

# Assessing cholera transmission in endemic areas following mass preventive OCV campaigns in DRC

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## Context

In the context of cholera resurgence, the Oral Cholera Vaccine (OCV) constitutes an important control strategy, including in endemic areas. Preventive OCV campaigns are now increasingly used; cholera transmission and the impact of OCV in such zones need to be better understood.

## Methods

This is a multi-study project underway in two sites in the Democratic Republic of the Congo: Goma (urban) and Bukama (rural). The project includes data collection at the suspect patient level (clinical surveillance), community level (vaccination coverage surveys and serial seroprevalence surveys), and household level (follow-up over time of positive patients and their household members). Preliminary clinical surveillance and vaccination coverage results are presented, as data collection is still ongoing.

## Results

In Goma, vaccine coverage two years after last vaccination is lower than expected at 49.5% in the targeted zones. Over 8000 suspect cases were included in clinical surveillance in Goma, with cases reported across most of the city.

In Bukama, high levels of vaccination coverage were reported through a community approach survey, with most areas reporting 80 to 90% coverage. Close to 1000 cases were reported, and while an epidemic was ongoing at the time of vaccination, notification levels have remained low and stable ever since.

In Goma, drinking surface or tank-delivered water appeared to be a risk factor for cholera infection, while in Bukama, the associated risk was the public distribution system.

## Conclusion

The study sites present different pictures in terms of their OCV campaigns as well as their cholera surveillance profile and transmission. Preliminary results offer elements to guide the implementation of vaccination campaigns. In Goma, for instance, patchy vaccination targets and population movements may have diluted coverage. Early findings illustrate risk factors for cholera transmission, providing operational insights to enhance control strategies. Future results will incorporate other types of data and help design efficient vaccination strategies.

This project aims to evaluate cholera transmission and the impact of OCV in endemic zones. Preliminary results offer elements to guide cholera control and vaccination strategies.

