

## 9 GENERAL INTEREST

### a Implications of drought for public health: how the government and NICD are responding

The 2015-2016 El Niño cycle is currently affecting rainfall patterns and temperatures, and consequently, the health of millions of vulnerable people in the Horn of Africa, southern and eastern Africa, South Pacific, Central America and South Asia. Although it is understood that El Niño-induced climatic conditions peaked in January 2016, the health consequences arising from these changes will be sustained throughout 2016. Drought leading to water shortages, diarrhoeal disease, famine and malnutrition will place additional burdens on already constrained health services.

In East Africa, the devastating drought has been followed by unusually heavy rains causing a high risk of vector-borne disease and other communicable disease outbreaks, such as Rift Valley fever, especially among displaced populations and those with high levels of malnutrition. It is feared that the on-going cholera outbreak in Tanzania will spread to adjacent countries. In southern Africa, below-average rainfall was experienced during the main growing season (December-April). Many regions are experiencing a 'green drought', a period of limited rainfall causing new, but insubstantial plant growth after a long dry period. Grazing animals in particular are left with inadequate food supplies until the next rainfall season. In Malawi, Madagascar, Zimbabwe and Lesotho, it is expected that more than 5 million people will experience food insecurity as a consequence during 2016. In addition to food insecurity and malnutrition, the region is expected to experience outbreaks of communicable disease and disruption of health services. Presently up to 15% of persons in Lesotho are experiencing acute water shortages. Outbreaks of watery and bloody diarrhoea are already reported and will likely increase in the coming months. Persons living with HIV and AIDS and children under the age of five are increasingly at risk of diarrhoea and pneumonia. There have been reports of suspension of certain critical services in health facilities due to lack of water.

Although the WHO has not highlighted South

Africa's potential health concerns as a result of the extreme weather patterns, South Africa's current water storage across the country is at critical levels. Several metropolitan districts have announced water restrictions in order to curb the increased demand and over-usage of water by households and industries. The South African government (SAG) under the Ministry of Cooperative Governance and Traditional Affairs, has called together key stakeholders including the National Disaster Management Centre and the Multi-sectoral National Outbreak Response Team (MNORT) to mitigate the effects of the drought. The Emergency Medicine Directorate of the National Department of Health (NDoH) has drafted a Strategic Preparedness and Response to the Effects of the Drought Action Plan to assist in reducing the effects of the drought, especially amongst at risk communities. The impact of the drought on health in South Africa will call on nearly every cluster within the NDoH, that is, health promotion, communication, surveillance, communicable disease control, malaria, food control, environmental health services, port health services, child health, hospital management services, National Health Operations Centre (NatHOC) and mental health. The National Institute for Communicable Diseases (NICD) has been identified as one of the key stakeholders in responding to communicable diseases brought about by the effects of the drought. The anticipated role of the NICD is to support and intensify surveillance of disease, support outbreak response and maintain outbreak response capacity, support malaria vector control activities, support food control activities by responding to food- and water-borne outbreaks, and to support MNORT as it provides oversight of all activities related to the management of the drought response.

**Reference:** El Niño-related health risks <http://www.who.int/globalchange/publications/factsheets/el-nino-and-health/en/>

**Source:** Division of Public Health Surveillance and Response, NICD-NHLS (outbreak@nicd.ac.za)