation-wide

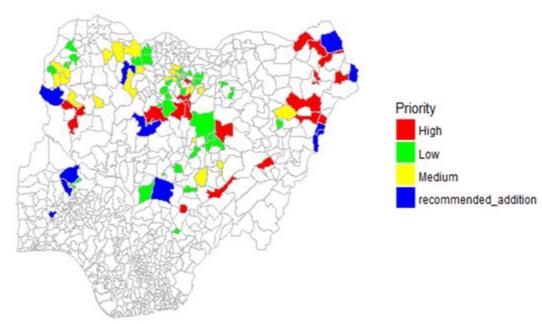
#### Validation and prioritisation of hotspots

- A *participatory* stakeholders' meeting on 17 July 2018
- Consideration of additional contextual indicators: security, flooding, and accessibility
- Inclusion of additional13 hotspot LGAs

# Mapping outcomes (1/2)

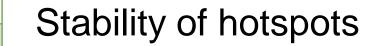


- 96 LGAs of 15 States were classified as cholera hotspots
- LGA rankings and targets for interventions (e.g. OCV):
  - Group 1 High priority LGAs
  - Group 2 Medium priority LGAs
  - Group 3 –Low priority LGAs









Depth of a LGA setting (micro-hotspot?)

Limited WASH and socioeconomic data

Diagnostic accuracy





- Mapping cholera hotspots in Nigeria was an important step towards attaining the Global Roadmap Strategic goals.
- Identified gaps need to be addressed for optimum outcomes.
- Lessons learned here will be useful in addressing these gaps.



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