

Impact of OCV preventative campaigns strategies for cholera elimination: A comprehensive research project in Democratic Republic of the Congo

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CONTEXT

- Oral cholera vaccine (OCV) mass campaigns are recommended for cholera prevention and control in endemic areas
- Since 2019, DRC implemented preventative OCV mass campaigns in identified hotspot areas, as part of multi-year cholera elimination plan.
- In 2021, Epicentre started implementation of comprehensive research project in Goma (North-Kivu) and Bukama (Haut-Lomami), with the main objective to evaluate the mid-term impact of the OCV preventative strategies
- From 2024 to 2026, a new phase of this project with renewed objectives will be implemented in both study sites



OBJECTIVES



To assess the strategies and impact of large preventative OCV vaccination campaigns in different contexts of cholera hotspots in the Democratic Republic of the Congo.

- 1 Assess impact of vaccination campaigns in endemic areas at population level over time for **up to 5 years post-vaccination**
- 2 Estimate **vaccine effectiveness** according to age, nb of doses received, delay between the two doses, and delay since last vaccination
- 3 **Inform delay in re-vaccination** by studying evolution of coverage, suspect/confirmed cholera incidence and mortality
- 4 Compare **perception of different preventative vaccination strategies** (geographical targeting, re-vaccination)
- 5 Estimate population movement and other **factors influencing the vaccine coverage** over time across contexts
- 6 Assess cholera healthcare-seeking behavior, and **factors influencing access to care**

METHODS

Clinical surveillance



- Suspect cases in cholera treatment centers/units
- Systematic inclusion



- Risk factor questionnaire
- Stool samples
- Cholera confirmation (RDT, culture, PCR)



- Goma and Bukama
- Implemented since 2021



Objectives

- 1
- 2
- 3

Population surveys



- Yearly surveys, GPS random sampling



- Vaccine coverage
- Retrospective mortality
- Incidence of cholera-like symptoms
- Population movements
- Healthcare seeking behavior



- Goma and Bukama
- 2024 to 2026



Objectives

- 1
- 3
- 5
- 6

Case-cohort



- Build prospective cohort in Goma community
- Vaccine effectiveness study (case-cohort design)



- Inclusion questionnaire
- Follow-up on vaccination status and episodes of diarrhea



- Goma only
- 2024 to 2026



Objectives

- 2

Qualitative assessments



- In-depth interviews
- Focus group discussions



- Perception of OCV strategies
- Acceptance for regular campaigns
- Reasons for non-vaccination and waning coverage



- Goma and Bukama
- 2025 or 2026



Objectives

- 4
- 6

EXPECTED OUTCOMES

Crucial vaccine effectiveness evidence

Improve vaccine coverage and its evolution over time

Estimate acceptance and perception of this new strategy

Efficiency of distribution strategies

Expand cholera laboratory capacity in DRC

Crucial experience and evidence for decision-makers in cholera elimination

Develop research capacity in DRC

Insights on re-vaccination delay

