Water and Environmental Sanitation (WES)

Indian Ocean emergency response
Core Commitments for Children in Emergencies - Initial response

• Availability of minimum safe water supply
• Water purification
• Water handling and storage containers
• Hygiene kits
• Safe excreta and solid waste disposal
Core Commitments for Children in Emergencies - Beyond 6-8 weeks

- Approaches, technologies consistent with national standards
- Improving, expanding safe water systems
- Water, sanitation and hygiene at schools and health posts
- Upgrading sanitation – semi-permanent and household solutions
- Regular hygiene promotion
- Planning for long-term solid waste disposal
Displaced populations,  > 1 million  
Directly affected,  > 2 million

Officials estimate that more than 280,000 perished. Another 27,000 are missing, and some 1,237,000 are displaced. Millions more have seen their families and communities torn apart. Tragically, UNICEF estimates that children account for more than one-third of deaths.

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>417,000</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>437,000</td>
</tr>
<tr>
<td>India</td>
<td>112,000</td>
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<tr>
<td>Maldives</td>
<td>22,000</td>
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<tr>
<td>Malaysia</td>
<td>4,300</td>
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<tr>
<td>Myanmar</td>
<td>3,200</td>
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<tr>
<td>Somalia</td>
<td>5,000</td>
</tr>
<tr>
<td>Thailand</td>
<td>55,000 (affected)</td>
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</tbody>
</table>
Assessment of risk

- People drinking contaminated water
- Excreta not disposed of properly
- Poor hygiene due to water availability
- Poor drainage
- Caretakers unaware of how to manage diarrhoea or malaria
- Poor food hygiene
Unsafe water sources
## UN Flash Appeal Amounts for WES (First Six Months)

<table>
<thead>
<tr>
<th></th>
<th>UNICEF</th>
<th>Other</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indonesia</td>
<td>$16.8m</td>
<td>$10.2m</td>
<td>$27m</td>
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<tr>
<td>Sri Lanka</td>
<td>$22.2m</td>
<td>$2.5m</td>
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<tr>
<td>Maldives</td>
<td>$7.9m</td>
<td>$0.2m</td>
<td>$8.1m</td>
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<tr>
<td>Thailand</td>
<td>$1m</td>
<td></td>
<td>$1m</td>
</tr>
<tr>
<td>*(Myanmar)</td>
<td>$2m - 2 years*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>*(India)</td>
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</table>
UN & NGO coordination
Rapid assessments
Response in Sri Lanka

Several of the areas that were hit by the tsunami had lower rates of access to basic safe drinking water and sanitation even before the disaster of 26 December.

Over 20 percent of children were drinking unsafe water and 35 percent were without access to basic sanitation. Already fragile water supply networks were damaged and water sources contaminated.

Sanitation facilities were destroyed, making survivors even more vulnerable to waterborne diseases. The potential for outbreaks still exists, particularly in camps and in host communities.

Action

UNICEF has focused its activities on ensuring access to safe drinking water and sanitation facilities for over 200,000 persons

Rebuilding proper sanitation facilities in camps, schools, and health centres.

Support for the construction of emergency toilets, in particular, has been essential in maintaining a disease-free environment for displaced populations.
UNICEF has signed an agreement with the Department of Public Works (PDAM) for the continuation of water tanking activities, to include municipalities on the west coast of Sumatra. Six water treatment units have also been procured on behalf of Public Works.

In sanitation, UNICEF signed an agreement with the local municipality in Banda Aceh to clean up displacement camps identified by UNICEF as requiring critical interventions.

To date, fifteen such camps are receiving regular rubbish collection and septic tank clearing. These activities serve approximately 17,000 people, including 3,000 children.

UNICEF is coordinating requests from partners regarding other camps in need of this service. The short-term results of these initiatives have been a remarkable improvement in the sanitation conditions of temporary settlements.

However, this will need to be complemented with an aggressive hygiene promotion package and the delivery of sanitation kits.
UNICEF has contracted national NGOs to undertake the construction of temporary latrines in camps for the displaced.

Sixteen schools have also been assessed, and will receive combined support of water supply and sanitation facilities. In total, twenty-one temporary settlements have been targeted, and work has begun to construct a modified design of a pit latrine.

UNICEF also continues to distribute hygiene kits and buckets in advance of hygiene campaigns; to date, over 27,000 people have benefited from these supplies. Daily distributions aim to reach 700-1000 people per day.

In conjunction with the Centers for Disease Control and Prevention (CDC) and an Australian medical team, assessments on water supply and sanitation were completed this week, results of which are being tabulated by CDC. The findings indicate a low prevalence of diarrhoea, with some cases of scabies reported
Immediate response measures

• Family water kits (containers, disinfection products, soap) and family hygiene kits
• Water tanks, motor pumps, tapstands,
• Water treatment units, water trucks
• Desalination units and storage tanks
• Bulk quantities of disinfecting chemicals
• Handdug well rehabilitation
Immediate response measures

• Tools, equipment for handling debris and camp clean-up
• Latrines, bathing facilities in IDP settlements
• Septic tank and latrine de-sludging
• Water quality and diarrhoeal disease surveillance
• Hygiene education posters, media campaigns, training
• School clean-up, WES facilities at schools and child-friendly spaces
Water trucking
Bladder tanks and tap stands
Well cleaning and disinfection
Constraints and challenges

• Large numbers and varied capacities of actors
• Access (logistical, military)
• Sanitation solutions
• Flux of population movements
• Assistance to IDPs hosted by families/communities
• IDPs housed in schools vs. getting children back
• WES facilities & management in semi-permanent camps
Emergency latrines
Poorly sited latrines
Solid waste collection
Moving towards recovery

• World Bank and Asian Development Bank assessment missions
• Sri Lanka – 11 month plan submitted to government
• UNOPS role in school and health centre reconstruction
• ‘Clean Start’ and ‘Back to Learning’
• Upgrading WES services above pre-tsunami levels
• UNICEF commitment to WES programmes