UNICEF Interventions for Cholera Prevention and Control

UNICEF Initiative Against Diarrheal and Enteric Diseases Meeting
6 – 9 March 2017
Hanoi, Vietnam
Session Outline

**UNICEF INTERVENTIONS**

- WASH Coverage Trends
- SDG implications on WASH
- UNICEF’s integrated approach to preventable diseases
- Global WASH Initiatives for cholera prevention and control
- Issues and Challenges
The world has missed the MDG Sanitation Target
and in 47 countries, areas and territories, less than half the population use improved sanitation
but the MDG target for drinking water has been met
with less than half the population in Africa and Oceania using improved water
SDG 6: Ensure **availability and sustainable management of water and sanitation for all**

**6.1** Drinking water

**6.2** Sanitation and Hygiene

**6.3** Water quality

**6.4** Water-use efficiency

**6.5** Water resource management

**6.6** Eco-systems

**6** CLEAN WATER AND SANITATION

**Means of Implementation**

- **6.A** International cooperation and capacity development
- **6.B** Local participation
Target 6.1 Drinking water

By 2030, achieve universal and equitable access to safe and affordable drinking water for all

6.1.1: Population using safely managed drinking water services

Definition: Pop. using an improved drinking water source which is:

- located on premises, Accessibility
- available when needed, and Availability
- free of faecal and priority chemical contamination Quality
<table>
<thead>
<tr>
<th>MDG/SDG</th>
<th>Service ladder</th>
<th>Progressive realization</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDG 6.1</td>
<td>Safely managed drinking water</td>
<td>Improved facility located on premises, available when needed, and free from contamination</td>
</tr>
<tr>
<td>MDG continuity</td>
<td></td>
<td></td>
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<tr>
<td>Basic water</td>
<td></td>
<td>Improved facility within 30 minutes round trip collection time</td>
</tr>
<tr>
<td>Unimproved water</td>
<td></td>
<td>Unimproved facility does not protect against contamination</td>
</tr>
<tr>
<td>No service</td>
<td></td>
<td>Surface water</td>
</tr>
</tbody>
</table>
### Example of Safely Managed Drinking Water

#### Elements of safely-managed drinking water services

<table>
<thead>
<tr>
<th>Service Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population using improved water sources</td>
<td>70</td>
</tr>
<tr>
<td>Population using basic drinking water</td>
<td>56</td>
</tr>
<tr>
<td>Population using improved on premises</td>
<td>49</td>
</tr>
<tr>
<td>Population using improved available when needed</td>
<td>56</td>
</tr>
<tr>
<td>Population using improved free of contamination</td>
<td>28</td>
</tr>
<tr>
<td>Population using safely-managed drinking water services</td>
<td>28</td>
</tr>
</tbody>
</table>

The diagram above illustrates the percentage of population using different levels of water services, emphasizing the importance of safely managed drinking water services.
Target 6.2 Sanitation

By 2030, achieve access to **adequate and equitable sanitation** and hygiene for all, and **end open defecation**, paying special attention to the needs of **women and girls** and those in **vulnerable situations**.

6.2.1: Population using safely managed sanitation services including a handwashing facility with soap and water

Definition: Pop. using an improved sanitation facility which is:
- not shared with other households and where **Accessibility**
- excreta are safely disposed in situ or **Quality**
- transported and treated off-site
<table>
<thead>
<tr>
<th>MDG/SDG</th>
<th>Service ladder</th>
<th>Progressive realization</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDG 6.2</td>
<td>Safely managed sanitation</td>
<td>Private improved facility where faecal wastes are safely disposed on site or transported and treated off-site; plus a handwashing facility with soap and water</td>
</tr>
<tr>
<td>MDG continuity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basic sanitation</td>
<td></td>
<td>Private improved facility which separates excreta from human contact</td>
</tr>
<tr>
<td>Shared sanitation</td>
<td></td>
<td>Improved facility shared with other hh</td>
</tr>
<tr>
<td>Unimproved sanitation</td>
<td></td>
<td>Unimproved facility does not separate excreta from human contact</td>
</tr>
<tr>
<td>No service</td>
<td></td>
<td>Open defecation</td>
</tr>
</tbody>
</table>
Example of Safely Managed Sanitation

Diagram showing population using various sanitation services:
- Population using improved sanitation
- Population using improved onsite sanitation
- Safely-disposed on site or treated offsite
- Population using improved piped to sewer
- Safely transported and treated offsite
- Population using safely-managed sanitation services
## Open Defecation

Countries that account for almost three-quarters of the people who practice open defecation:

- India 626 million
- Indonesia 63 million
- Pakistan 40 million
- Ethiopia 38 million
- Nigeria 34 million
- Sudan 19 million
- Nepal 15 million
- China 14 million
- Niger 12 million
- Burkina Faso 9.7 million
- Mozambique 9.5 million
- Cambodia 8.6 million
Target 6.2 Hygiene

By 2030, achieve access to adequate and equitable sanitation and hygiene for all, and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

Emerging data on handwashing show that the presence of facilities with water and soap varies widely between countries and regions.

Fig. 40 Proportion of the population with a handwashing facility with soap and water (2009-2014)
UNICEF WASH Programme is guided by

The Global Cluster Mechanism as Global WASH Cluster Lead

To fulfil core accountabilities for children in emergencies

And ensure regular development and humanitarian nexus

Strategy for Water, Sanitation and Hygiene 2016-2030
Cholera is cross cutting across results areas in UNICEF Global WASH Strategy 2016 -2030

Realization of the human rights to water and sanitation

By 2030, achieve universal and equitable access to safe and affordable drinking water for all

By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations

Programming Principles
- Reduce inequality
- Sustain access to services at scale
- Promote resilient development
- Strengthen accountability at all levels

- Contribute across SDGs
- Integrate humanitarian and development programming
- Strengthen national systems

Programming Approaches
- Strengthen enabling environments
- Leverage sustainable financial resources
- Build sustainable markets
- Empower communities
- Utilize evidence to promote child rights
- Deliver services and supplies

*Approaches and Areas represent a global “menu” to be tailored to country context

Results Areas
- Water
- Sanitation
- Hygiene
- WASH in Institutions
- WASH in Emergencies

Evidence-based programming and monitoring
An Integrated approach to cholera

Multi-sectorial collaboration is a key component of cholera prevention and control

• Externally: close collaboration between UNICEF, WHO, local governments, implementing partners, communities and others

• Within UNICEF, between sections:
  – WASH
  – Health
  – Communication for development
  – Supply division

• UNICEF part of two regional cholera platforms
key pathway to prevent cholera is to ensure that

- People have access to and use safe water supply for drinking
- Households, communities, institutions and food outlets practices safe food hygiene
- Infants are exclusively breastfed and if needed given safe fluids and food
- The environment is free from excreta because people dispose of it safely
- People WASH their hands with soap and water at critical times
- Environmental hygiene is adhered to in markets and other public places
Priority WASH Interventions in emergencies

- Increase water supplies
- Improve quality of water supplied
- Increase access to excreta disposal facilities
- Provide hygiene kits, handwashing facilities or soap, water storage vessels (NFIs)
- Hygiene education/Social Mobilization
- Solid waste collection and disposal
- Reduce vector breeding sites

Preferably follows a rapid or comprehensive WASH assessment
UNICEF Cholera Toolkit: A key resource

The UNICEF cholera toolkit provides practical resources to implement an integrated approach to cholera prevention and control.

The toolkit covers:
• WASH
• Health
• Communication for development (C4D)

Currently being transferred to GTFCC for a broader ownership

Adding a specific section on OCV

https://www.unicef.org/cholera/index_71222.html
Revised Cholera kits

- UNICEF support WHO in providing cholera kits to governments and partners
- **Revised Cholera kits** designed in 2015; revised after field testing in 2016
- **Process**
  - 6 kits, with modules
  - Available in country in 2017

<table>
<thead>
<tr>
<th>Central Reference Kit</th>
<th>Periphery Kit</th>
<th>Community Kit</th>
<th>Hardware Kit</th>
<th>Investigation Kit</th>
<th>Laboratory Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Drugs</td>
<td>1) Drugs</td>
<td>1) Drugs</td>
<td>1) Shelter</td>
<td>1) Sample collection and RDTs</td>
<td>1) Laboratory Supplies for 100 samples</td>
</tr>
<tr>
<td>2) Renewables</td>
<td>2) Renewables</td>
<td>2) Community Care</td>
<td>2) Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3) Equipment</td>
<td>3) Equipment</td>
<td>3) Documents</td>
<td>3) Sanitation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4) Logistics</td>
<td>4) Logistics</td>
<td>4) Support</td>
<td>4) Support</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5) Documents</td>
<td>5) Documents</td>
<td>5) Fencing</td>
<td>5) Fencing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
UNICEF hosts the OCV stockpile in its supply division

OCV Award, Availability and Supply in 2016

<table>
<thead>
<tr>
<th></th>
<th>Award</th>
<th>Available</th>
<th>Supplied</th>
<th>Available 31 Dec 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emergency Stockpile</strong></td>
<td>2,000,000</td>
<td>2,000,000</td>
<td>1,611,050</td>
<td>388,950</td>
</tr>
<tr>
<td><strong>Non-emergency Reserve</strong></td>
<td>4,300,000</td>
<td>3,876,300</td>
<td>1,180,000</td>
<td>2,167,725</td>
</tr>
<tr>
<td></td>
<td>6,300,000</td>
<td>5,876,300</td>
<td>2,791,050</td>
<td>2,556,675</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reserve</th>
<th>Sanchol</th>
<th>Euvichol</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Sudan</td>
<td>72,450</td>
<td></td>
</tr>
<tr>
<td>Zambia</td>
<td>68,635</td>
<td></td>
</tr>
<tr>
<td>Mozambique</td>
<td>425,495</td>
<td></td>
</tr>
<tr>
<td>Zambia</td>
<td>293,720</td>
<td></td>
</tr>
<tr>
<td>DR Congo</td>
<td>680,750</td>
<td></td>
</tr>
<tr>
<td>DR Congo</td>
<td>70,000</td>
<td></td>
</tr>
<tr>
<td>Haiti</td>
<td>1,000,000</td>
<td></td>
</tr>
<tr>
<td>Malawi</td>
<td>180,000</td>
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</tr>
</tbody>
</table>
1. WASH Strategies
   • define specific WASH interventions in various contexts including: emergency response, ongoing preparedness, long term intervention and in conjunction with OCV campaigns.

2. Efficiency of WASH Interventions
   • develop an investment case methodology for WASH intervention and plan for its development;

3. WASH Practices
   • formulate recommendations for key WASH practices to be implemented at local level for cholera control

4. Advocacy & funding
   • identify evidence-based approaches including essential personnel, material and budget to advocate for WASH interventions in high risk cholera areas

UNICEF Chairing Global Task Force for Cholera Control WASH working group

Four sub-WASH working groups
Progress so far…

1. Technical briefs developed
   ✓ Low-cost assays for microbiological monitoring in the field
   ✓ Designing and implementing a water quality surveillance scheme
   ✓ Producing and testing chlorine solutions
   ✓ Oral rehydration salt preparation
   ✓ Summary of WASH requirements for health care facilities, including cholera treatment centers
   ✓ Summary of practices to prevent cholera transmission in homes, institutions, public places

2. A study to define “household disinfection”, its feasibility and effectiveness carried out in collaboration with Tufts School of Engineering

3. A review of literature conducted by a London School of Hygiene and Tropical Medicine (LSHTM) MSc student
Post Ebola UNICEF evaluations – need to improve UNICEF preparedness and response to epidemics/pandemics

Each outbreak requires collective actions from all sectors (beyond health)

Challenging to navigate technical standards

UNICEF not starting from scratch

Identified key diseases, categorized them and developed a “package of support” for each
Disease Categorization

**Category 1**
Current epidemics of focus and focus diseases of epidemic/pandemic potential
- Dengue, Yellow Fever, Zika
- Avian Influenza, Pandemic influenza
- Cholera
- Malaria
- Measles
- Meningococcal Disease
- Polio (Non-Vaccine derived)

**Category 2**
Endemic or epidemic diseases of potential threat/changing pattern
- Hepatitis E
- Leptospirosis
- Novel coronaviruses
- Typhoid fever
- Viral hemorrhagic fever
- West Nile Virus

**Category 3**
Endemic or epidemic diseases currently affecting a limited geographic area and or posing limited threat
- Diphtheria
- Monkey pox
- Japanese Encephalitis
- Pertussis
- Plague, Seasonal Influenza
- Shigellosis, enterohemorrhagic E-coli
- Rubella
Key support package for disease categories

- **Full package for category 1 diseases**
  - Sector guides, notes, institutional guides, C4D tools,
  - Disease specific materials requirements and guidance
  - Prepositioning of stock, strengthening supply chain
  - Assessment
  - Surge support
  - Funding support

- **Basic Package for Category 2 diseases**
  - Disease specific materials requirement and guidance
  - C4D Guides

- **Limited support for category 3 diseases**
  - Overarching guide
Issues and Challenges

1. WASH related advocacy activities as agreed in GTFCC has not been implemented
2. Information sharing among members of the WASH WG, UNICEF regional offices and countries has been minimal
3. WASH response often reactive rather than proactive
4. Spread of outbreak difficult to predict and complicates pre-positioning of supplies
5. Criteria to trigger WASH response often unclear
6. Areas with good WASH coverage impacted less by the outbreak and difficult to control once underway
7. Funding of WASH priorities remains a challenge