

## Early detection for prompt and effective response to outbreaks of communicable diseases

### At a glance

Total population:  
8.70 million

Number of people of population in need of humanitarian assistance: 3.64 million

Infant mortality: 88 per 1000 live births

Child mortality: 142 per 1000 live births

Global acute malnutrition: 19%

Severe acute malnutrition: 5%

Routine child immunization coverage: 30%

Number of cases of AWD in 2009 (up to week 44):  
66,253

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[www.emro.who.int/somalia/collaborative-programme.htm](http://www.emro.who.int/somalia/collaborative-programme.htm)



New and pre-existing displacement in Somalia over 2009 poses serious risks to health from lack of access to safe drinking water and sanitation, overcrowding, and disruption of disease reporting systems and health services

Photo: WHO

### Context

The humanitarian situation in Somalia is at **its worst level for 18 years**. Currently 3.64 million people are in need of humanitarian assistance with 1.55 million displaced across the country, most of whom are in South Central Somalia.<sup>1</sup>

Escalating conflict, new displacement, shrinking humanitarian space and limited capacity of the service provider network are posing specific risks to the health of populations of humanitarian concern in Somalia. These risks to health stem from a lack of access to safe drinking water and sanitation for people in displaced settlements, and disruption of life-saving health services including vaccination. This situation heightens the risk of outbreaks of communicable disease which can lead to preventable death and disability amongst the vulnerable population. In Somalia, the main causes of death

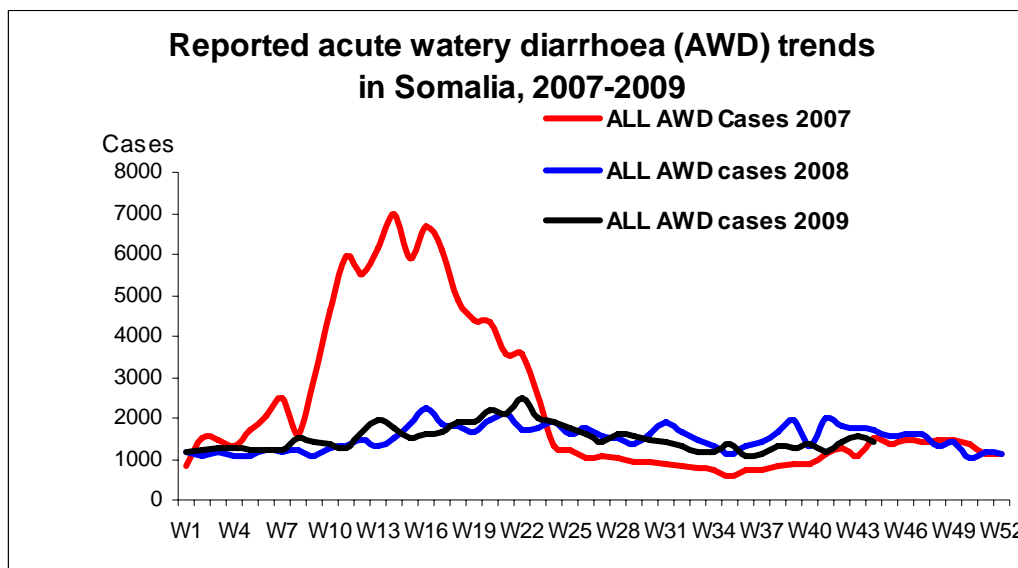
and disability are diarrhoeal diseases, including cholera and dysentery, acute respiratory infections, measles, and malaria from which children are at particular risk. Furthermore during times of conflict, and displacement, disease reporting systems become disrupted, compromising the ability of health partners to detect and respond to outbreaks in a timely manner.

Lastly during times of high malnutrition and poor health status of the population, the risk of contracting communicable diseases is further increased. Currently one in five Somali children are malnourished resulting in suppressed immunity and greater susceptibility to communicable disease.

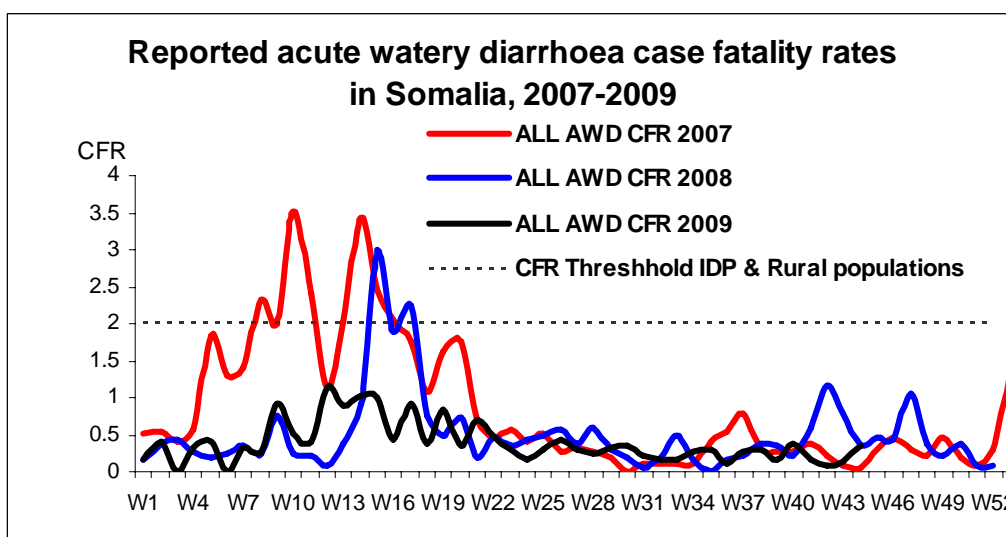
These factors combine together with pre-existing underdevelopment of reporting and response systems, to heighten the risk of outbreaks.

<sup>1</sup> CAP 2010

## Trends of communicable disease in Somalia between 2007—2009



**Figure 1: Trends of acute watery diarrhoea (AWD) in Somalia, 2007-2009**



**Figure 2: Trends in case fatality rates for AWD in Somalia, 2007-2009**

Strengthened outbreak preparedness and response, including the early detection and diagnosis of communicable disease outbreaks, environmental health mitigation with the WASH cluster, pre-positioning of supplies and timely deployment of trained health workers, and improved disease reporting, have all contributed to case fatality rates being maintained below the international benchmark of 2%. From 2007– 2009 (up to week 44), a substantial reduction in the number of reported AWD cases has also been observed. Maintaining these trends requires concerted efforts from health and WASH partners including local health authorities, greater partnership across intercluster partners, and strong and sustained donor support.

Year (up to week 44)	Diarrhoeal diseases	AWD	Suspected measles	Suspected malaria
2007	117,606	107,422	1061	37,264
2008	81,505	67,728	333	23,316
2009	80,168	66,253	1961	22,221

**Table 1: Cases of communicable disease reported in Somalia, 2007-2009 (Up to week 44)**

## WHO's outbreak detection and response in 2009

In response to the threat of outbreaks, WHO has maintained disease reporting systems throughout the country particularly in areas with large IDP populations. Key challenges to further expand the system have included shrinking humanitarian space, insecurity, targeting of humanitarian workers and lack of funding. However key achievements in 2009 include:

- **Outbreak preparedness:** WHO led the development of AWD preparedness plan including the developing of matrix which sets out the available response supplies in the country in the case of outbreaks
- **Reporting through EWARS:** Through 36 sites, the Early Warning Alert and Response System (EWARS), has been functioning throughout Lower Shabelle providing a means for regular monitoring of trends and early detection of and response to outbreaks. Over 150 health workers from 125 health facilities, including 11 hospitals and over 60 mother and child health clinics, in Puntland, Bakool, Banadir and Middle Shabelle have been trained in disease reporting in 2009.
- **Outbreak response and rumour verification:** WHO and partners responded to over 70 rumoured outbreaks in 2009, all within 96 hours of initial reporting. WHO is the only agency that collects and transports outbreak related samples from Somalia for confirmation in Nairobi or any other referral laboratory as there is no referral laboratory facility within Somalia.
- **Effective case management:** In 2009, WHO has trained over 70 health care workers delivering health services in how to effectively managing patients with AWD.

## WHO's outbreak detection and response in 2010

In 2010, WHO will be implementing integrated activities to ensure the effective response of health partners to outbreaks for the prevention of avoidable death and disability including for key populations of humanitarian concern. Activities will include:

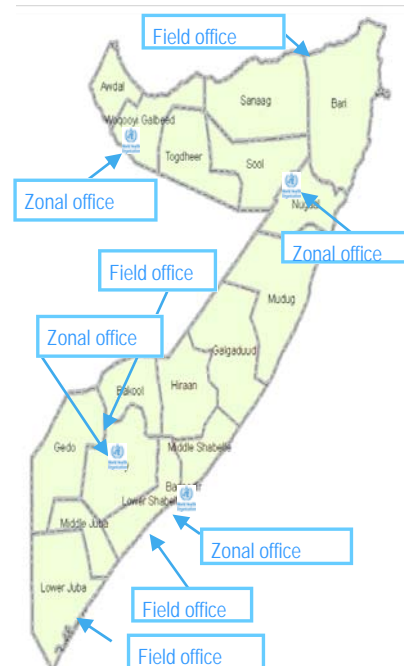
**Expanding the Early Warning System to other conflict-affected communities:** WHO will roll out EWARS to other conflict-affected communities in Somalia through the training of health workers, provision of essential supplies and equipment and other technical assistance.

Despite the country's fragile situation, WHO has been able to establish and maintain its presence inside Somalia, including in

- Merka
- Jamaame
- Wajid
- Hargeisa
- Garowe

The liaison office in Nairobi, Kenya coordinates all programme activities

### WHO's presence in Somalia



### Objectives of the EWARS system in Somalia

- To ensure the timely detection response and control of outbreaks by early detection at local level of time and place clustering of cases amongst vulnerable communities including IDPs
- To monitor trends of communicable diseases in order to take appropriate public health actions and;
- To estimate the workload of different health units involved in the system to rationalise resource allocation.

## WHO's outbreak reporting and response in 2010 (continued)

**Outbreak investigation and response:** Verifying a rumoured outbreak is the first step following a report of an increased number of cases of a disease. An investigation involves a range of activities from the interviewing of patients, health workers and community to the collection of samples. In 2010, WHO will continue, through its current operational presence in Somalia, to actively investigate rumoured outbreaks reported by cluster partners for a prompt, coordinated and effective response.



Photo: WHO



Photo: WHO

**Strengthening of laboratory confirmation:** The availability and capacity of diagnostic laboratory facilities is extremely limited, particularly in South Central Somalia. This situation hampers the early detection of outbreaks. In 2010, WHO will train key laboratory workers and provide essential supplies to ensure adequate capacity to confirm suspected cases of disease within the current health response. It is hoped that the reduced reliance of laboratory confirmation outside the country will facilitate a prompt response to outbreaks when they occur.

**Supporting effective case management:** Ensuring that health workers are able to effectively treat patients is important for both preventing avoidable deaths of individual patients and interrupting transmission hence reducing cases and the subsequent impact of the outbreak. In 2010, WHO will support case management through the provision of essential medicines and supplies, training of health workers delivering services and working with partners within social mobilization to ensure that people with symptoms of disease present early at health facilities.



Photo: WHO

## WHO’s outbreak reporting and response in 2010 (continued)

**Environmental health interventions including monitoring the quality of drinking water:** Contaminated water sources are a major source of transmission of communicable diseases. Weak water and sanitation systems across Somalia make water-borne diseases common, particularly in areas with high levels of internal displacement and makeshift living conditions.



In 2010, WHO will be monitoring the quality of water sources through the provision of essential supplies and training of key health workers and community stakeholders, in coordination with WASH partners. Furthermore, WHO will work closely with WASH partners in vector control for an integrated approach to reducing cases of vector-borne and other communicable diseases.

## Budget for outbreak detection and response in 2010

Budget item	USD
Direct project inputs	\$2,166,300
Personnel costs	\$382,700
Operations support cost	\$450,000
Transportation and storage	\$400,000
Programme support costs	\$237,930
<b>Grand total</b>	<b>\$3,636,930</b>