#### CHOBAL TASK FORCE ON CHOLERA CONTROL REDUCING MORTALITY: CASE AREA TARGETED INTERVENTIONS (CATIS) IN OUTBREAK SETTINGS

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### **RATIONALE FOR CASE AREA TARGETED INTERVENTIONS**

**Scenario** A

300

250

200

150

100

50



**Source**. Modified by Darcy, J. et al. (2018)

Schematic representation of the same cholera control measures implemented at the beginning (Scenario A) and after the peak (Scenario B) of an outbreak, and potential cases averted. [Y-axis = incidence of new cases, X-axis = time].

### **RELATIVE RISK OF CHOLERA TRANSMISSION**

- Proximity to a cholera patient, increases risk of transmission spatially and temporally
- In Bangladesh 36 times increased risk in first 3 days within 50 meter radius (Debes et al 2016)
- Increased risk of at least 200-meters during the 5-days immediately following reporting of case (Azman et al 2018)
- These results provide a rational for targeted interventions, delivered rapidly



**Source**. Modified from MSF (2017). Debes et al. (2016) and Azman et al. (2018)

### CASE AREA TARGETED INTERVENTIONS TEAMS



**Source**. GARWSP Yemen (2019)

- Objective is to reduce the risk of local transmission and reduce cases
- Target affected households and surrounding households with an immediate response (< 48 hours)</li>
- Usual package includes delivery of a standard WASH package (< 100 m) and hygiene promotion
- Additional WASH and hygiene promotion in the community may also be included

### **USE OF CATIS TEAMS IN RECENT OUTBREAKS**

- Implemented in Haiti, Yemen,
   Zimbabwe and Mozambique
- Risk of large caseloads and increased transmission
- Strengthen linkages between active case investigation and immediate response
- Improve timeliness and effectiveness of response efforts through better targeting (not a blanket approach)



Source. UNICEF Zimbabwe (2019)

	Haiti	Yemen	Zimbabwe
Team composition	Four members. 57 teams in 10 departments 'Mixed-teams', with multi-sectoral team members from government partner (MSPP's EMIRA) and NGOs (SI, ACTED and ACF). Total of 57 teams in 10 departments	Two members. Between 400 – 850 teams in 22 governorates. Non 'mixed-teams', with WASH only team members from government partner (GARWSP).	Four members. 8 teams. 'Mixed-teams', with multi-sectoral team members from government partner (Harare Health Division, Environmental- Health Officers) and NGOs (Goal and Oxfam)
Activation	1 suspected case = 1 alert = 1 response	'Cluster of cases': 20 cases or more in one geographical area over a week period (aimed to reach 25% of cases)	1 suspected case = 1 alert = 1 response
Response time and coverage	In 2018, 85 per cent of suspected cases were responded to within 48 hours, and 75 per cent within 24 hours. 95 per cent response rate for suspected cases	In 2018, 3 per cent of suspected and confirmed cases were responded to within 24 hours; 43 per cent within 24 to 48 hours and 23 per cent within 48 to 72 hours. 32 per cent response rate for suspected cases and 83 per cent confirmed cases	In 2018, 73 per cent of suspected cases responded to within 48 hours
Response coverage	10 to 20 households per case	20 to 21 households per day	10 to 20 households per case
Scope of action	<ul> <li>Households: water treatment, testing and monitoring, household disinfection, household hygiene and disinfection kits, and hygiene promotion sessions</li> <li>Community: quick assessment of WASH situation, 'quick fixes' of existing WASH infrastructure, chlorination of water sources, intensified community engagement and hygiene awareness in public places and institutions, and preventive measures with the presence of risk factors</li> </ul>		

# EVIDENCE OF THE EFFECTIVENESS OF CATIS: *HAITI CASE STUDY*

- **Timeliness:** the sooner the response was implemented, the fewer the number of suspected cholera cases.
- **Reduction in cases:** by 74% when the first completed CATI was conducted within one day or less (as compared to seven days or more).
- Duration of outbreaks: decreased by 64% where the first completed CATI was completed within one day or less (as compared to seven days or more).



Source. Michel et al. (2018)

### KEY ADVOCACY MESSAGES FOR USE OF CATI TEAMS



Source. UNICEF Haiti (2018)

- Early establishment and response is key
- Multi-sectoral approach capitalizes on the optimization of available capacities and resources
- Embedded in a national-led comprehensive alert-response strategy is required
- Timely sharing of reliable epidemiological data and line list is essential
- Play a critical role in reducing the risk of local transmission
- Importance of building upon or incorporating into existing public health programmes

### NEXT STEPS FOR CATIS TEAMS

- Multi-sectoral integration and roles for teams
- Improved operation and performance
- Cost efficiency
- Systematic monitoring and evaluation framework
- Standardized capitalization and programmatic learning
- Effectiveness and impact studies
- Sustainability and long-term measures



Source. UNICEF Nigeria (2018)

### **REMAINING QUESTIONS FOR CATIS TEAMS**



Source. UNICEF Bangladesh (2018)

- Use of antibiotics
- Role of ORS
- Active case finding and investigation
- SOP for Case Management engagement

## Thank you **Together we can #endcholera**



CHOLERA CONTROL