

# Integrated community-based interventions to overcome a deadly cholera outbreak in Zimbabwe

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17<sup>th</sup> World Congress on Disaster  
and Emergency Medicine

May 31–June 3, 2011 Beijing, China



Beijing  
China

# Outline

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- Background
  - General
  - Epidemiological
- Methodology
- Result
- Limitations
- Conclusion

# Background (1)

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- Country (12,5 million pop, 2008) facing socio economical crisis: long time.
- Basic services disrupted: potable water, primary health care
- Health system heavily affected: shortage of Health workers; medical supplies/equipments & deteriorated infrastructures

# Background (2)

## *Epidemiological*

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- 54 out of 62 districts (**84%**) affected by the cholera
- Started: 8 Aug 08; Officially: Dec 08; Ended: 3 Jul 09.
- Week 47 (from 16 Nov 2008), epidemic swept through Zimbabwe, 6 more provinces and 46 districts: **>3000 cases/day**.
- **98 592 cases; 4,288 deaths; Crude CFR: 4.3%**
- **2631 deaths at community level – 61.4% of all deaths**
- **Response: Hum Clusters and C4 Epidemio, Case mngt, Soc Mob, WASH, Logistic.)**

# Methodology

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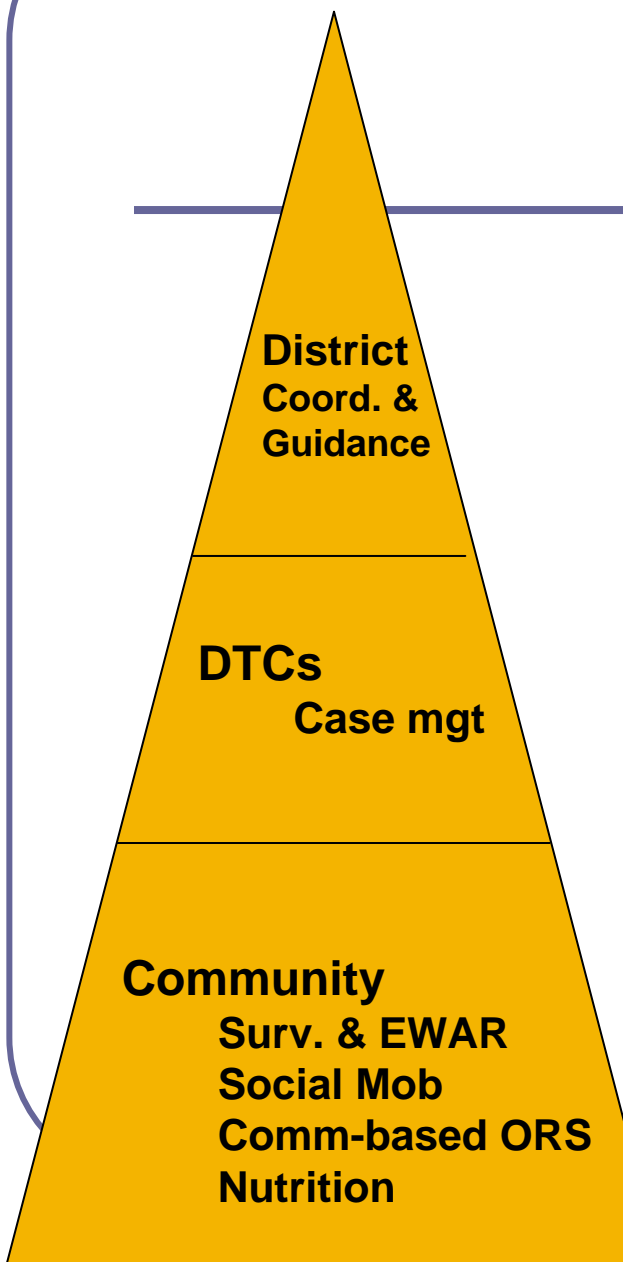
- The present work is a case study to describe the strategy and lessons learnt for future humanitarian crises and preparedness.
- The methodology was based on:
  - Review of epidemiological, assessment & surveys' reports:
    - UNICEF/Social Mob Team,
    - ICDDR-B and Health and WASH cluster members
  - Minutes of joint Health and WASH clusters' meetings,
  - Direct observation as health cluster coordinator.

# Result

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- **Epidemiological data/alert system & Assessment surveys:**
  - Increasing number of cases & community deaths in rural areas : 66% of 1,948 deaths/61,304 cases on 31 Jan 09
  - Risk factors identified in communities:
    - lack of awareness about the disease, cultural behaviours,
    - lack of potable water & weak sanitation, & poor use of water purification tablets,
    - lack of soap & water containers
    - late arrival to rural treatment centres

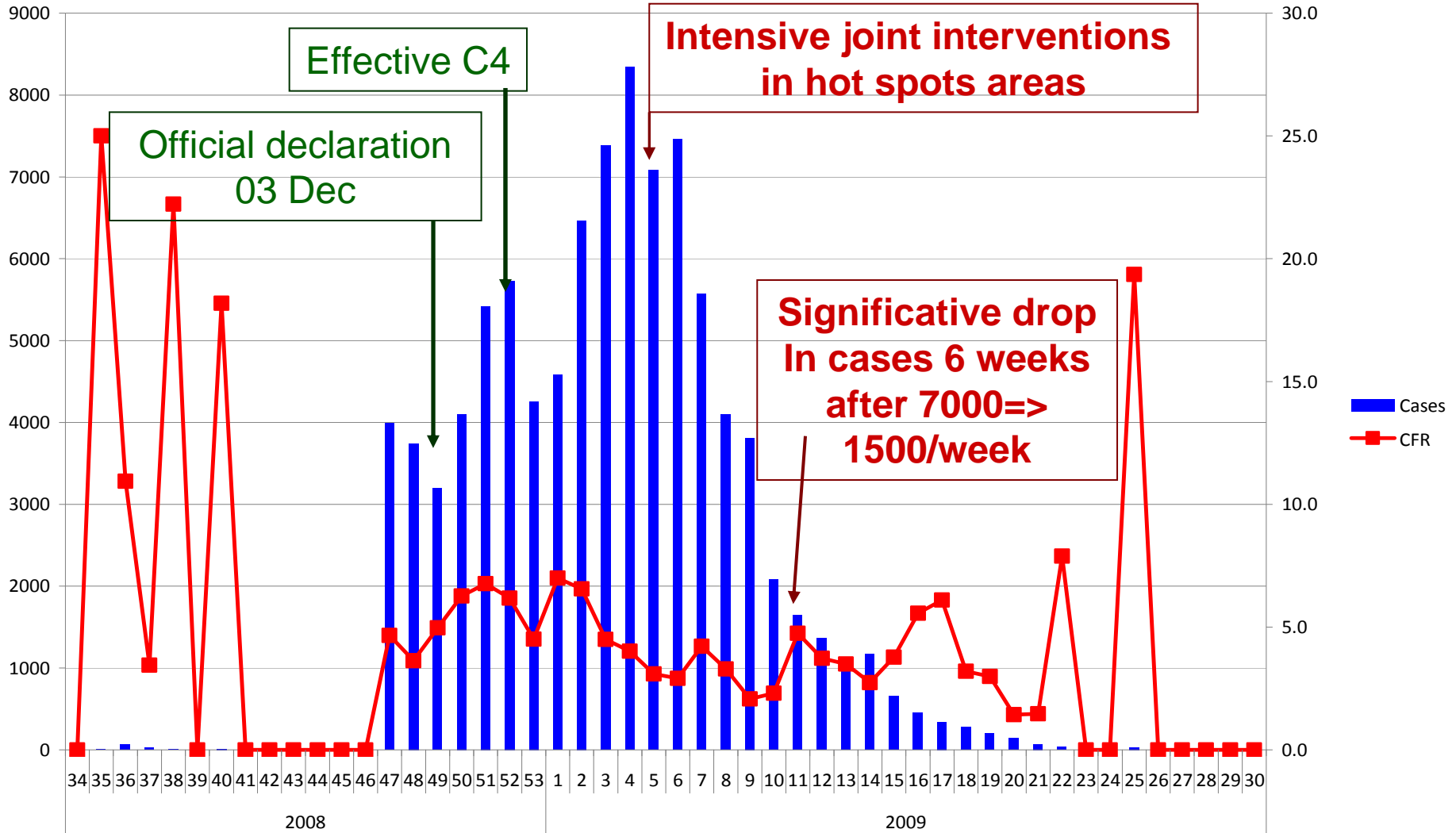
## Response strategy: *Community-based package*



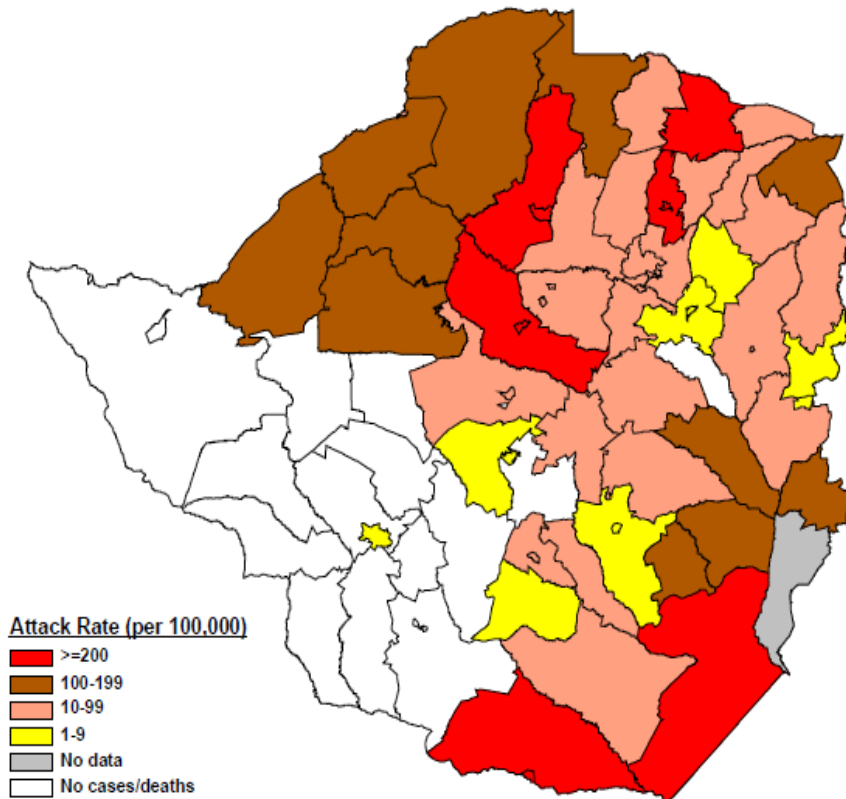
Intervention	Responsible
<b>1- Surveillance &amp; EWAR (investigation team) &amp; Lab</b> <b>2-Social mobilization strategy and plan</b> <b>3- Guidance Case mgt (training)</b> <b>4- WASH activities coordination</b> <b>5- HR: incentives</b> <b>6- Logistic support (vehicle, fuel)</b>	<b>- Health &amp; WASH cluster members</b> <b>- MoHCW</b>
<b>1-Staff: incentive</b> <b>2- Supplies</b> <b>3-Non medic items</b> <b>4-Guideline (CTC; Case management)</b> <b>5-Food</b>	<b>- Health Cluster members</b> <b>-MoHCW</b>
<b>1- Package:</b> <ul style="list-style-type: none"> <li>- <b>Health &amp; WASH education tools</b></li> <li>- <b>Water containers</b></li> <li>- <b>Water purification tablets</b></li> <li>- <b>Comm- based surv &amp; EWAR</b></li> <li>- <b>ORS at community level</b></li> </ul> <b>2- Media campaign</b>	<b>- Health and WASH Cluster members (mainly NGOs)</b> <b>-NUT Cluster</b> <b>-MoHCW</b> <b>- Comm Health workers +++(MoH &amp; NGOSs)</b>

# Epicurve cholera in Zimbabwe 2008-2009

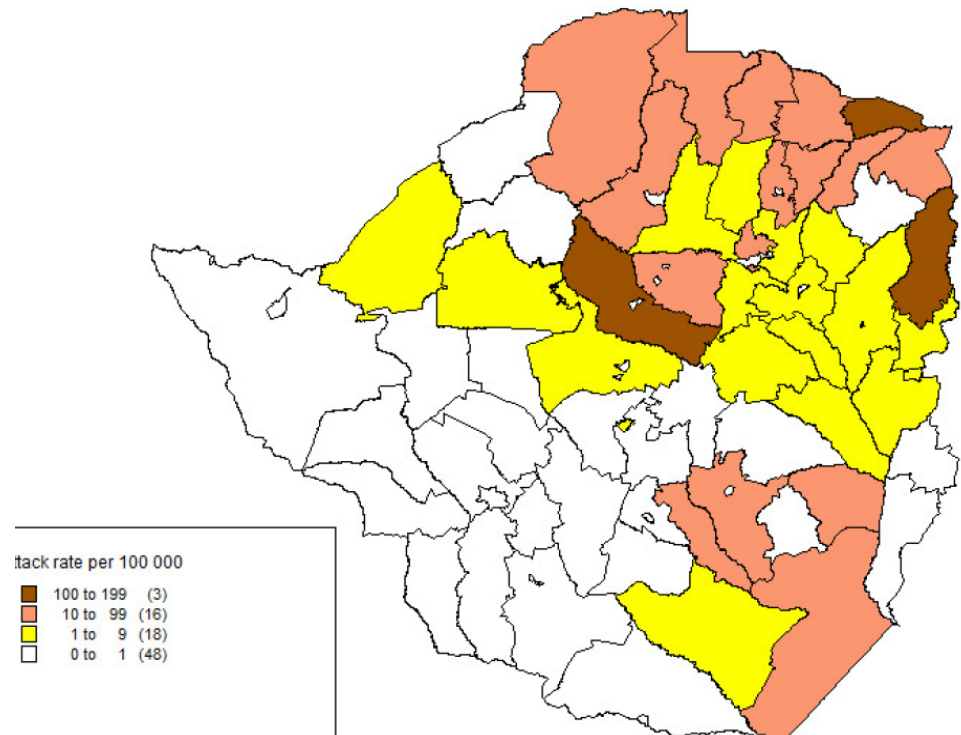
17 August 2008 – 01 August 2009



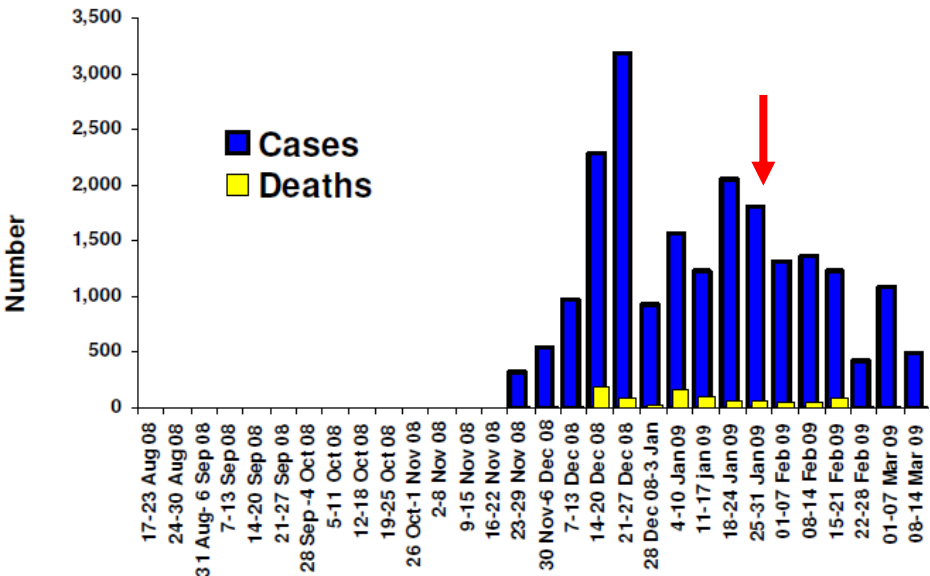
**Weekly attack rates, by district.  
Zimbabwe as of 31/01/09 W4**



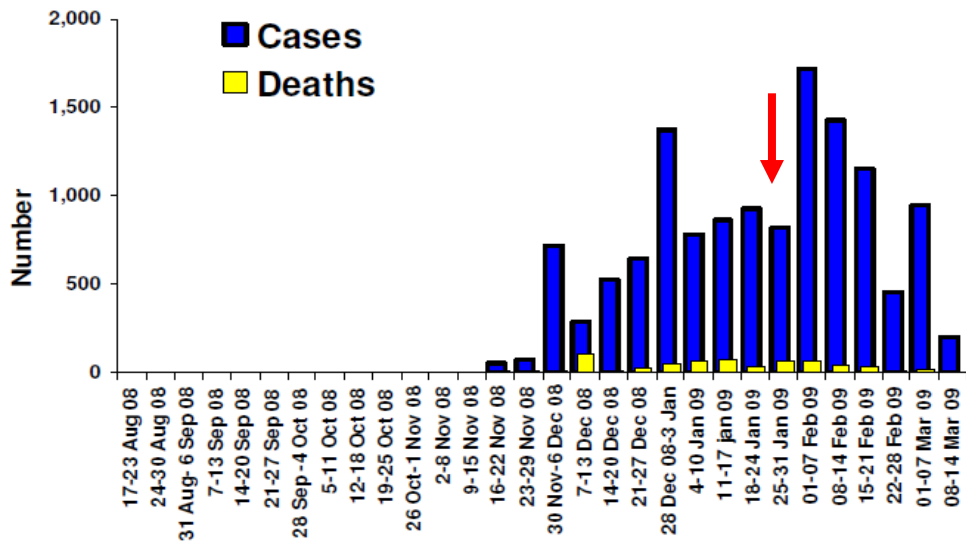
**Weekly attack rates, by district.  
Zimbabwe as of 14/03/09 W11**



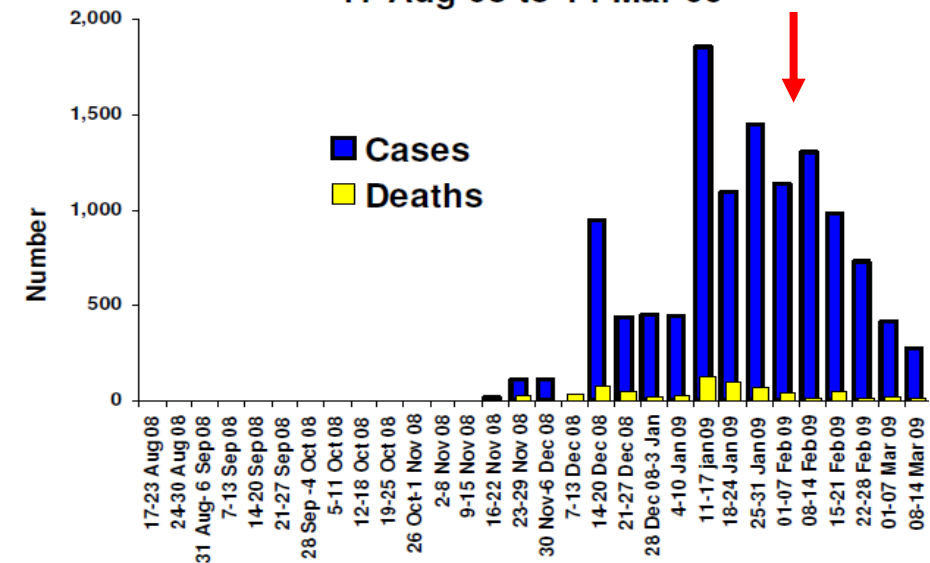
**Cholera in Mashonaland West province, Zimbabwe**  
17 Aug 08 to 14 Mar 09



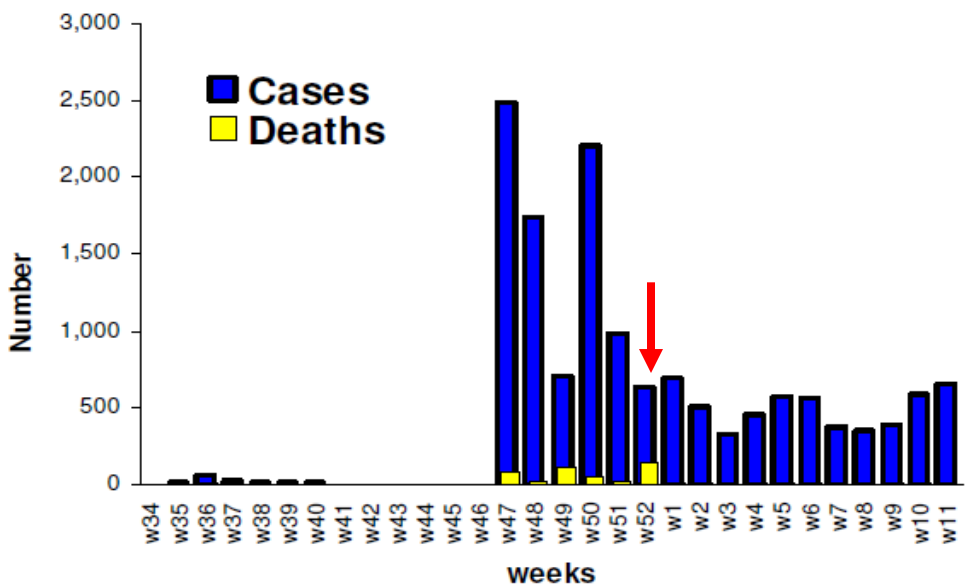
**Cholera in Manicaland province, Zimbabwe**  
17 Aug 08 to 14 Mar 09



**Cholera in Masvingo province, Zimbabwe**  
17 Aug 08 to 14 Mar 09



**Cholera in Harare province, Zimbabwe**  
17 Aug 08 to 14 Mar 09



# Limitations of the study

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- Based on analysis of information and data from different sources (validity of surveys)
- No comparative study done on impact of the specific interventions' package.

# Conclusion

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- Package of mutually-reinforcing interventions targeting the risk factors can be effective on cholera epidemic in rural communities.
- Community-based preparedness can be based on such integrated packages
- Need for a more structured study to confirm the impact of the strategy.
- Could be a framework to address other public health threats.

THANK YOU!!!