**Rainy season and insecurity**

**Effects of the rainy season**

The rainy season has started in the Horn of Africa (HoA), where more than 13 million people continue to depend on humanitarian assistance due to the latest drought and related food crisis. Although the rains will have long-term positive effects on food production, the rains also bring increased risk of mosquito-borne illnesses such as malaria and dengue and waterborne illnesses such as cholera and other severe diarrhoeal diseases. In addition, heavy rains are washing out roads, making it more difficult for health workers to reach their posts, medical supplies to be delivered, and rapid response teams to investigate reports of disease outbreaks.

WHO country offices have been preparing for this. In the past months, increased funding from emergency relief funds and bilateral donors has enabled WHO to identify emerging health threats and mobilize the necessary response. WHO has been making sure that people are ready with the skills and medical supplies they need to avert further disaster. Detecting disease outbreaks requires people on the ground. In many places where communication is difficult, WHO has been able to rely on its polio workforce to provide intelligence, report and follow up on rumours and ask for medical teams when needed.

For example, in Somalia there are only two main roads leading in and out of Mogadishu, both of which run next to rivers. With water levels rising, these roads are becoming more difficult to pass. WHO Somalia pre-positioned medical supplies before the rains started. However, given the unstable situation in Somalia, this is a balancing act that must be carefully managed: the availability of too many supplies increases the risk of looting and resale, while too few supplies can result in stock-outs. WHO staff have many years’ experience working inside Somalia to manage this difficult situation.

Heavy rainfall in Kenya’s northern districts is disrupting food aid distribution because roads are impassable. In addition, there has been loss of livestock from heavy downpours. And where there is malnutrition, health implications follow. Severely malnourished children are nine times more likely than healthy children to die from infectious diseases such as measles, cholera and malaria.

In Ethiopia, the October-December rains have eased the food security situation in the lowland pastoralist areas in southern parts of the country, though some pockets in the Somali region and in the highlands have experienced very little rain thus far. However, drought conditions are likely to continue in parts of the Afar Region of northeastern Ethiopia at least until the next rains in April 2012.

**Insecurity and conflict**

On 13 October 2011, two Spanish staff of Médecins Sans Frontières Spain were kidnapped from Dadaab refugee camp in Kenya. As a result all international and national
health staff were evacuated. This has caused a huge disruption in health services as the only staff who are now able to provide health services are Somali refugees who live in the camps. As of the end of October all preventive health care has been stopped; only a minimal level of life-saving activities is being provided in the camps.

Kenya is reportedly increasing its security forces in Dadaab, which will hopefully encourage NGOs to increase their presence. The Kenyan Red Cross has just deployed health workers as security improves. While these measures are certainly helpful, these new staff need significant training to bring Dadaab services back to their levels before the incident.

Another complicating factor is the conflict between Kenya and al-Shabaab in Somalia. WHO and its partners continue to negotiate with al-Shabaab on access to allow them to carry out measles vaccination campaigns and other life-saving activities. However, at this point it is very difficult to predict how many of the planned activities will be carried out. The increasingly volatile situation is destabilizing the entire region. Insecurity is high in Mandera and Wajir in north-eastern Kenya.

Main health concerns

Dengue fever

A total of 2070 cases of dengue fever have been confirmed in Kenya’s Mandera District since September. As many as 40% of Mandera’s population of 80,000 have come into contact with mild forms of the disease. Of the total cases, seven suspected deaths have been reported. Eight cases have been confirmed as imported from Ethiopia and five from Somalia, highlighting the cross-border nature of the outbreak.

There is no cure and no vaccine for dengue. The only control method is preventing the bites from the mosquitoes that carry it. The only care is to treat the symptoms and make patients more comfortable. WHO and Ministries of Health have trained health care workers on dengue fever in Mandera and provided continuous medical education to clinicians in Garissa Provincial General Hospital. Similar activities are planned for other North Eastern Province districts. The number of reported cases is gradually declining, maybe because of improved immunity due to exposure, massive indoor residual spraying, and the massive awareness campaign in the community leading to improved personal protection.

In October, the Ministry of Health of Ethiopia and WHO received rumours of patients with high fever and bleeding from the nose. A team of WHO-trained Ministry of Health outbreak specialists, plus a public health expert from WHO, immediately set off, only to be delayed by heavy rains. Six days after first hearing the rumours they reached the site and collected specimen samples from patients, none of whom appeared to be bleeding. But they could not afford to take chances when haemorrhagic fever was a possibility. The samples were dispatched to more sophisticated laboratory facilities in Nairobi for further analysis.

In Mogadishu, WHO and CDC are conducting an entomological survey to determine the extent of the dengue vector, as well as sero-surveillance to assess the virus type of the dengue fever that has been reported there. Epidemiologists will establish the magnitude of the vector and track circulation of the dengue virus across the region.

Measles

The drought and related malnutrition have severely impacted recent gains in reducing measles...
mortality. In July, when famine was first officially declared in Somalia, there were more than seven times as many measles cases than during the same month in 2010. Kenya has seen a number of measles outbreaks, with nearly 4000 confirmed cases since the beginning of 2011. Most of the cases in Kenya have occurred in children who were not fully vaccinated.

WHO and its partners have stepped up their efforts to combat this debilitating disease through catch-up campaigns (targeting all children under five) and mop-up campaigns (targeting all children up to age 15) in the refugee camps and surrounding areas. In addition, WHO and partners have conducted refresher training courses for health care workers on measles case management.

**WHO’s response**

**Horn of Africa Health Emergency Support Team**

WHO has established an inter-regional emergency support team in Nairobi (HoA team). The team supports the five WHO country offices involved in the HoA crisis. It has improved communication and coordination between the five countries, two of which (Somalia and Djibouti) are in the Eastern Mediterranean Region, and the remaining three (Ethiopia, Kenya and Uganda) are in the African region. The team works with individual country offices and health partners to identify available financing and gaps in malaria control, a growing concern in the region as the rainy season progresses. The team, with health partners, has been advocating for the urgent need to earmark scarce global supplies of artemisinin-based combination therapy (ACT) for the HoA. This call has been heard: the region now has enough ACT and rapid diagnostic kits for the coming months.

Much of the coordination work is conducted through weekly meetings of all health partners based in Nairobi. Participants include representatives from WHO offices as well as UNICEF, UNFPA, UNHCR, OCHA, IFRC, donors and NGOs. The meetings identify issues of cross-border significance, including outbreaks of measles, acute watery diarrhoea (AWD)/cholera, malaria and dengue fever, and assign follow up actions to the appropriate partners. The forum has provided the opportunity to address strategic issues, for example advising NGOs on best practice methods to protect people living in refugee and IDP camps against mosquitoes that spread dengue fever.

The HoA team produces a weekly epidemiological bulletin which provides comprehensive reports on disease trends, regional distribution and emerging health issues. Each bulletin provides an in-depth analysis of specific topics such as measles and malaria outbreaks. The systems being set up to collect and report this information are designed to enable WHO country offices to produce their own regular information updates; an exception is WHO Somalia which already produces its own weekly bulletin.

The HoA team travels to each country to assess nutrition needs and explore WHO’s role in this area. While UNICEF and WFP both play critical roles in improving access to food and nutrition supplements, WHO’s comparative strength is in providing standard protocols and expertise to government health systems to manage the medical complications that arise from severe acute malnutrition. A comprehensive training programme, based on updated protocols and training guides, is now being planned for national staff from each of the five countries.

The HoA team is also helping countries to improve the quality of health information and data. In Somalia, where physical access to health posts changes daily due to conflicts and the changing political environment, the data management system is further complicated by the existence of two different systems for capturing data.
Kenya, data management is centralized in the Ministry of Health and maintained by a limited number of staff. The HoA team is providing intensive support in both Kenya and Somalia, tailored to their specific challenges, including filling human resource gaps where local staff have been on extended sick leave.

To achieve a longer-term sustainable impact, the HoA team is working with WHO staff in Kenya to design and implement a training of trainers course that will strengthen the capacity of district-level health workers to gather and feed data up the information chain to the capital, freeing up central level ministry staff to analyse and produce comprehensive reports for action.

Lastly, the HoA team is developing tools to help WHO country staff track income and activities and outputs, to enable it to provide more accurate, informative and timely reports to donors. It has also helped to prepare donor proposals and support negotiations on international and national funding opportunities.

**Ethiopia**

1. **Prevention and control of communicable diseases**

WHO has responded to a number of disease outbreaks in Ethiopia, primarily measles and AWD. In addition to funding and training government teams to conduct outbreak investigation and response, WHO has provided technical and financial support for training courses on the identification and treatment of measles and intestinal disorders. Hundreds of health professionals and community health workers have been trained so far. WHO has also deployed staff to support UNHCR and its partners working in the Dolo Ado refugee camps.

WHO Ethiopia is providing technical and logistical support to conduct massive emergency vaccination campaigns which are targeting 6.9 million children between 6 months and 15 years across six regions of Ethiopia. The campaign, which was launched in the Somali Region at the end of September, has so far immunized 669,169 children against measles and another 243,247 children under five against polio. Prior to these mass campaigns, WHO supported measles campaigns in the Dolo Ado refugee camps and surrounding areas, helping to drive down measles cases in children under 15. However, it emerged that the virus was being transmitted among those over 15 years, not normally a significant risk group. In response to the Government’s request for advice, WHO recommended that limited measles vaccination campaigns be conducted among refugees aged 15 to 30.

The impact of these emergency health response efforts can be seen in Dolo Ado refugee camps, which experienced a dramatic drop in death rates, from 4 deaths per 1000 people per day last July to 0.4 deaths per 1000 people in October, below the emergency threshold.

2. **Basic health services**

A major strategy for disease control is to send medical supplies to remote areas before they are needed. In Ethiopia, pre-positioned supplies have helped to reduce the impact of malaria, pneumonia, measles, AWD and other disease outbreaks. Since August, WHO Ethiopia has provided refugee camps and surrounding regions with 10 emergency health kits which together provide enough medicines to care for 100,000 people for three months. WHO has also pre-positioned 15 diarrhoeal disease kits, enough to treat 1500 people with severe cases or 6000 people with moderate cases of diarrhoea. In regions where large numbers of pilgrims regularly visit holy water sites, WHO has mobilized drugs and medical supplies and trained health workers on the prevention of AWD outbreaks.

3. **Management of severe acute malnutrition**

Given the severe food insecurity in drought-affected areas, the WHO office has bolstered its support to the government and partners in treating the increased numbers of cases of severe malnutrition. WHO provided technical and financial support for training courses for health professionals throughout the Somali and Oromia regions.

4. **Coordination**

The Ethiopian Ministry of Health effectively coordinates the work of the various health partners in the country. WHO regularly supports the ministry at the national level by providing up-to-date information on who does, what, where and when. At the regional level, EPI surveillance officers (supported by the polio eradication initiative) have been trained to step in and act as WHO focal points on all health matters. WHO Ethiopia has equipped the officers with information and training on issues related to the drought emergency.

**Next steps**

The major undertaking for the rest of the year is the emergency vaccination campaign. In addition WHO plans to deploy four additional staff to disease outbreak zones to bolster disease early warning systems, especially as they relate to cross-border threats.
**Somalia**

1. **Prevention and control of communicable diseases**

At the end of October 2011, WHO issued a warning of a possible major outbreak of cholera in Mogadishu. The disease is endemic in the country. In 2011 alone, nine minor outbreaks occurred across South and Central Somalia. As part of control efforts, random stool samples are regularly tested; in the most recent check nearly 50% of all stool samples taken from several health facilities in Mogadishu tested positive for cholera. WHO immediately sent enough health kits to Banadir hospital to treat 5000 severe cases of cholera.

Over the past two months, WHO and partners have been preparing for cholera. WHO has been mapping existing health facilities and capacities (supplies, trained health workers, available guidelines, etc.) for case management in hospitals and cholera treatment centres. After these assessments WHO supported health worker training on cholera detection and management, and cholera treatment centres have received enough essential supplies to treat 2000 severe cases or 8000 moderate cases. To help stop cholera at its source, WHO has also worked with partners working in the area of water, sanitation and hygiene to reinforce preventive measures including provision of water testing supplies in health facilities.

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There are now 115 health facilities in South and Central Somalia that provide regular surveillance reports on a weekly basis, out of a total of 303 health facilities in the drought-affected areas. WHO is working to improve that track record. A major new data training programme is starting in November, with the aim of developing a robust surveillance system to improve planning, sharing information of cross-border significance, and positioning supplies where they will be most needed. The 115 district polio officers and 10 zonal officers have been instrumental in WHO’s health response, adding surveillance strength and supporting the supply chain where access is a challenge.

WHO has prepared contingency stockpiles to diagnose and treat both uncomplicated and severe malaria. It has worked with partners to identify global stocks to ensure that adequate stocks of ACT and rapid diagnostic tests are available at health facilities. Contingency plans for further medical requirements are being made. WHO is working to provide protection to 711 000 high-risk internally displaced households either through conducting indoor residual spraying or providing long-lasting insecticide treated bed nets where possible.

2. **Basic health care services**

WHO is working with partners to carry out massive emergency vaccination campaigns in Southern Somalia. Since July, the campaign has reached more than 1 million children aged 6 months to 15 years with measles vaccine, out of a targeted 2.9 million. In addition nearly 1 million children received vitamin A and almost 200 000 children under five received deworming tablets. A total of 187 961 women of child-bearing age were vaccinated against tetanus and 452 090 children under five were vaccinated against polio. Services are being delivered through a combination of Child Health Days and Measles Plus campaigns, depending on the location.

Given the unstable situation, and the lack of access to a growing number of areas, WHO cannot be sure that its immunization target will be reached by the end of the year. The Organization continues to employ negotiation strategies that have been successful in the past, namely appealing to all parties involved in the conflict for access to allow it to provide essential health services to Somalis.

WHO and UNICEF have launched a new programme that aims to drastically reduce morbidity and mortality from the major health threats to children in Somalia: malnutrition, malaria, AWD/cholera, and acute respiratory infections/pneumonia. Health workers are scarce and access to health services is irregular. The programme will train primarily young women without medical backgrounds, who will then identify malnourished children and refer them to treatment centres, as well as diagnose and treat malaria, AWD and acute respiratory infections. The trainees will receive medical supplies so they can live and work in their own villages. The cascade of trainings for this programme will begin in early November 2011.

In September 2011, WHO installed a new field hospital in Dolow Somalia, near the Ethiopian and Kenyan borders. The hospital, which is operated and managed by WHO, is providing such high-quality care that there are reports of people crossing the border into Somalia to access the facility.

WHO has established 12 mobile health clinics in IDP camps and host communities, and is supporting 10 secondary health care facilities. Because of the high number of trauma-related casualties, WHO has pre-positioned blood transfusion and trauma kits in addition to the basic emergency health kits that have already been provided. WHO has also supported the expansion of emergency obstetric care services and is supporting basic mental health care in nine health facilities.
3. Management of severe acute malnutrition

WHO developed a treatment and care strategy for severe acute malnutrition and supported training courses on the management of severe malnutrition in eight hospitals and the development of a treatment and care strategy for severe acute malnutrition, in coordination with nutrition partners. At the same time WHO is supporting referral and treatment services for severe acute malnutrition in mother and child health centres and hospitals.

4. Coordination

WHO, UNICEF and UNFPA are the only UN agencies with access to South and Central Somalia. With more than 100 NGOs working in Somalia, coordination is a major activity for the office. Emergency staff must keep track of which health facilities have an ambulance, covering how much of the surrounding area; which hospital can accept obstetric emergencies, which health centres are running out of supplies. This is all against a backdrop of constantly changing access and increasing conflicts and no-go areas. Logistics and people management skills are a huge part of WHO’s job in Somalia.

At the national level, WHO leads the health cluster, with monthly meetings of approximately 40 participants including UN agencies, NGOs and donors. WHO also has four sub-offices in Baidoa, Garowe, Hargeisa and Mogadishu to support coordination and the supply chain. In September 2011, WHO deployed a full-time Health Cluster coordinator to Mogadishu; it is hoped their work can continue during the current unrest. WHO has also identified focal agencies in all regions in Somalia in collaboration with local health authorities to provide a cascade of information chains. The goal is to use whatever human, medical and structural resources are available to reach as many as possible of the 750 000 Somalis who are at risk of severe malnutrition.

New health actors are also taking part in the response. For example, an association of Turkish doctors is working in Somalia, and Qatar has provided some health support. The challenge now is to explore how these new resources can complement the traditional support systems in the country.

Next steps

WHO Somalia is focusing significant efforts until the end of the year on emergency vaccination campaigns, refurbishing data collection, surveillance and analysis and strengthening regional health cluster coordination.
been able to replenish most stocks, but human resource capacity is still being pushed to the limit. In fact, the weather pattern is exhibiting signs of a heavy rainy season, increasing the chance that the malaria surge that was seen over the past few months may continue for several more months.

WHO has distributed laboratory reagents to district hospitals and deployed six epidemiologists to support coordination, strengthen disease surveillance and assist provincial and district authorities to scale up emergency response efforts. WHO is using polio surveillance officers to collect data for the early warning and response systems. Furthermore, WHO has supported the upgrading of laboratory facilities in Kakuma refugee camp so that outbreaks can be identified and addressed before they spread through the camp and to local populations.

The recent outbreak of polio in Western Kenya did not directly affect the drought response but it did divert efforts as WHO, UNICEF and key Ministry of Health experts had to rapidly respond and conduct an unplanned emergency polio campaign.

2. Basic health care services
WHO pre-positioned essential drugs in eight strategic locations which have been used for prompt response in the refugee camps in Dadaab and Kakuma and the heavily impacted communities in Mandera and Marsabit.

The WHO and UNICEF offices in Kenya and Somalia and the Kenyan Ministry of Health organized a campaign along the border with Somalia, in which 215 000 children under five received measles and polio vaccination, as well as vitamin A and deworming tablets.

3. Management of severe acute malnutrition
WHO conducted training courses on the management of severe acute malnutrition in eight district and three provincial hospitals, and disseminated technical guidelines.

4. Coordination
The Kenyan Ministry of Health has taken a strong leadership role in coordinating the health sector, with the support of WHO. WHO focal points are providing technical support to the Ministry of Health and health partners in Nairobi as well as in WHO’s sub-offices in Garissa, Turkana and Marsabit.

WHO and partners have developed multi-stakeholder national response plans and resource mobilization strategies, as well as contingency plans for floods during the short rains at the end of 2011 and medium-term plans for emerging health threats in 2012.

Next steps
WHO Kenya will focus its efforts on upgrading the cold chain to support improved vaccine management for effective immunization campaigns, continue to strengthen electronic health information reporting from all districts, and replenish emergency medical supplies and laboratory reagents to be ready for future health threats.

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Djibouti

1. Prevention and control of communicable diseases
The limited rains in September, an increase in the number of sick and weak migrants arriving in the semi-urban slums, on top of widespread water shortages and contaminated drinking water, created the right conditions for an outbreak of AWD. More than 200 patients with AWD were admitted for treatment in October in the cities of Djibouti, Dikh, Obock and Tadjourah. These cases are thought to be related to the migration since they are along the migration trail. More young men are among those affected and hospitalized, and families which have hosted migrants in certain areas of the capital were more affected than others.

WHO is supporting disease surveillance, early warning and response particularly for the ongoing AWD outbreak. WHO and UNICEF have also supported the MOH’s response to measles outbreaks over the past few months.

2. Basic health care services
WHO provided medicines and kits to cover the needs of more than 50 000 people for three months, along with medicines and supplies for the treatment of more than 2500 cases of diarrhoea. In addition WHO is providing logistic support to MOH mobile clinics in all five regions. These clinics have covered the most affected and remotest areas of Djibouti, allowing access to an emergency package of services. The clinics have treated more than 10 000 people over the past few months.

3. Management of severe acute malnutrition
WHO is supporting the management of severe acute malnutrition with medical complications in stabilization centres. WHO has also disseminated guidelines and conducted training courses on the integrated management of severe acute malnutrition.

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Ethiopian refugees in Sankal, Djibouti. © WHO
4. **Support to coordination**

The Health Cluster was established in August by the Ministry of Health with support from WHO. The MOH has also established a crisis team in which WHO, UNICEF, UNHCR and the Ministry of Health have implemented a joint plan of action with the Ministries of Interior and Energy to ensure the availability of safe drinking water, an effort supported by WHO and UNICEF. WHO and UNHCR are looking at needs in Obock where many migrants first arrive in Djibouti, and where the hospital was damaged after a storm last September.

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**Uganda**

1. **Prevention and control of communicable diseases**

WHO has been supporting measles vaccination campaigns and heightened disease surveillance, which may be contributing to the downward trends in measles cases since May 2011. However, hepatitis E remains a health threat in Kaabong region, which WHO is closely monitoring and assisting to control. Prevention activities include improved water quality and sanitation measures.

2. **Management of severe acute malnutrition**

WHO is supporting quarterly nutrition assessments in drought-prone areas, strengthening the management of severe acute malnutrition with medical complications in stabilization centres and disseminating guidelines and training on the integrated management of severe acute malnutrition.

3. **Coordination**

WHO is providing technical assistance to all districts in the affected Karamoja Region through its district field office in Moroto.

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**Next steps**

Lack of funding is hindering WHO’s ability to respond to the drought-affected areas in Karamoja. WHO Uganda is focusing on strengthening acute flaccid paralysis surveillance and assessing polio immunity levels to determine the scale of preventive measures following the polio outbreak in neighbouring Kenya. It is also conducting two sub-national polio campaigns (in October and November).

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