World Health Organization
Somalia

Changing the narrative

Annual Report 2018

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Photos and figures: WHO, Somalia

Note: Names of regions, districts, cities and towns have been standardized in line with the UN Office for the Coordination of Humanitarian Affairs Somalia Standardized Spelling List (with the exception of Hargeisa). Reference to Somaliland is made to the unilateral self-declared, north-west regions of Somalia - since 1991.

Contents

Message from the WHO Representative, Somalia

I am very pleased to see the publication of the Annual Report of the World Health Organization (WHO) Country Office for Somalia. The report covers our work in 2018 in the areas of communicable disease control, emergency preparedness and response, child immunization, polio eradication, reproductive, maternal and child health, and universal health coverage.

The year 2018 marks the first year of our 2018–2019 biennial programme and I am happy to note that our achievements and successes in the first year have been far-reaching and have contributed to bridging gaps in areas critical for the country's health sector that are still under-funded. The stories that have marked our success in the field and are presented in this report have deepened our understanding of the complex interaction between the health system and our goal to achieve sustainable health gains in a crisis-torn country. While we can see huge strides taken in some fields, we are looking forward to making progress in other areas in the near future.

As the country is slowly recovering from protracted crisis and underinvestment in the health sector and working to rebuild the fragile health systems, we are making sure that WHO's work supports the Government of Somalia's national

priorities and plan to achieve health for all through the country's new vision and aspirational goal for universal health coverage.

I sincerely thank all my colleagues working in the WHO Country Office in Somalia for their passionate and dedicated work in 2018, our partners for their collaboration and our donors for the much-needed financial resources. Without their contributions, we could not have achieved the success we did in 2018 and it would not have been as rewarding. They supported us in reaching out to several communities in need of health services. I also thank staff of the WHO Regional Office for the Eastern Mediterranean and WHO headquarters for their technical support whenever we asked. Lastly, we could not have achieved anything if we did not have the guidance, and tremendous support of and contribution from the Ministry of Health of the Federal Government of Somalia.

Looking forward, we are embarking on a bigger transformative agenda to meet WHO's global triple billion target of the 13th General Programme of Work 2019–2023 (GPW 13) – the Organization's planned way of working to achieve its global organizational goals that are aligned with the SDGs. Five critical components will drive changes in our work in Somalia in 2019 and beyond – harnessing the power of integration, keeping our staff at the centre, measuring the impact of what we do, embracing the power of visibility, and exercising accountability at every level. We believe that these transformations will make our work at the country level more cohesive, connected and collaborative. At the heart of all this work will be the interests of Somali communities and the empowerment of health workers in every corner of the country.

Building on achievements made thus far, we will work closely with the Government of Somalia and our partners to redefine the health agenda in light of the SDGs of 2030 and transform the Somali health sector. We look forward to accelerating, aligning and accounting for our work to protect the health of the millions of people we serve in this country.

Dr Mamunur Rahman Malik
WHO Representative
Somalia

Acronyms

AIDS	acquired immunodeficiency syndrome
Africa CDC	Africa Centres for Disease Control and Prevention
CDC	Centres for Disease Control and Prevention
cVDPV	circulating vaccine-derived poliovirus
DALYs	disability-adjusted life years
DCP3	Disease control priorities
EPI	Expanded Programme on Immunization
EWARN	early warning and response network
GAVI	the Vaccine Alliance
GPEI	Global Polio Eradication Initiative
HIV	human immunodeficiency virus
HSS	health system strengthening
IPV	inactivated polio vaccine
IOM	International Organization for Migration
ICC	Immunization Coordination Committee
IGAD	Intergovernmental Authority on Development
IHME	Institute for Health Metrics and Evaluation
ICDRA	International Conference of Drug Regulatory Authorities
mOPV	monovalent oral polio vaccine
OCHA	Office for the Coordination of Humanitarian Affairs
SDGs	Sustainable Development Goals
STIs	sexually transmitted infections
TB	tuberculosis
UHC	universal health coverage
UN	United Nations
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WASH	water, sanitation and hygiene
WHO	World Health Organization

Executive Summary

This report looks back at 2018 the first year of the ongoing 2018–2019 biennial programme of WHO and describes some of the key activities and achievements WHO contributed to throughout the year to improve health and health care in Somalia. With guidance from Somali health authorities, and the support of donors and partners, WHO Somalia was able to make huge strides in 2018.

Strengthening the health system

To ensure that the health needs of Somalis are prioritized and met, WHO's Health System Strengthening Programme has been helping to shape health policies and protocols, ensuring they complement the Sustainable Development Goals (SDGs) and international guidelines and standards.

One of WHO's top priorities is to develop the capacity of health workers and policy-makers across Somalia to deliver of health services and of communities to adopt healthier lifestyles.

Through 500 female health workers in Mogadishu, Bosaso, Gaalkacyo, Cabudwaaq, Awdal, Gebiley and Hargeisa, who deliver preventive, promotive and selected curative services, WHO has helped provide health education to around 75 000 households within the communities that these health workers visit.

In efforts to ensure Somalis have access to basic health services, without suffering financial hardship, WHO is introducing universal health coverage (UHC) to Somalia. A planning workshop conducted in April 2018 set the stage to bring UHC to the top of the health agenda in Somalia and revitalized government commitment to this intervention. Following this workshop, health authorities and WHO developed a roadmap for attaining UHC in Somalia, with support from partners.

Improving the health of mothers and children

Over the years, Somalia's health workers, WHO, Somali authorities and partners have reduced maternal mortality from 820 per 100 000 live births in 2010 to 732 per 100 000 live births in 2015.

In 2018, two key plans were developed with Somali authorities and partners to guide action and improve maternal and newborn health: a strategic plan for integrating reproductive and maternal health with newborn, child and adolescent health (2019–2023), and a national midwifery strategy developed with the United Nations Population Fund (UNFPA).

Somalia is one of the most difficult places to be a child as child mortality is high: 137 deaths per 1000 live births. To give Somali children a better chance at living healthy and fuller lives, WHO is continuing to improve routine immunization in the country. So far, with support from Gavi, the Vaccine Alliance, Expanded Programme on Immunization (EPI) services have been offered to children in 499 health facilities in 25 districts in Somalia. To expand these services to reach more children, routine immunization will be offered in health facilities in 25 additional districts by a Health System Strengthening 2 programme launched in September 2018.

Disease control efforts

In addition to responding to the regular health needs of Somalis, WHO spent the first quarter of 2018 responding to the effects of events that took place in 2017: From January to March 2018, WHO, health authorities and partners rolled out a measles vaccination campaign to stop an outbreak that Somalia experienced in 2017. A total of 4.49 million children (93% of the original target) were vaccinated against measles. Children aged between 6 months and 5 years also received vitamin A supplements.

After discovering poliovirus in a sewer sample in Banadir in 2017, WHO, Somali authorities and health partners implemented a comprehensive and timely set of activities in response. This included an intensified search for circulating vaccine-derived poliovirus (cVDPV) in children aged under 15 years. In addition, after confirming two outbreaks of cVDPV types 2 and 3 in children, Somalia's polio programme conducted polio vaccination campaigns to boost the immunity of every Somali child possible to protect them against any poliovirus infection. Between December 2017 and December 2018, 11 immunization campaigns were conducted in Somalia. Surveillance for children with polio-like symptoms was expanded from 955 reporting sites to 1267.

In April 2018, Somali health authorities, WHO and partners developed a strategy for polio transition planning. Once it is implemented, this plan will ensure that the investments made by the Global Polio Eradication Initiative (GPEI) in human resources and developing an infrastructure to deliver polio vaccines

and conduct disease surveillance in Somalia will be used to strengthen other disease control efforts.

By increasing the number of centres that manage tuberculosis in Somaliland to 96 by the end of 2018, WHO and Somali authorities were able to deal with more cases of tuberculosis. In 2018, 16 683 new drug-sensitive tuberculosis cases were recorded in Somalia. Improved diagnosis of tuberculosis using effective GeneXpert tests and new chest X-ray machines resulted in detecting and hence treating cases in a timely manner.

The work conducted by WHO, the National Malaria Control Programme, Somali health authorities and partners in controlling malaria saw cases of malaria fall from 13 829 in 2017, reported in Bosaso, Bari region, to 3838 in 2018. Strategies used in malaria control ranged from providing antimalarial drugs to malaria patients, distributing insecticide-treated mosquito nets, and training health workers to prevent and diagnose malaria and treat cases.

The HIV epidemic in Somalia has been declining since 2014, including in people with sexually transmitted infections and tuberculosis. In 2018, WHO supported Somali health authorities to determine the national burden of HIV – HIV prevalence was 0.10% and 11 000 people were living with HIV in 2018, down from 0.29% prevalence and 23 900 people living with HIV in 2017. WHO continued to offer counselling and treatment to people with HIV/AIDS in Somalia. By the end of 2018, 3231 people were receiving antiretroviral therapy at 16 sites across in the country.

Responding to emergencies

Early in 2018, WHO worked with partners to respond to the effects of the 2017 drought that Somalia had experienced. Life-saving medical supplies were offered to about 85 000 Somalis, and about 60 national staff in drought-affected areas, responsible for the storage of medicines and medical supplies, were trained on how to manage emergency supplies.

After the drought, in December 2017, parts of the country experienced flash floods along River Juba and River Shabelle. This led to a cholera outbreak. Between 2017 and April 2018, in consultation with WHO and partners, the Somali Government implemented an oral cholera vaccination campaign in 13 districts at high risk of cholera. Of the targeted 1.4 million people aged one year and above, 96% were vaccinated. An additional 1.2 million people aged one year and above were vaccinated against cholera in another campaign conducted in Xudur and Afmadow, with support from partners. With support from WHO, cholera treatment centres in Banadir, Jubaland and Hirshabelle were able to treat 6731 Somalis for acute watery diarrhoea/cholera in 2018.

From January to March 2018, WHO and the Somali Government trained and deployed rapid response teams to affected areas in Somaliland, Puntland and Galmudug to stop the spread of and respond to infectious diseases associated with drought. The supplies that were provided helped 750 people with severe acute malnutrition with medical complications. In May 2018, WHO joined with partners and the Somali Government to respond to flash floods: integrated emergency response teams were deployed, 45 tonnes of emergency medical supplies were supplied and 40 health workers were trained on how to use the supplies.

An electronic early warning and response network introduced between

2017 and 2018 in more than 450 health facilities has been useful in reporting epidemics in real time, allowing a quicker response to disease outbreaks.

Maintaining high-quality essential drugs in a fragile health system

As part of its mandate to offer technical support to health authorities to improve the health of Somalis, WHO continued to help regulate the use of essential medicines in the country. This goal was accomplished by supporting the authorities to draw up a medicines' law, developing a list of essential medicines needed by citizens, and training health workers on managing emergency medical supplies.

Coordinating the health sector

WHO plays a key role in coordinating organizations and actors that work to improve the health of Somalis. The Health Cluster brings together more than 100 partners, community representatives, health authorities and UN agencies to work harmoniously to serve Somali health services wherever possible.

Next steps

Building on this foundation, WHO aims to meet the short-term and long-term health needs of the Somali people. To do this, a transformative agenda is being developed that contributes to meeting WHO's global triple billion target of the 13th General Programme of Work (GPW), which runs from 2019 to 2023.[1] The 13th GPW complements the SDGs, particularly SDG 3: Ensure healthy lives and promote well-being for all at all ages.

[1] Using the GPW 13, WHO aims to ensure 1 billion more people achieve universal health coverage, 1 billion more people are better protected from health emergencies, and 1 billion more people enjoy better health and well-being.

Building on primary health care, the Somali health system is moving towards universal health coverage and bridging the gap between humanitarian and development settings which will facilitate resilience-building and health system recovery in Somalia

UHC
road map finalized

SDG goals
localized in Somali context

UHC Strategic plan
(2017-21) finilized

Changing the status quo: enabling Somalis to access health care

Every working day, 42-year-old Marian Ismail leaves home at 07:30 to meet at least seven to eight families in her area of responsibility. One of Somalia's 500 female health workers (marwo caafimaad), Marian's main role is to check on the health of the families she covers, treat common illnesses and educate them on disease prevention and how to keep healthy. Sometimes, health education offered could be as simple and effective as sharing information on how to wash hands properly before eating and handling food.

During each visit, Marian checks on people who are ill, have fevers or may be suffering from problems like malnutrition. If she spots a serious problem, she refers families to health facilities nearby. She also looks out for children who need vaccinations and encourages caregivers to keep up with their schedules.

Having served the World Health Organization (WHO) in Mogadishu for many years, Marian is a proud role model for her seven children. One of her best days at work was the day she took on her current role. She still recalls how

families she met welcomed her, the health information she shared with them, and the joy she felt when she returned home to tell her family about her work. Looking back at her work and resilience with pride, Marian says, "We often save lives with the information we share."

"We have an important role in our society," says Marian. "Female health workers serve as a bridge between the community and health centres."

"The roadmap for UHC, developed in 2018, is expected to ensure health equity, and improve access to care and health service delivery. Further support is being extended to Somali health authorities to ensure that the network of female health workers provides vital health education and other essential community-based health services."

Spread across Mogadishu, Bosaso, Galkayo, Cabudwaaq, Awdal, Gabiley and Hargeisa, Somalia's female health workers provide mainly preventive, promotive and selected curative services to their communities, including treatment of diarrhoea, pneumonia, malaria, mild malnutrition and micronutrient deficiency. In addition, they are extensively involved in health education on key health issues and community organization by forming health committees and women's groups in order to discuss and resolve their communities' health problems. These health workers work in difficult and sometimes dangerous environments.

WHO's Health Systems Strengthening Programme provides support to Somali health authorities to ensure that the network of female health workers offers vital health education and other essential community-based health services to about 75 000 households in the country.

The Health Systems Strengthening Programme in Somalia also provides technical support to the Ministry of Health to apply the six building blocks of health systems (governance, information system, health workforce, service delivery, medicines and technologies, and health financing) based on the country context, available resources and capacities.

The programme works to bridge the gap between humanitarian and development settings and facilitate resilience-building and health system recovery in Somalia, which is still suffering from the effects of the civil war in 1991.

Moving towards universal health coverage

Universal health coverage (UHC) means that all individuals and communities have access to the health services they need, without suffering financial hardship. It includes the full spectrum of essential, good-quality health services, from health promotion to disease prevention, treatment, rehabilitation and palliative care.

UHC, as a fundamental human right, is firmly based on the World Health Organization's Constitution of 1948 and the Health for All agenda set by the Alma-Ata Declaration in 1978. It is also reflected in the 2030 United Nations Sustainable Development Goals for good health and well-being.

Defining health policies and improving coordination

The Health Systems Strengthening Programme mainly focuses on supporting authorities to engage in health policy dialogue in line with the needs of Somalis and international developments in health. One of the programme's main aims is to provide technical support to ensure Somalia has updated health policies, strategies, protocols, standards, guidelines and plans that guide the health sector and respond to the urgent, immediate, and long-term needs and priorities of Somalis in a sustainable manner. The programme works to develop the capacity of policy-makers, health managers, health workers and communities in Somalia.

WHO serves as a leader in health sector coordination, steering a wide range of partners towards serving Somalis better in the area of health, in harmony and avoiding overlap.

Moving forward, WHO and the Somali Ministry of Health continue to work on developing an essential package of health services for integrated care to ensure that all Somalis have access to the health services they need, without suffering financial hardship

Universal health coverage

WHO's plans to introduce universal health coverage (UHC) in Somalia started at a planning workshop in April 2018 in Nairobi. During this meeting, which was supported by the Tokyo International Conference on African Development, representatives from the Kenya and Sudan UHC programmes shared best practices and challenges with the Health Systems Strengthening Programme in Somalia. Members of the donor community also provided key advice, and a team from the WHO Regional Office for the Eastern Mediterranean discussed the synergy between the humanitarian, development and peace contexts in work that WHO will be doing. Through this meeting, WHO brought UHC to the top of the health agenda for Somalia and revitalized government commitment to this intervention. The meeting also set the foundation for the development of a roadmap for UHC in Somalia. This was done in consultation with the health authorities and all stakeholders. The roadmap has been developed based on evidence and includes the priority interventions required to achieve UHC.

Using UHC as the core function for health system coverage, WHO will work with authorities and partners to ensure more health equity and improvement in the overall health of Somalis. The main priorities for the UHC programme in Somalia are strengthening leadership and governance, improving access to service delivery, and working to establish sustainable mechanisms for health financing.

Using universal health coverage as the core function for health system coverage, WHO worked closely with Somali health authorities and partners in 2018 to monitor that access to health services and health equity was improving in all settings

Key achievements of WHO with the Ministry of Health in 2018

- Developed the UHC roadmap.
- Reviewed the Essential Package of Health Services based on guidelines for disease control priorities (DCP3).
- Localized health-related SDGs to the context of Somalia, defining the baseline and targets for 2030.
- Contributed to institutional capacity-building of state ministries of health through placement of advisers and support of managers to participate in courses, workshops and seminars.
- Finalized health sector strategic plans in consultation with partners and all stakeholders; the second and latest plan covers 2017–2021.
- Established a public health laboratory in Mogadishu and supported blood bank and laboratory services in regional hospitals.
- Introduced the civil registration and vital statistics programme.

In response to a major cholera outbreak in 2017, WHO and the Somali Ministry of Health introduced a two-dose oral cholera vaccine targeting 1.4 million people aged 1 year and above. This was the largest ever mass immunization campaign for cholera in a humanitarian setting in Africa. Despite inaccessibility and security concerns, WHO and its partners succeeded in achieving an overall coverage of 95.5%

450
EWARN sites established

1.2 million
vaccinated against cholera

6 731
cholera cases treated

Averting and responding to health emergencies

The World Health Organization (WHO) works with the Somali Government to help families affected by emergencies. In 2018, the Somali Government and WHO worked with partners to provide life-saving medical supplies to about 85 000 Somalis. In addition, about 60 national staff responsible for storage of medicines and medical supplies from the drought-affected regions were trained on managing emergency medical supplies in collaboration with the national health authorities.

Responding to intermittent emergencies

Somalia often faces public health emergencies. In the past two decades, the country has experienced seasonal and recurring cholera outbreaks, which are a major public health challenge. These outbreaks often affect communities living in large urban centres, camps for internally displaced people and communities living along the Shabelle and Juba rivers.

In December 2017, Somalia also faced a drought followed by floods which led to

"One of the biggest achievements in 2018 was organization of a mass oral cholera vaccination campaign in 13 cholera hot spots targeting over 1.4 million people aged 1 year and above. The campaign successfully stopped a major cholera outbreak in fragile settings where an outbreak in 2017 had claimed over 1100 lives."

a cholera outbreak in some parts of the country. In response to the drought, from January to March 2018, WHO worked with the Somali Government to train and deploy integrated rapid response teams in Somaliland, Puntland and Galmudug to respond to infectious diseases associated with the drought. Eighty-four tonnes of emergency medical supplies were put in position to protect families from the consequences of the drought, and 15 severe acute malnutrition kits were procured for stabilization centres in South West State, Puntland and Somaliland. These will support the treatment of 750 cases of severe acute malnutrition with medical complications for three months. In November 2017 and September 2018, WHO, in collaboration with federal and state ministries of health, conducted training on case management of severe acute malnutrition with medical complications for 250 health workers from 43 stabilization centers in Banadir, South West State, Jubaland, Galmudug, Hirshabelle, Puntland and Somaliland.

Similarly, in May 2018, flash and river floods caused by heavy rainfall in Somalia affected more than 770 000 people and displaced nearly 230 000. WHO worked hand in hand with the government of Somalia to respond to the health consequences of the flooding. During the flood response in the southern and central states, 10 integrated emergency response teams of 40 health workers were trained and deployed to provide essential life-saving health services to people affected by the floods. As part of an immediate response, WHO airlifted 45 tonnes of emergency medical supplies, including essential medicines, oral rehydration supplies, water-testing kits and cholera treatment supplies, to different states in the country, including Hirshabelle, South West State and Jubaland. The medical supplies supported by WHO covered 83 691 people affected by the flood, 74 700 of whom were internally displaced people who had to move because of the flooding.

Delivering a timely response to a cholera outbreak

Within a few weeks of the start of the cholera outbreak in December 2017, the Ministry of Health set up a national cholera taskforce to coordinate and plan focused multisectoral interventions to tackle the cholera outbreak throughout the country.

Between 2017 and April 2018, following a comprehensive risk assessment and consultation with partners, the Government implemented an oral cholera vaccination campaign in 13 cholera hot spots. It was the first time the Ministry of Health had introduced and used oral cholera vaccination as part of its cholera prevention and control strategy.

WHO and the Ministry of Health provided two doses of oral cholera vaccine to 95.5% of the targeted 1.4 million people aged 1 year and above in the 13 high-risk districts.

Following the campaign, a random sample survey was conducted in nine of the 13 districts to evaluate the coverage and awareness of the campaign. The findings of the independent monitoring were similar to the administration coverage. Reasons for not being vaccinated included being absent from home during the campaign, vaccination teams not visiting the household, being

sick during the campaign and the household decision-maker being absent at the time of the vaccination. The survey also showed that 93% of the respondents had received two doses of the oral cholera vaccine.

Through an additional oral cholera vaccine campaign conducted in Hudur and Afmadow districts of South West and Jubaland states by Save the Children International and the Ministry of Health, WHO provided oral cholera vaccines to 1.2 million Somalis aged over 1 year in 2018.

With support from WHO, cholera treatment centres in Banadir, Jubaland and Hirshabelle were able to treat 6731 Somalis for acute watery diarrhoea/cholera in 2018. The reported case fatality rate, a measure of the severity of the disease (defined as the proportion of confirmed deaths from a disease among those diagnosed with the disease) for Somalia in 2018 was 0.7% compared with 1.7% in 2017 (ideally the case fatality rate should be less than 1%).

Providing support to control a measles outbreak

To address a measles outbreak in 2017, WHO worked with the United Nations Children's (UNICEF) and the Ministry of Health to carry out a nationwide measles campaign between January and April 2018. In total, 4.5 million children between the ages of 6 months and 10 years received the measles vaccine across Somalia.

Enhancing surveillance to determine the prevalence of diseases

Between 2017 and 2018, Somalia rolled out an electronic early warning and response network (EWARN) disease surveillance system in all states. This system covers more than 450 health facilities and has been useful in reporting epidemics in real time, thus facilitating the deployment of district-based rapid response teams to control potential disease outbreaks before they escalate and affect more

Between 2017 and 2018, Somalia rolled out an electronic early warning and response network (EWARN) disease surveillance system in all states covering more than 450 health facilities. Using a both web-based and mobile app, the system is able to monitor health threats and detect epidemics in real time

people. To support the implementation of EWARN in sentinel sites, WHO provided 400 mobile phones to health workers to improve the timely submission of reports, as well as 40 laptop computers to surveillance officers to support analysis and dissemination of surveillance data for public health action.

Providing support to the health sector

Between 2017 and 2018, WHO deployed national and international personnel to support public health emergency and nutrition services. Through the Somalia Health Cluster, WHO enhanced coordination between United Nations agencies, donors and local and international nongovernmental organizations.

WHO and the Ministry of Health conducted a comprehensive risk assessment of all hazards which mapped the hazards and their severity for each state. During the same exercise, a national action plan for health security was developed to support the implementation of the priority actions identified in the Joint External Evaluation report as required under the International Health Regulations 2005.

To provide a coordinated response to emergencies, WHO conducted an assessment to establish a public health emergency operations centre. The Ministry of Health, WHO,

WHO and the Ministry of Health are working hand in hand to end cholera in Somalia as part of the global strategy to end cholera by 2030. The leadership and political commitment of the Minister of Health has been pivotal in driving this process forward

"In 2018, WHO successfully launched an electronic early warning and response network (EWARN) disease surveillance system in all Somali states. This system covers more than 450 health facilities and has been useful in reporting epidemics in real time, thus facilitating the deployment of district-based rapid response teams to control potential disease outbreaks before they escalate and affect more people."

US Centers for Disease Control and Prevention (CDC) and the Africa Centres for Disease Control and Prevention (Africa CDC) identified a physical site for this centre and prepared a plan for its development. WHO continues to provide support to maintain government surveillance of diseases, and to staff in the Government's health emergency and laboratory units.

Providing medical supplies

Like every mother who worries about her children, 31-year-old Fadumo Hussein Ali was concerned when her 18-month-old baby boy Sadaq Ali Mohamud had a high fever and bad cough.

Fadumo has been living in a camp for internally displaced people at Jowhar's airport for three years with her husband and four children.

She arranged for help to mind her three children and set off to the health centre in the camp to seek medical attention. The medical team at the facility diagnosed Sadaq with a respiratory tract infection and gave him medication to treat it.

"I was worried and thought I might lose my child when I saw his condition," said Fadumo, "but I was really relieved to see that WHO was supporting the health facility at the camp with medical supplies. These supplies saved his life. As internally displaced people, we are suffering and need treatment and support to deal with common illnesses, like diarrhoea, coughs and fever. Life can be difficult. We know that safe water is essential, but we do not have access to clean water."

Fadumo and her family moved to the camp to escape regular floods that affected their home.

Political will and a socially inclusive programme have enabled Somalia to make significant strides in reproductive and maternal health despite destruction of the health system. WHO, UNICEF, International Organization for Migration (IOM) and UNFPA continue to work collaboratively to make motherhood safer in the country

National midwifery strategy
updated

Integrated reproductive health plan (2019-23)
developed

12 doctors
received diploma on emergency obstetric care

Making motherhood safer in Somalia

The Somali Midwifery Association: empowering midwives

The Somali Midwifery Association, established in 2012, aims to provide good-quality and timely health care for newborns and mothers. After the formation of the association, the Somali Government engaged the association to help register midwives by location and keep a database of all midwives working and those who finished training but are not practising. As a result, a continuing community education programme was launched in 2013 to license, oversee, and train and retrain Somali midwives, so they had the skills to meet the needs of marginalized populations (internally displaced people, nomadic populations and groups deprived of access to health services, mainly women and children but also elderly people and adolescents).

The programme has effectively ensured that the quality of midwifery services at the grassroot levels meets the required standards outlined in the newly updated midwifery curriculum and midwifery strategy for Somalia, and that maternal and reproductive health care services, including basic family planning services, are integrated in the primary health care system and are offered to all, including socially disadvantaged populations.

"Working closely with UNFPA and its other partners, WHO finalized the national midwifery strategy in 2018 and supported the Ministry of Health in developing a strategic plan for integrating reproductive and maternal health with new born, child and adolescent health."

Over the years, this programme has led to significant changes – birth attendance by skilled personnel increased in the country to an estimated 37% in 2015 compared with 22% in 2010, and the availability of skilled midwives at the grassroots level has risen four- to six-fold. The maternal mortality ratio has also decreased substantially from more than 820 per 100 000 live births in 2010 to the 2015 estimate of 732 per 100 000 live births. Political will and a socially inclusive programme have enabled the country to make progress despite the destruction of the health system.

WHO support

In 2018, WHO supported the Ministry of Health in developing a strategic plan for integrating reproductive and maternal health with newborn, child and adolescent health. The plan, which will run from 2019 to 2023, was developed in consultation with all stakeholders, including field health workers who are at the front line and are very aware of the challenges and interventions needed to address them. The strategic plan will be validated and endorsed in 2019.

To ensure that high-quality family planning services are provided and that counselling services are offered to communities based on the latest evidence, WHO organized a series of refresher courses in 2018 for midwives from various regions of the country on WHO tools and guidelines for family planning in Somalia. The training courses were interactive and aimed to reduce knowledge gaps and address any concerns of Somali midwives. The feedback from trainees was encouraging and all the midwives said that the training has familiarized them more with the guidelines and tools and that they felt more confident to provide the services in their areas of work.

WHO worked closely with the United Nations Population Fund (UNFPA) to provide technical guidance through the regional and country offices to develop a

WHO works closely with the Somali Midwifery Association empowering midwives to deliver maternal and reproductive health care services, including basic family planning services, in an integrated primary health care system

national midwifery strategy that was finalized in December 2018.

By forging strategic alliances with the University of Hargeisa, WHO introduced diploma courses on emergency obstetrics surgery for 12 doctors from remote areas in 2018. Following a request by the Ministry of Health, WHO aims to provide similar additional training. Furthermore, in 2018, a number of supervisory field visits were made to Banadir and Somaliland family planning services at the health facility level. In addition, a planning visit was made to Puntland to make preparations for training health workers on reproductive, maternal, newborn, child and adolescent health.

Offering key health services to Somalis

Maternal, neonatal and under-five mortalities are high in Somalia – with an estimated maternal mortality rate of 732 deaths per 100 000 and an under-five mortality rate of 137 deaths per 1000 live births in 2015. To address these indicators, the Government and UN agencies first offered the Essential Package of Health Services in 2012. Since then, it has been supported by key partners and reaches more than half of Somalia's health facilities. The core of the essential package in Somalia is maternal and child health services.

Changing attitudes to women's health

"I would love to see men change their attitudes, and prioritize and learn about the importance of women's health," says Halima Abdi Sheikh, popularly known as Mama Halima Abdi Sheikh in Somalia. "I would also love to see religious leaders empower women by airing their voices. If they can encourage birth spacing and advocate for better health for women and children, they would be leaving the best legacy for the next generation. Women really should receive quality health services. After all, women are raising the next generation of leaders."

Mama Halima is speaking from 24 years of experience; she joined the World Health Organization (WHO) in Somalia as Maternal, Newborn, Child and Adolescent Health Officer for south central Somalia. A pioneer in maternal health services in Somalia, Mama Halima has dedicated herself to improving the health of mothers, newborns and children – one delivery at a time.

"Mothers in Somalia trust us. WHO provides medical supplies to treat mothers in health facilities. We are training health workers to upgrade their knowledge and skills so they can deliver babies professionally, and attend to mothers and children in a timely manner," says Mama Halima. "WHO tools and guidelines are used to support the Government to ensure that Somalia's maternal and child health services will meet international standards."

One of the key founders of the Somali Midwifery Association, Mama Halima succeeded in bringing Somalia's midwives together to speak with one voice to represent them nationally.

With support from Gavi, the Vaccine Alliance, immunization services for children are being offered in 25 districts in Somalia. Despite progress, a large percentage of children still have no access to life-saving vaccinations contributing to high child mortality in the country

23 000
measles cases detected

4.49 million children
vaccinated against measles

499 health facilities
with EPI service

Turning the tide on common childhood diseases

Vaccines have proved to be one of humankind's greatest inventions; they have controlled diseases, reduced mortality and even eradicated a disease. In Somalia, the Government, WHO and partners, with support from GAVI, the Vaccine Alliance, joined forces in 1978 to introduce the Expanded Programme on Immunization (EPI). In 2013, the country introduced pentavalent vaccines against diphtheria, pertussis, tetanus, hepatitis B and haemophilus influenzae type b, and the Bacillus Calmette–Guérin (BCG), measles vaccine and oral polio vaccine; two years later, the inactivated polio vaccine (IPV) was introduced. Somalia currently vaccinates children against eight diseases as part of its routine immunization programme: diphtheria, pertussis, tetanus, hepatitis B, haemophilus influenzae type b, tuberculosis (TB), measles and polio (Table 1).

Routine immunization remains low and efforts are continuing to address this issue. With support from GAVI, EPI services are being offered in 25 districts in Somalia. Even then, the quality of services provided is uncertain in some health facilities. A large percentage of

children do not have access to life-saving vaccinations, which contributes to the high child mortality in Somalia – 137 deaths per 1000 live births.

Table 1. Vaccination coverage in Somalia, 2014–2018

Indicators	2014	2015	2016	2017	2018
BCG coverage	32.9	42.7	57.9	59.0	75.0
Polio zero coverage	14.4	20.0	25.9	30.0	45.0
Pentavalent vaccine 1 coverage	41.1	57.2	66.1	75.0	80.0
Penta valent 3 coverage	34.1	50.7	56.5	63.0	69.0
IPV coverage	ND	ND	ND	41.0	61.0
Measles 1 coverage	33.9	45.9	49.8	60.0	70.0
TT2 coverage	ND	63.4	57.5	61.0	59.0
Pentavalent vaccine 1–3 dropout	17.0	11.3	14.6	16.0	15.0
TT1–TT2 dropout	ND	19.3	11.3	13.0	22.0

BCG: Bacillus Calmette–Guérin; IPV: inactivated polio vaccine; TT: tetanus toxoid; ND: not determined.
Figures shown are percentages of the child population covered.

"In 2018, in efforts to offer routine immunization to more children, the Somali Government, UNICEF and WHO launched a updated version of the health system strengthening programme (known as HSS2) in Mogadishu, with support from GAVI. HSS2 aims to support about 220 000 newborns and 290 000 women of child-bearing age – about 45% of the general population."

Implementing a nationwide measles campaign

Measles is a highly contagious viral disease normally passed to unvaccinated individuals through direct contact or the air. Despite the availability of safe, well-tested and effective vaccines, measles is still one of the leading causes of child mortality in the world.

In 2017, Somalia experienced its worst outbreak of measles in four years. More than 23 000 suspected cases of measles were reported in all of the Somali states; 83% of these reported cases were in children under 10 years of age. Low vaccination rates and malnutrition, compounded by drought-related mass displacement and the resulting overcrowding, allowed the disease to spread rapidly.

To respond to the measles outbreak, the Ministry of Health, WHO and the United Nations Children's Fund (UNICEF) conducted a nationwide vaccination campaign from January to March 2018. The campaign aimed to vaccinate 4.8 million children aged between 6 months and 10 years in all accessible and partially accessible districts. WHO deployed an international consultant to

support the country in preparation for the campaign. Health workers were trained to develop microplans and cascade training was conducted for health workers at district and subdistrict levels. District microplans, with social mobilization, advocacy and communication plans, were developed by teams comprising staff from the Ministry of Health, UNICEF and WHO at the district level. Regional- and state-level teams provided support.

The measles campaign was carried out in phases. It was first done in Puntland, then Somaliland and then federal Somalia. In total, 4.49 million (93%) of the target of 4.82 million children were vaccinated against measles. Children aged between 6 months and 5 years also received vitamin A during the campaign.

To ensure the campaign met expected standards, teams from WHO, UNICEF and the Ministry of Health supervised and monitored campaign activities. Additionally, independent monitors also checked activities during the campaign. Results from their reports indicate that 94% of children were vaccinated, while monitoring conducted after the campaign showed 95% coverage.

One of the 499 health facilities across the country that provides EPI services to Somali children. Plans are underway to reach out to missing children through a strengthened national routine immunization programme covering 25 more districts in the country

Introducing a second dose of measles vaccine

Representatives from the Somali health authorities, GAVI, UNICEF and WHO came together at a three-day workshop in May 2018 to consider ways to boost routine immunization throughout the country.

Plans were made for the introduction of a second dose of the measles vaccine and strategies were discussed for inclusion of measles and rubella vaccines in the future in the vaccination calendar for Somali children. As a result, the existing EPI policy will be reviewed and adjusted to integrate these new vaccines into the routine immunization schedule for Somalia. In addition, a measles outbreak response plan was developed in 2018 and endorsed by the Immunization Coordination Committee (ICC). The five-year measles and rubella plan is in place and awaiting final endorsement by the ICC. A nationwide measles campaign is planned for the last quarter of 2019.

These efforts aim to reduce the morbidity and mortality caused by both measles and rubella in Somalia.

Increasing routine immunization across Somalia

WHO provides technical support and advice to Somali health authorities to guide them in the effective provision of EPI services throughout the country. Currently, 499 health facilities provide EPI services to Somali children: 233 in states in south and central Somalia, 128 in Puntland and 138 in Somaliland. These facilities include mother and child health clinics, EPI centres and a few hospitals.

In efforts to offer routine immunization to more children in Somalia, in September 2018, the Somali Government, UNICEF and WHO launched an updated version of the health system strengthening (HSS) programme in Mogadishu, with support from GAVI.

Known as HSS2, the newly introduced initiative builds on the success of a similar programme that was rolled out in 25 health facilities in Somalia from 2012 to 2016. The HSS2 will strengthen weak national health systems and offer routine immunization to children in 25 additional districts throughout the country. These districts were selected based on their population size, programme accessibility, low coverage of the third dose of the pentavalent vaccine, high dropout rates for pentavalent vaccine 1/3, and the availability of immunization services.

HSS2 aims to support about 220 000 newborns and 290 000 women of child-bearing age – about 45% of the general population. Many of the mothers and children are from nomadic families and internally displaced populations, both of whom are high-risk groups in Somalia. HSS2 sets out to expand and strengthen the availability of routine immunization services, enhance the physical capacity and effective management of the cold-chain and logistics systems, and increase demand for immunization services. The initiative also works to strengthen leadership and management of Somalia's immunization programme and improve the availability, quality and use of data on immunization.

By increasing children's access to immunization, HSS2 supports Somalia's goals of enhancing UHC, reducing child mortality and achieving the third SDG: attainment of good health and well-being for all at all ages.

Somalia's Immunization Coordination Committees

Somalia's first Immunization Coordination Committee (ICC) was officially launched by Her Excellency Dr Fawziya Abikar Nur, Minister of Health, on 26 July 2018. The ICC for Somaliland was launched soon after, on 27 September 2018.

The committees will serve as the technical and strategic oversight bodies for both immunization and health system strengthening, with the aim of ensuring sustainable coverage and equity of immunization and other health services.

They will work to develop a coherent view on strategy, planning, funding and performance of the Expanded Programme on Immunization throughout the country, within the context of the broader health system.

The committees will also ensure activities and investments of relevant stakeholders are coordinated and complementary.

Representatives from the Somali health authorities, GAVI (the Vaccine Alliance), UNICEF and WHO continued to update policies of the Expanded Programme on Immunization in the country with regard to introduction of a second dose of measles vaccine, rubella vaccination and other new vaccines as part of efforts to boost routine immunization throughout the country

Changing perceptions and saving children from preventable diseases in Nugaal

In many parts of the world, families are not familiar with the disease diphtheria. Caused by bacterial microorganisms, diphtheria spreads easily among populations that have not been vaccinated against it. It is an airborne disease that spreads through sneezing and coughing; a shared drink is also just enough to infect an unvaccinated person.

Diphtheria was a disease of the past, eradicated from several countries through regular vaccination efforts. However, in countries like Somalia, where routine immunization is low, this disease is becoming more common again.

This happened in Nugaal, in a difficult-to-reach region in Puntland, where immunization is low on the list of priorities. Aisha, a child living in this region, and one of her five siblings experienced the painful effects of diphtheria. Aisha felt her throat getting sore one day, after which, she felt weak and noticed a thick, grey patch at the back of her throat. Soon, she found she was struggling to breathe.

Luckily for her, Aisha and her sibling affected with the same disease were able to access medication that helped the symptoms subside. However, not all children are fortunate enough to access health support in time.

Diphtheria is just one of the seven common childhood diseases that can be prevented using vaccines. Families, like that of Aisha's, sometimes lack vital knowledge about the benefits of vaccines. Being part of a small social group in their community that chooses to refuse vaccines whenever they are offered, Aisha's family has now changed its mind after seeing the severe effects of being under-immunized. They attributed this change of perception to a team of health workers from the Ministry of Health, WHO and World Vision International, who took the time to discuss the importance of vaccines with them.

This team was successful in convincing the entire community of the success of vaccines in protecting children from preventable diseases.

Several rounds of an immunization campaign against the circulating vaccine-derived poliovirus type 2 and 3 were organized in Somalia in 2018 to help keep the country free of polio

0
wild poliovirus case

1 267
AFP surveillance sites

11
immunization campaigns

In pursuit of polioviruses in Somalia

Wild poliovirus was last found in Somalia between 2013 and 2014. The virus spread rapidly over 14 months and 199 children and young adults were confirmed to have been infected. Rapid action, international commitment and redoubled team efforts helped to control the outbreak and to avoid a spill over to children in other countries.

Concurrent outbreaks of two strains of poliovirus

In September 2017, Somalia introduced environmental surveillance to determine if there were any polioviruses circulating in the country. It was introduced in the most highly populated location in the country, Banadir, where Somalia's busy capital, Mogadishu, is located. In October 2017, polio teams found a virus – circulating vaccine-derived poliovirus (cVDPV) type 2 – in a sewer sample collected from the environmental site in Banadir.

Immediately, two small-scale rounds of immunization (delivering monovalent oral polio vaccine (mOPV) type 2) were conducted in December 2017 and January 2018 to vaccinate children in Banadir and the surrounding regions of Middle Shabelle and Lower Shabelle. Each round vaccinated more than 700 000 children aged under 5 years. At the

Efforts to keep the country polio free faced a setback in 2018 when concurrent outbreaks of circulating vaccine-derived poliovirus were detected. In response, 11 rounds of immunization campaigns were conducted delivering inactivated polio vaccine (IPV), monovalent oral poliovirus vaccine (mOPV) and bivalent oral polio vaccines in different rounds.

same time, acute flaccid paralysis surveillance was intensified and three additional environmental surveillance sites were introduced to determine where any polioviruses might be circulating.

In February 2018, cVDPV was again found in sewage samples. Early in May, a 72-month-old child was confirmed to have a coinfection of cVDPV types 2 and 3.

In response to the polio outbreak, between December 2017 and the end of December 2018, 11 rounds of immunization were conducted in Somalia. One campaign delivered IPV, seven delivered mOPV and three campaigns used bivalent oral polio vaccine to vaccinate children under 5 years.

Deploying additional expertise to end outbreaks

Somalia's polio team, which comprises staff from health authorities at all levels, WHO and UNICEF, deployed six senior state surveillance officers and a national surveillance officer based in Mogadishu to support efforts to intensify acute flaccid paralysis surveillance. Two experts in geographical information systems were brought in to support mapping activities.

Enhancing surveillance for polio-like symptoms

To boost case detection, the programme developed and implemented an annual enhanced surveillance workplan with an accountability framework. As a result, surveillance for children with polio-like symptoms (known as acute flaccid paralysis) expanded from 955 reporting sites to 1267. At the reporting sites, health workers, including district polio officers, actively search for acute flaccid paralysis in children aged 15 years and under. These sites include health facilities in public, private and informal health care sectors. The facilities were prioritized according to the likelihood of detecting acute flaccid paralysis cases and classified as high, medium and low priority. At the community-level, about 600 village polio volunteers regularly search for acute flaccid paralysis cases.

Analysing data for accuracy

Data compiled are now being used to: develop accurate microplans (maps and plans for immunization campaigns, which include settlements, fixed vaccination points and transit points); estimate population density, as triangulated with other sources; and plan for short interval additional doses, which are intensified campaigns to deliver vaccines to children in vulnerable populations. The polio programme is also able to map the distribution of health facilities providing services with the EPI, map the routes of sewages sites and estimate the number of households and populations in the catchment areas around sewage sites. This information helps determine the risk of poliovirus circulation in these areas and facilitates the active search for cases of acute flaccid paralysis.

To improve data sharing and analysis, with support from the Global Polio Eradication Initiative (GPEI), the polio team introduced a website. [1]

[1] www.somaliapolio.org

Open Data Kit

Open Data Kit[2] has been in use in Somalia's polio programme since 2015. It has been used to store information on settlements in Somalia (location and nature), microplan immunization activities, and monitor ongoing outbreaks. The Somalia polio programme also uses Open Data Kit to: determine where settlements are located within districts ahead of immunization campaigns; gather data on surveys being conducted; monitor immunization activities during campaigns; and conduct monitoring after campaigns have ended. Data gathered using Open Data Kit facilitate quick assessments of children with acute flaccid paralysis and cVDPV, as well as viruses found in the environment.

Open Data Kit is also used to collect geolocations of acute flaccid paralysis cases, conduct household assessments for detailed acute flaccid paralysis investigations, and collect data from cholera campaigns and vaccination campaigns that use IPV.

Open Data Kit: an innovative tool to accelerate polio eradication in Somalia

Ali Abdullahi Ali-Obsie, fondly known as Obsie by his peers, serves the Somalia polio team as a supplementary immunization activity data assistant. Everyone knows Obsie goes above and beyond his duties. He also provides support in geographic information system work. Living in Hargeisa with his two children and wife, Ali joined the Somalia polio programme seven years ago.

He started using Open Data Kit in 2015 when it was introduced in Somalia as a platform for conducting lot quality assurance sampling, a system used for monitoring and validation after every polio campaign in Somalia. A team from Nafundi and the Bill & Melinda Gates Foundation, with support from the Centers for Disease Control and Prevention, Atlanta, conducted training on Open Data Kit.

During his work with the Somalia polio programme, Obsie has seen a big change in the way data are collected and used by the polio programme. He has used Open Data Kit across the country, for polio campaign activities (e.g. collecting administrative data), intracampaign monitoring, independent monitoring, mapping and lot quality assurance sampling.

"Open Data Kit has given me a platform that collects data efficiently and effectively. It has improved the quality of data used for polio work in Somalia. The integration of logic/skip patterns, metadata, geocodes and multimedia has made the data collected in the field extremely useful," says Obsie.

"Data collected by surveyors and monitors are available to us at the office in real time and ready for analysis. This has greatly reduced

[2] www.somaliapolio.org

the turnaround time for data management and report development. For example, using lot quality assurance sampling, we usually target hard-to-reach, low-performing villages for monitoring. However, sometimes monitors may decide to complete the survey in a village nearby. By using the geocodes in Open Data Kit, we are able to confirm that monitors visit areas that need supervision."

"The use of Open Data Kit has transformed data management and use in Somalia," explains Obsie. "Through Open Data Kit, I can know where each monitor is working at a given time and which household they monitored. I can provide reports very quickly to my supervisors so that critical decisions are taken for the benefit of the programme."

Monitoring and evaluation

Somalia's polio programme uses monitoring and evaluation at different levels of the programme to assess ongoing work and improve practices for the future. This includes monitoring conducted during polio vaccination campaigns, and post-campaign monitoring. These efforts also guide immediate and future corrective decisions and actions.

As part of international measures to assess the outbreak response activities carried out by the polio programme, an outbreak response assessment group and a technical advisory group were established in November 2018. Both groups acknowledged the work conducted so far and provided key oversight and recommendations aimed at guiding activities to end the outbreaks.

Coordination within countries in the Horn of Africa

In August 2018, the subregional polio outbreak was categorized as a Grade 2 WHO health emergency. In response, the Intergovernmental Authority on Development (IGAD) convened a Horn of Africa event to plan for a coordinated polio campaign in September 2018. At this launch, health ministers and their representatives from Horn of Africa countries – Ethiopia, Kenya and Somalia – signed a communique to show commitment to eradicating polio from the region.

Polio transition

Somalia is one of 16 global priority countries where resources from the GPEI are focused. In light of several countries being certified as polio-free, the GPEI is substantially reducing its global funding. As a result, it is anticipated that its financial support to Somalia will be significantly reduced in the near future. To avoid reversing the gains made by the polio programme over the years, the GPEI is encouraging countries to prepare for the integration of the polio programme's knowledge, infrastructure, assets and functions with other ongoing health interventions.

In line with this strategy, in 2018, Somalia took steps towards transitioning polio. In April 2018, WHO, together with the Somalia Government and partners,

held a workshop to develop a Somalia-specific polio transition framework aligned with the country's health priorities and to suggest transition strategies and timelines for activities. The workshop also aimed to agree on broad lines for advocacy, communications and resource mobilization, and specific roles and responsibilities during the transition.

The polio team reviewed global polio transition issues and lessons learnt from other countries, the Somalia health policy, draft health sector strategic plans and the comprehensive multi-year plan (cYMP) – with a focus on linkages to the polio infrastructure and the Somalia polio assets (human resources, physical programme assets and systems in place).

Objectives of polio transition

The primary goals of transition planning are both to protect a polio-free world and to ensure that the investments made to eradicate polio contribute to future health goals after achieving polio eradication. For Somalia, where public health systems are weak or non-existent, a priority of the transition will be to ensure that assets of the GPEI continue to support broader health initiatives, working towards the larger objective of integration with key health priorities.

Key strategies of polio transition

As a result of the transition planning workshop held in April 2018, it was decided that the polio transition

WHO has supported the establishment of environmental surveillance to detect and monitor circulation of polioviruses in Somalia. Circulating vaccine-derived poliovirus type-2 was detected for the first time in the country in a sewage sample collected from one of the environmental sites in Banadir

strategy would be most useful to the country context if polio assets and infrastructure were integrated with the following health priorities: disease surveillance, basic health delivery (including EPI) and public health emergencies.

The findings of the planning workshop and research conducted indicate that: many polio personnel in Somalia have skills/experience in areas beyond polio eradication (e.g. disease surveillance and response, EPI, health emergencies, logistics management and support); transitioning the polio infrastructure to help these other initiatives is aligned with Somalia's health policy priorities; and with proper planning, polio staff and expertise can support the achievement of Somalia's health priorities and the SDGs.

Using teamwork to deliver better health services for Somalis

The polio programme worked with partners to provide crucial and timely support to other emergency and health programmes in Somalia in 2018. Between January and March 2018, in response to a measles outbreak in Somalia, the polio workforce provided support in vaccinating 4.49 million children (aged 6 months to 10 years) out of a targeted 4.82 million children (93% coverage) in accessible and partially accessible areas of the country.

In 2017, the polio team supported WHO's Emergency Programme in rolling out a response to a cholera outbreak, during which 1 613 cases were confirmed and nine deaths were reported.

Sustained efforts by WHO has been keeping the country free of wild poliovirus since 2014

Shedding light on vaccine benefits

A 30-year-old teacher from Denmark, Fahima Ibrahim Jama, together with her two young sons, is visiting her family in Hargeisa, Somaliland, to get to know them better. Fahima, who has spent 23 years in Denmark, arrived eight months ago.

Recently, during a polio vaccination campaign, Fahima refused to allow her sons to be vaccinated. Soon after, polio teams, who had recorded Fahima as a "refusal", revisited her to look more closely into reasons why she was hesitant and to explain the benefits of vaccination and of polio eradication efforts.

"I had so many mixed and wrong beliefs. I believed that a child aged under 6 months does not need to be vaccinated if they are being breastfed, as that should be enough to protect them. I also believed that the regular vaccination campaigns are not important because some children are suffering from other serious diseases, such as hepatitis and tuberculosis, which have a bigger impact on society," says Fahima.

At schools in Denmark, Fahima came across children who had disorders related to attention and mental health. She began to believe that vaccinations given at a young age were probably causing these conditions.

"Now I realize how wrong I was," explains Fahima. "Now I know that all children need to receive polio vaccinations, as many times as they are offered, especially in countries where immunity is generally low."

Fahima says she was never concerned about vaccination until she had children of her own. "In my opinion, when you become a mother, your main job is to look after your children and to do what is best for them. Since I became a mother, I have started to read and listen to what parents say about vaccination. There is so much confusion in some countries; I really feel like parents could do with more information about vaccinations, from doctors and health workers. This will save so many children from diseases and their effects."

Fahima would also like parents and caregivers to know more about the role good hygiene plays in preventing the spread of diseases. If she could share one message with parents anywhere in the world, Fahima would encourage them to be critical and ask why vaccines are important, and to learn which ones children should be receiving at various ages.

WHO's support of health workers to diagnose and treat tuberculosis better and support of efforts to inform communities about diseases have strengthened health systems in Somalia and helped people avoid contracting diseases. Early detection and access to treatment have resulted in a dramatic improvement in the cure rate for tuberculosis in the country

16 683
new TB cases

96
TB centers

44
TB diagnostic centers

Saving Somalis from TB

Mohamed Abdi knew something was wrong when he had a constant fever and a cough that lasted all day. His cough and sweating kept him up at night. Abdi lost his appetite and his clothes became baggy. He was exhausted all the time and was gasping to breathe at one point.

Abdi had no idea that TB would have such a significant impact on his life. Before he was infected, 50-year-old Abdi lived an independent life. He made his living looking after a shop owned by one of his relatives.

When he fell ill, Abdi visited the Hargeisa TB Hospital twice, only to be told twice that he did not have TB. The third time he visited, he was much weaker and was still suffering from a painful chest, cough and fever. This time, after testing his sputum, Abdi was diagnosed with multidrug-resistant TB. Abdi began his treatment immediately.

Even though he is much better now, Abdi says he has never really felt as healthy as he was before. He still does not have enough energy to return to work. The aches and weakness in his body have decreased considerably but he still has a slight cough and feels weak. Abdi knows he is getting better and that it is just a matter of time before he is back to normal again.

Abdi is very grateful for the medication he received that helped him feel "dramatically" better. His message to WHO and the nongovernmental organizations working in the health sector is to continue to support health facilities with medicines and to develop the capacity of health workers. Supporting health workers to diagnose and respond to diseases better, and informing communities about diseases would strengthen health systems and help people like Abdi avoid contracting diseases. Another key message Abdi has is for communities to learn about the symptoms of diseases and get professional help from hospitals as soon as possible.

TB is still one of the main public health problems in Somalia, even though the incidence has been progressively decreasing – from 285 cases per 100 000 population in 2010 to 266 per 100 000 in 2018 (Fig. 1).[1] This decline is attributed to a number of actions outlined below.

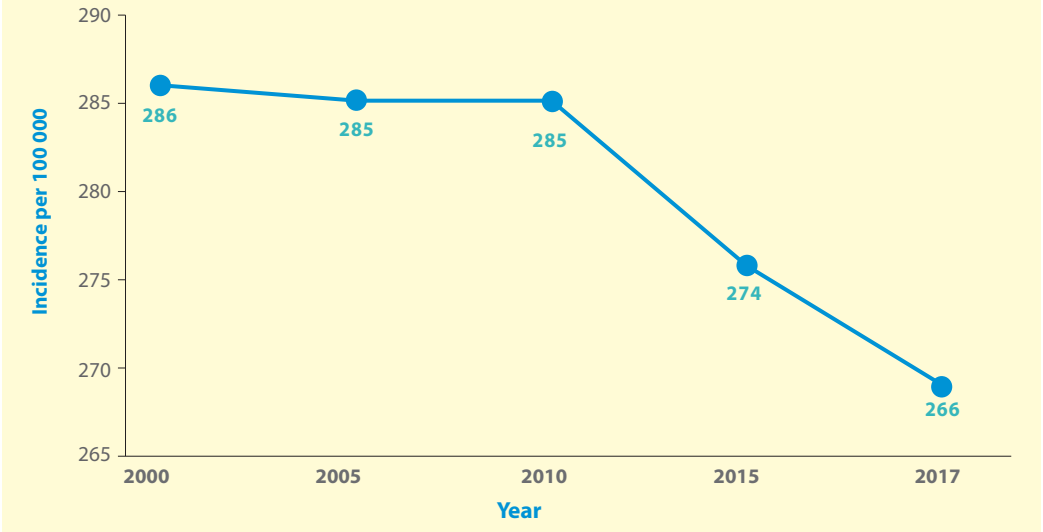
Expansion of the TB programme

WHO has expanded the TB programme in Somaliland to address the incidence of the disease in Somalia. By the end of December 2018, the number of TB centres in Somalia was 96 (Fig. 2). The increase in the number of TB centres has resulted in an increasing number of notifications of drug-sensitive and drug-resistant TB cases (Fig. 3). In 2018, 16 683 new drug-sensitive TB cases were notified in Somalia.

Furthermore, WHO has ensured that TB drug supplies for both drug-sensitive and drug-resistant TB continued uninterrupted. Since January 2018, no drug stock-outs have been reported in any TB centre in Somalia except for the multidrug-resistant TB centre in Mogadishu, which was swiftly supplemented with supplies from Kenya.

"By the end of 2018, TB diagnostic services were extended to 44 health facilities. Additionally, 218 health workers, including 40 from the private sector, were trained on TB diagnosis and treatment."

Fig. 1. Trend in tuberculosis incidence in Somalia, 2000–2017



[1] Global tuberculosis report 2018. Geneva: World Health Organization; 2018 (https://www.who.int/tb/publications/global_report/en/, accessed 20 July 2019).

Fig. 2. Trend in the number tuberculoisis (TB) centres in Somalia, 1990–2017

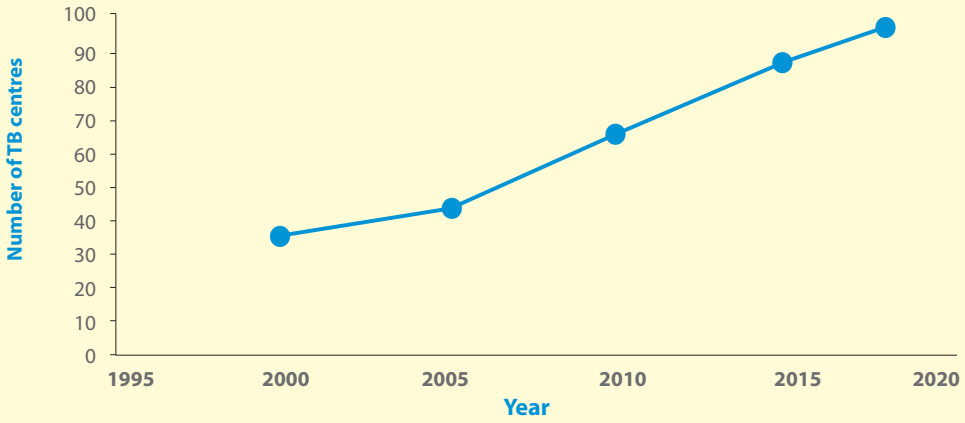
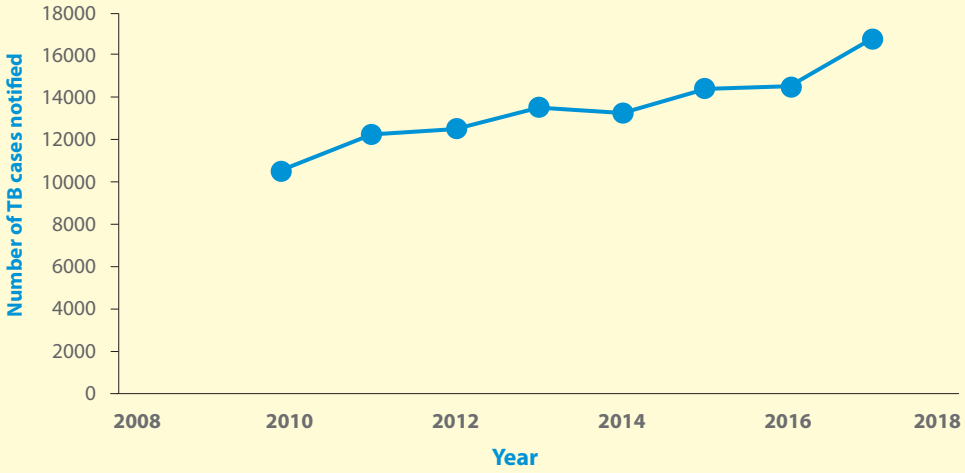


Fig. 3. Trend in tuberculosis (TB) case notifications in Somalia, 2010–2017



Supporting better diagnosis and treatment

The diagnosis of TB in Somalia has improved substantially since the country adopted the GeneXpert test for the initial diagnosis of presumptive TB. The TB diagnostic algorithm was reviewed in 2017 to ensure that all presumptive cases had access to GeneXpert diagnosis. In addition, the sputum mobility strategy was developed so that TB centres with no GeneXpert machines could send sputum specimens regularly to TB centres that had these machines. By the end of 2018, 44 health facilities had access to these diagnostic machines.

In addition, 28 mobile chest X-ray machines were provided to Somalia in 2018. These machines are useful to screen for presumptive TB cases and support TB diagnosis in children and in sputum smear-negative TB cases. In Somalia, in 2018, 12% of TB cases were children aged between 0 and 4 years; 22% were children aged between 0 and 14 years.

Capacity-building of health workers

WHO continues to build the capacity of both clinical and laboratory staff of the TB centres and multidrug-resistant TB centres. In 2018, 218 health workers, 40 from the private sector, were trained in various areas of TB diagnosis and treatment. This is part of a strategy to systematically involve the private sector in the management of TB in the country. Six of the trainees were from the Hargeisa TB culture laboratory. They were trained on TB culture using Lowenstein–Jensen medium, GeneXpert management, laboratory information management systems and external quality assurance of peripheral microscopy. Fourteen staff from the three multidrug-resistant TB centres were trained on active TB drug-safety monitoring and management. Clinicians and laboratory technicians working in the other TB centres were trained on how to diagnose and treat TB cases according to the Somalia TB guidelines.

WHO continues to guide the TB programme in the proper management of both drug-sensitive and drug-resistant TB. In 2018, the drug-sensitive TB treatment guideline was revised to include the new WHO recommendations for management of TB. In order to effectively monitor multidrug-resistant TB treatment, standard operating procedures for active TB drug-safety monitoring and management were developed. These procedures include the recording and reporting materials within the country and for the WHO Tropical Diseases Research Centre, which monitors adverse drug reactions caused by second-line drugs used in the treatment of drug-resistant TB.

During 2018, WHO helped the Somali National Tuberculosis Control Programme to expand. The increase in the number of tuberculosis centres has resulted in an increasing number of notifications of drug-sensitive and drug-resistant tuberculosis cases in the country

> ***By the end of 2018, the number of TB centres had increased to 96 resulting in expansion of the TB programme and, more notably, an increase in notifications of drug-sensitive and drug-resistant TB cases.***

Continuous programme review

The TB programme in Somalia continues to be monitored by various international partners. In 2018, three monitoring missions supervised and monitored the programme. These included missions from: the regional Green Light Committee, which reviewed the multidrug-resistant TB programme; the Global Drug Facility, which monitored drug management for TB in the country; and the Global TB Programme, which reviewed both the multidrug-resistant TB programme and the TB culture laboratory in Hargeisa.

The diagnosis of tuberculosis in Somalia has improved substantially since the country adopted the GeneXpert test for the initial diagnosis of presumptive tuberculosis. By the end of 2018, 44 health facilities had access to these diagnostic machines

Despite progress, the risk of and vulnerability to malaria epidemics continue in settlements and camps of internally displaced people because of the frequent population movement

3 838
malaria cases
detected in 2013-18

100 000
insecticidal nets distributed
in high-risk areas

5
research studies conducted
during 2012-2018

Reducing the burden of malaria in Somalia

In 2012, torrential rains hit the bustling city of Bosaso, in the province of Bari, one of Somalia's largest ports and a business gateway to the rest of the world. The rains brought with them floods and malaria – to more than 300 000 people who had never seen flooding or malaria on that scale before.

The first case of malaria reported in this region was confirmed in a private health facility in Bosaso on 12 December 2012. Reports from both public and private health facilities recorded more malaria cases in the following week which reached 51 cases, and the Minister of Health announced a malaria outbreak. Since then, the residents of Bosaso have continued to suffer from malaria. In 2015, 5 327 cases were reported, in 2016, the number of cases rose to 8 758. In 2017, Bosaso had the highest number of malaria cases – 13 829.

During 2018, the Malaria Control and Elimination Programme of the WHO country office in Somalia worked with the National Malaria Control Programme of the Ministry of Health and other key partners, such as UNICEF, and with technical support from the WHO Regional Office, to tackle this escalating

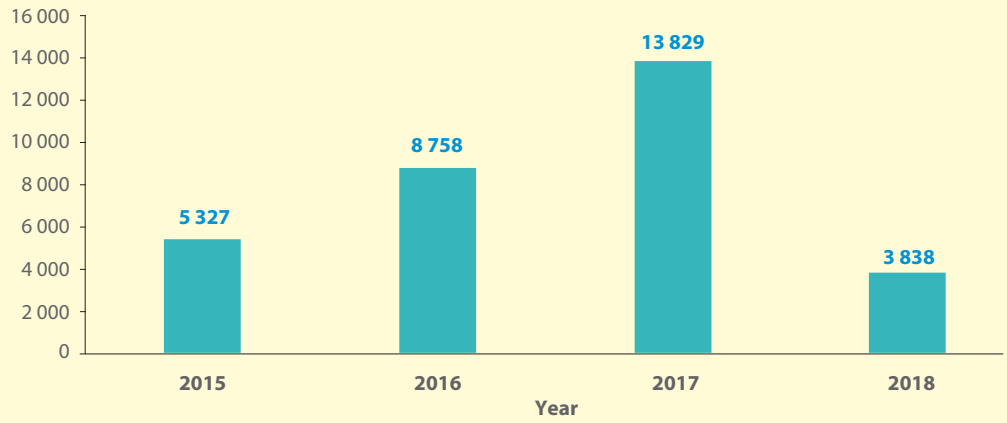
challenge in Bari. Together, they reduced the number of cases of malaria to 3 838 in 2018 (Fig. 1).

WHO and the National Malaria Control Programme distributed antimalarial drugs for complicated and uncomplicated malaria cases. To manage all severe malaria cases admitted to the main hospital in Bosaso, they continued to distribute the needed supplies to treat severe malaria in 2018. Supplies of artemisinin-based combination therapy, rapid diagnostic tests and laboratory reagents were also distributed to all health facilities in Bari for diagnosis and treatment of malaria.

As part of the efforts to control malaria, two campaigns were conducted to spray insecticide in residential areas and sites where mosquitoes were known to be breeding. In addition, 100 000 long-lasting insecticidal nets were distributed to families living in high-risk locations in Bosaso. Communities living in the city were also made aware of how to prevent and treat malaria.

"During 2018, effective support to the National Malaria Control Programme by WHO saw a reduction in malaria cases – from 13 829 in 2017 to 3838 in 2018."

Fig. 1 Confirmed malaria cases in Somalia, 2015–2018



WHO and the Somali National Malaria Control Programme distributed insecticide-treated mosquito nets in all malaria endemic areas in 2018 with support from The Global Fund

Capacity-building

In January 2018, WHO and the National Malaria Control Programme conducted training for health workers in Bosaso's public health facilities on malaria case management to strengthen their capacity to diagnose malaria, using malaria microscopy and rapid diagnostic tests. In addition, malaria treatment guidelines were distributed and the importance of adhering to them was highlighted. By disseminating malaria treatment guidelines to public health facilities in Bosaso, WHO and the national programme aimed to develop health workers' understanding of malaria prevention, causes and diagnosis and how to treat malaria cases.

Similar trainings were conducted in Somalia and outside the country for staff from the National Malaria Control Programme to help fight this life-threatening disease.

The WHO Malaria Control and Elimination Programme deployed three malaria and laboratory focal points to the Federal Government, Somaliland and Puntland. These focal points provide technical support to the National Malaria Control Programme and support capacity-building within the Ministry of Health. They also coordinate and facilitate the implementation of WHO field activities with the national programme and supervise the peripheral health facilities providing malaria diagnosis.

Research

A malaria vector behavioural study conducted between 2013 and 2014 showed the presence of various species of Anopheles mosquitoes. Two species, *An. arabiensis* and *An. funestus*, are common in Somalia. Interestingly, nine other species such as *An. pharoensis, An. rhodesiensis* and *An. dthali* were also found in these locations.

Another important operational research study, known as the malaria indicators survey (2014 and 2017), was conducted across the country to determine the prevalence of malaria and the effectiveness of interventions being used to fight it. The prevalence of malaria in 2014 was 1.9% out of 16 362 people tested, and in 2017, the prevalence was 1.88% out of 17 410 people tested.

Recognizing that successful malaria control depends on the efficacy of drugs, WHO and the National Malaria Control Programme conducted antimalaria drug efficacy studies on artemether and lumefantrine in Bosaso in 2015 and 2017–2018. Other studies on dihydro artemisinin–piperaquine as a second-line drug were carried out in sentinel sites in Jowhar and Bosaso in 2016. The findings of these studies suggested that the drugs in use were effective against *Plasmodium falciparum*. The Ministry of Health and WHO also jointly carried out an efficacy study of artemether and lumefantrine on P. vivax for the first time in Somalia which found that this drug was also effective in fighting malaria.

Data management

In 2018, the WHO Malaria Control and Elimination Programme deployed a malaria data manager to the country, who analyses information from the national health information management system (data from various levels of health facilities). The database is used at national and subnational levels

and allows users to determine how many people are suffering or have died from malaria. In addition, there is a national functional malaria database for the country developed and supported by WHO that is designed to capture malaria data only.

Malaria policies

With the technical support and resources of WHO, strategies, guidelines and studies were developed by the National Malaria Control Programme of the Ministry of Health.

- Defining the risk of and vulnerability to malaria epidemics in the Somali context (2014), which aimed to define the risk by settlement (village or group of villages).
- The Somali National Malaria Curriculum (2015), which aims to teach medical students, nurses and paramedics about malaria so that by the time they graduate they will be able to manage malaria patients.
- The National Long-Lasting Strategy for Malaria (2015–2020). A study was conducted to examine the durability and influencing factors of long-lasting insecticidal nets distributed three years ago in the country, to guide future national decisions about procurement and replacement of these nets.
- The Somali National Malaria Epidemic Detection Preparedness and Response Strategy (2015–2020). This study classified settlements by their epidemic risk within the epidemic risk zone; 65% of settlements in the Central South zone, 84% in Puntland and 32% in Somaliland have moderate to very high epidemic risk. All 57 villages that were selected by the malaria programme as epidemic prone are also in South Central Somalia and Puntland. However, these settlements only cover a small proportion of villages that are likely to be at substantial risk of an epidemic.
- Guidelines for the diagnosis and treatment of malaria (2016–2020).
- Somali National Malaria Strategic Plan (2017–2020) which aims to consolidate the achievements of previous national plans, increase equitable coverage of interventions for all at-risk populations including internally displaced and mobile populations, and enhance national surveillance systems and community-based case management to promote an enabling environment in which to move towards malaria elimination in areas of continually low transmission.
- Insecticide resistance monitoring and management (drafted in 2018, yet to be endorsed by partners).

All the policies and actions taken to control malaria have resulted in improvements being made in the quality of life of Somalis.

Improvements in quality of life with reductions in malaria cases

In 1990, malaria and neglected tropical diseases were the most important cause of disability-adjusted life years (DALYs) per 100 000 Somalis. DALYs can be thought of as one lost year of "healthy" life. This means Somalis were not able to lead the lives they had the capacity to lead, in terms of health, because of malaria and neglected tropical diseases. In 2017, malaria and neglected tropical diseases had fallen to 17th as a cause of DALYs. This means that, in the recent past, fewer Somalis have been suffering from malaria and losing healthy days of their lives as a result. This significant drop in DALYs caused by malaria is attributed to efforts made by the Malaria Control and Elimination Programme of the World Health Organization in collaboration with the National Malaria Control Programme and health authorities.

Source: Institute for Health Metrics and Evaluation (IHME). Burden of disease data for Somalia, 1990–2017 (http://www.healthdata.org/somalia).

Joint supervision by WHO and Somali National Malaria Control Programme has made an essential contribution to the success of the malaria control and elimination programme in the country

In 2018, WHO provided technical assistance to update the national data on HIV in Somalia, which led to a more realistic estimation of the burden of HIV in the country

16
ART treatment centers

111
counselling and testing services

3 231
people on antiretroviral therapy

Addressing a disease with stigma: HIV/AIDS

Monitoring the prevalence of HIV in different populations

The human immunodeficiency virus (HIV) epidemic in Somalia has been declining since 2014 and is at a low level. To monitor the prevalence of HIV, in partnership with the Somali health authorities, the World Health Organization (WHO) has conducted repeated sentinel surveys at 20 antenatal clinics and five clinics for patients with sexually transmitted infections (STIs). In addition to monitoring infection rates among patients with STIs, the sentinel surveys also monitor HIV rates among tuberculosis patients.

Between 2010 and 2016 the prevalence of HIV dropped from 1.01% in Somaliland, 0.41% in Puntland and 0.28% in South Central Somalia to 0.48%, 0.29% and 0.02%, respectively, giving an average of 0.24% in all three areas in the 2016 survey. Possible reasons for this decline include increasing awareness of the disease.

"In 2018, WHO provided technical assistance to update the national estimates of the burden of HIV using the Spectrum/Epidemic Projections Package software. The year 2018 saw a reduction in the burden of HIV in the country. An estimated 11 000 people were living with HIV in 2018 (prevalence: 0.10%), down from 23 000 in 2017 (prevalence: 0.29%)."

The findings among patients with STIs also indicate an overall declining trend, although the prevalence is not as low as in pregnant women. In the survey conducted from 2010 to 2011, the HIV prevalence in patients with STIs was 2.91%. This prevalence dropped to 2.0% in 2014, and an average of 1.11% in 2016. Among key populations at high risk of HIV infection, the most recent study in 2017 found that the average HIV prevalence was 3.4% in female sex workers, 0.5% in people in uniformed services, 0.6% in truck drivers and 0.7% in port workers (in Bosaso and Mogadishu). The prevalence of active syphilis was 2.67% in female sex workers, 0.58% in truck drivers, 0.70% in port workers and 0.23% in people serving in the uniformed services.

HIV prevalence in tuberculosis patients has also been on the decline. The prevalence decreased from 5% in 2011 when systematic testing was launched to 3.33% in 2014 and to 1.15% in 2018. The proportion of tuberculosis patients tested for HIV has continued to increase from 55.1% in 2011, 58.3% in 2014 and 89.7% of all tuberculosis patients in the country in 2018.

Improving estimates of the burden of HIV

In 2018, WHO provided technical assistance to update the national estimates of the burden of HIV using the Spectrum/Epidemic Projections Package software. This update led to a more realistic estimation of the burden of HIV in the country – HIV prevalence of 0.10% and 11 000 people living with HIV in 2018, down from 0.29% and 23 900 respectively in 2017. The reduction in the number of people living with HIV in

Although HIV counselling and testing services are available in the 16 treatment centres for antiretroviral therapy, at mother and child health clinics and at 95 tuberculosis treatment facilities across Somalia, addressing the stigma associated with the disease remains the biggest challenge

the country indicates that the increased coverage of antiretroviral therapy, which was 27.3% at the end of 2017 and had risen to 29.4% at the end of 2018, was effective. This demonstrated more accurately the impact of the various investments in HIV interventions in the country.

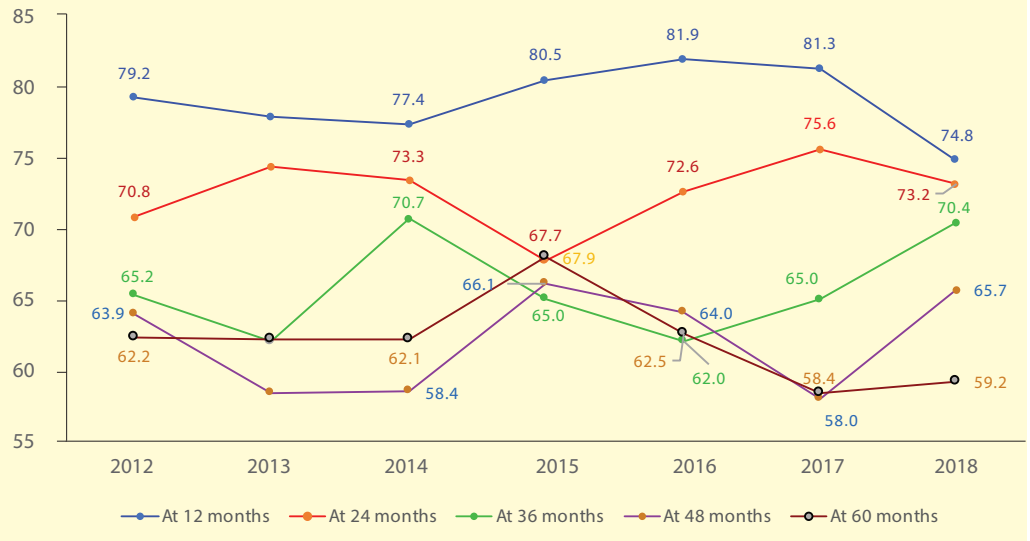
Support to HIV counselling and testing services

WHO continued to provide support to HIV counselling and testing services, the gateway to HIV care and treatment. Training for new counsellors, as well as refresher training for staff already in the service, was provided. These HIV/AIDS counsellors provide services at counselling and testing facilities in the 16 treatment centres for antiretroviral therapy, at mother and child health clinics to prevent mother-to-child transmission of HIV, and at 95 tuberculosis treatment facilities. WHO also provided supportive supervision, procured HIV test kits for tuberculosis patients and blood safety services, and supported external quality assurance testing to assess accuracy with which HIV testing is done.

HIV/AIDS treatment: antiretroviral therapy

WHO worked with the Ministry of Health and other partners to offer treatment to people living with HIV/AIDS. By the end of the 2018, 3231 people were on antiretroviral therapy at 16 sites across the country, 58.4% of whom were women and 41.6% men. Reasons why there were more women may include the easier transmission of HIV from males to females and the fact that Somali women are more likely to seek health care than men. In terms of survival, in 2018, the proportion of people on antiretroviral therapy who remained alive was 74.8% at 12 months, 73.2% at 24 months, 70.4% at 36 months, 65.7% at 48 months and 59.2% at 60 months. Trends in survival on antiretroviral therapy from 2012 to 2018 are shown in Fig. 1.

Fig. 1. Percentage of people on antiretroviral therapy who survived for 1 to 5 years, 2012–2018



Introducing advanced HIV/AIDS treatment technology

In 2018, WHO and partners reached an important milestone through the introduction of HIV viral load testing, an advanced technology that measures the amount of HIV in a person's blood. This measurement provides an insight into the effectiveness of the medication the person is taking and improves the quality of treatment being provided. Despite challenges experienced in providing supplies, 35% of the individuals enrolled for HIV treatment and care in 2018 were able to have HIV viral load testing. These tests confirmed suppression of the virus in 69% of cases. Those in whom the virus was not suppressed were given intensive treatment and counselling to ensure that they took their medicines according to the instructions, and they are to be re-evaluated with repeat testing.

Management of HIV in tuberculosis patients

In 2018, 89.7% of tuberculosis patients were tested for HIV and counselled. The HIV-positive rate was 1.11%. About 65% of all tuberculosis patients found to be co-infected with HIV also began antiretroviral therapy within six months of the HIV diagnosis. People living with HIV/AIDS enrolled in treatment were also screened for tuberculosis during every visit to the treatment sites, which contributed significantly to reducing HIV in various segments of the population in Somalia.

Throughout 2018, WHO continued to provide support to HIV counselling and testing services. WHO and partners reached a milestone in 2018 through the introduction of HIV viral load testing, an advanced technology that measures the amount of HIV in a person's blood

Overcoming dismay to find purpose and power

Mohamed Said couldn't believe his headache, fatigue, aching muscles and sore throat were anything more serious than a common cold. He was taken aback and in denial when he was told that he was HIV-positive in 2000. Going back to his home in Mombasa, Kenya, that day, Said dismissed it as a health worker who may have misdiagnosed him.

In 2001, Said visited a hospital in Nairobi with the same symptoms. He was again diagnosed with HIV. Once again, Said found it very hard to believe that he was HIV-positive. He continued to lead his life, until one day, he went into a coma. From 2004 to 2005, he remained in a coma at a hospital in Mombasa.

Fortunately, Said recovered. His mother called him and encouraged him to move back to Somalia. Even though Said had been too embarrassed to talk about his condition to his mother, he was touched by her love and concern. "If you feel you are dying, come home," Said's mother said to him, "let me look after you."

His mother's words changed his life. Said packed his belongings and left for Somalia in 2006. From then onwards, his life took a turn for the better. He met Dr Mohammed Fuje from the World Health Organization (WHO) in Somalia at a hospital in Merca.

"I still remember there were seven people ahead of me waiting to see the doctor, and I had all kinds of thoughts racing through my mind," Said recalled. "It was October 2006 when Dr Fuje started to talk to me, to counsel me."

Dr Fuje sent Said antiretroviral medicines that would help him to treat the HIV infection. Since then, Said has been taking his medicines without fail – one pill every morning and night. The treatment has worked for Said. He was very thin with sunken cheeks when he started his treatment. Nine years later, a more confident and energetic Said has gained weight and looks more healthy.

As he recovered, Said began to participate in WHO-led training on voluntary testing for HIV, counselling for people living with HIV, and on the use of data on HIV/AIDS. He currently works as Programme Coordinator for an HIV/AIDS programme run by the United Nations Children's Fund (UNICEF) and the Global Fund at Banadir Hospital. His work involves facilitating voluntary counselling and testing, providing antiretroviral therapy to patients and following up on its use. He travels across all regions where the Federal Government runs or supports programmes for voluntary counselling and testing, and antiretroviral therapy.

"There is such a huge stigma related to HIV and AIDS – everywhere – but particularly in Somalia," says Said. "People who are infected and are suffering would rather stay indoors and hide than come out and get antiretroviral medicines. And it all comes down to how people judge and treat you. I have been to restaurants where people refuse to

serve me. I don't take it personally. I am a happy man. I am serving my fellow human beings and helping them have better lives – that gives me great joy."

Said meets all kinds of people. Since November 2006, Said has been speaking to about 100 people every month about his life to help motivate them to take their medication regularly to improve their condition. Sometimes, he visits people living with HIV in their homes to provide medication or encourage them to continue taking the medicines. Said has received telephone calls from Somalis living outside the country, as far away as South Africa and Europe. They all want to know how Said turned his life around, who helped him, how much he paid for medication and how he lives now.

"I was the first person in Somalia to come out openly and talk about my status and how to cope with and prevent HIV," says Said. "I raise awareness on social media and, in 2019, I cofounded a group for people living with HIV in Central and South Somalia. We discuss our challenges and look out for each other," says Said smiling.

"In every downfall in life, a lot of positivity comes out of it," adds Said. "I now feel as if I am a medical doctor – I know so much about HIV/AIDS thanks to WHO. Every time the Ministry of Health or WHO has training on HIV and AIDS, they invite me to speak. I would like to express my heartfelt gratitude to all those who have helped me and others living with HIV/AIDS, both individuals and institutions – my mother, the WHO team, Dr Sadia from the Federal Ministry of Health, UN agencies and many others. Their support has given many people like me a lot of strength and power. I don't take anything for granted anymore."

Following the revitalization of the leprosy programme in Somalia, case detection and notification continue to improve across the country

5000
new leprosy cases

13 staff
trained on case finding

4 IDP
camps screened

Revitalizing services towards eliminating leprosy

In the past, leprosy was limited to certain pockets in Somalia. More recently, however, the disease has spread to other parts of the country, which is mainly attributed to population movements as a result of conflicts or drought.

The Federal Ministry of Health of Somalia has therefore revitalized leprosy control by reorganizing the central unit for control of neglected tropical diseases.

Leprosy staff have been recruited. With sustained efforts of the Government, many new cases are being detected through leprosy screening in camps for internally displaced people. Campaigns were started in 2016 and were supplemented by intensive awareness-raising activities to motivate people to seek medical care and to reduce stigma against the disease. Dr Abdillahi Hashi, Director-General of the Federal Ministry of Health and Human Services, recognized the need to increase women health professionals in the health department to reach women and children affected by leprosy because of the prevailing social customs in the country.

> ***The Government of Somalia is determined to provide multidrug treatment to all patients suffering from leprosy; likewise, we are committed to providing disability care for those in need and to eliminating all forms of discrimination against people affected by leprosy in the community.***
>
> *— Dr Fawziya Abikar Nur, the Federal Minister for Health and Human Services*

Camps for internally displaced people in Mogadishu and in seven other regions – Banadir, Middle and Lower Shabelle, Middle and Lower Juba, Bay and Hiraan – have been covered by the campaigns as these areas were known to be endemic for leprosy.

Efforts have begun in a small way but are steadily continuing. Dr Abdullah, the national programme manager, is working with a team of 12 staff to cover all camps for internally displaced people. The road to complete coverage is full of challenges and support from interested partners is needed. The Nippon Foundation has allocated funds to support regenerating the leprosy infrastructure in the country, and WHO has provided technical support. Dr Fawziya Abikar Nur has said that the Government welcomes partner agencies to join in combatting leprosy in Somalia.

Dr Abudullahi Aziz, national programme manager for control of neglected tropical diseases, is confident that they will be able to cover all camps in the next few months and then gradually all pockets of endemic leprosy. He said that for success against leprosy, it was critical to keep up awareness among the general public and maintain the skills of health workers to detect leprosy early.

WHO works in tandem with the Federal Ministry of Health to implement health services. All efforts are being made to support the Ministry to access support from bilateral aid agencies and donors to strengthen infrastructure and the national leprosy programme. WHO is firmly committed to helping the Federal Ministry of Health rebuild Somalia's leprosy services to eventually reach the goal of no leprosy in the country.

More recently, leprosy has spread to many other parts of the country, which is mainly attributed to population movements as a result of conflicts or drought. Early detection and provision of treatment remains the key to elimination of leprosy in the country

Sana (name changed) was living happily in Buur-eyle with her family until she noticed unusual skin patches all over the body in her late teens. Then, because of civil war in the country, she had to travel a long distance to reach Warta-Nawada camp for internally displaced people in Sinay, Banadir region. Although Sana went to many local doctors, proper treatment was not available for many years. A diagnosis of leprosy was only made when leprosy health workers from the Federal Ministry of Health visited her camp in May 2017. By that time, she was already crippled with severe deformities in her hands and feet. However, Sana was determined to get cured after being diagnosed and was given treatment free of charge by the health workers. She now earns a living working as maid in Mogadishu, the capital city.

Sana is – unfortunately – not alone. Similar stories were heard from leprosy patients during a programme review by WHO in January 2019. Several of the people with leprosy were luckier than Sana because they received timely treatment and so have not suffered disabilities.

Leprosy clinics to screen for leprosy among internally displaced people have been organized regularly in Mogadishu and other areas known to be endemic for leprosy

WHO is supporting the Somali health authorities to set up and maintain an efficient and robust supply chain for medicines and to build their capacity to monitor distribution to users. In 2018, 90 tonnes of emergency medical supplies were distributed using this supply chain to provide health services with the needed medicines

National
medicines list updated

120
staff trained on emergency medicine supplies

90 tonnes
emergency medical items supplies and disstributed

Regulating quality of and ensuring access to essential medicines

Safe, effective, high-quality medicines, vaccines and diagnostic supplies are a fundamental building block of any health system. In Somalia, where national health authorities have limited capacity, the Essential Medicines and Pharmaceutical Policies Programme of the WHO plays a vital role in supporting health and regulatory authorities to promote access to safe, effective and affordable medicines, and medical services and devices. Medicines' policies on access to essential medicines and the quality, safety and rational use of medicines are key to achieving equitable access to good-quality medicines.

The programme also supports health authorities in ensuring the rational use of medicines and medical products to avoid their misuse and side-effects to patients. For example, the overuse of antibiotics in a country leads to antimicrobial resistance – resistance of bacteria and microbes to different drugs – which is now a global health problem.

"Despite various challenges faced by the national authorities in humanitarian settings, the Essential Medicines and Pharmaceutical Policies Programme of WHO is playing a vital role in supporting health authorities of Somalia to promote access to safe, effective and affordable medicines, and medical services and devices. In 2018, WHO's support resulted in updating the Somalia Essential Medicines List as part of this process."

Key policies and systems in place

In collaboration with WHO, Somali health authorities formulated and developed the Somali National Medicines Policy in 2014. This policy addresses key issues related to the pharmaceutical sector in the country and serves as a guide for all parties interested in medicines – UN agencies, donors, local and international pharmaceutical companies, academia and health professional associations – regulating the use of medicines across the country. WHO has supported the health authorities to implement, and monitor the effectiveness of, national medicines' policies, guidelines, strategies and plans that ensure the availability, affordability and rational use of essential medicines that are safe, effective and of good quality.

In efforts to improve access to medicines across Somalia, WHO has also supported health authorities to set up and maintain an efficient and robust supply chain for medicines and build its capacity. In a landmark achievement in 2016, the health authorities, with support from WHO, were able to establish regulatory authorities for medicines to protect the population's health in the country. Since then, WHO has provided technical support to the meetings and work of these regulatory authorities, in collaboration with health ministries, UNICEF, The Global Fund, UNFPA and World Food Programme (WFP).

In 2018, WHO initiated work on and provided technical support for the development of a medicines' law. The purpose of the law is to establish an effective and efficient system to control medicines and medical products and ensure that they meet required standards of safety, efficacy and quality. WHO lobbied for support from partners such as UNICEF to fund this activity which will continue until endorsement of the law and thereafter.

Empowering health workers

WHO trained 65 national staff from various health facilities in the country on managing emergency medical supplies, and 55 staff from the private pharmaceutical sector (members of the pharmaceutical wholesalers' association, medicine and pharmacy higher education, and medical and pharmacists' associations) on the work being conducted on medicines by the WHO Essential Medicines and Pharmaceutical Policies Programme and the regulatory authorities.

Improving access to essential medicines

In 2018, WHO updated the Somalia Essential Medicines List and shared it with health authorities for official endorsement. Essential medicines address the priority healthcare needs of a population. They are selected based on public health relevance, evidence of efficacy and safety, and comparative cost–effectiveness.[1] They should be available in a functioning health system at all times, in adequate amounts, in appropriate dosage forms, with assured quality and adequate information, and at a price the individual and the community can afford.

[1] World Health Organization. Essential Medicines (https://www.who.int/topics/essential_medicines/en/, accessed 9 August 2019).

The Somalia Essential Medicines List has been updated taking into account the country's needs. It has been part of a broader series of actions to promote the optimal use of medicines and best use of limited healthcare resources. Medicines on the Somalia Essential Medicines List have priority for procurement in the public sector so as to meet the healthcare needs of the population.

To store medicines and essential supplies in Mogadishu, WHO also offered key technical guidance to the Government and contributed to the building of a new warehouse. This will facilitate the easy and efficient dispatch of medicines and supplies to communities in need in the future.

Providing support

About 90 tonnes (about 7000 cartons/boxes) of emergency medical supplies were provided and distributed to the national health authorities in areas affected by floods, drought and acute watery diarrhoea/cholera in 2018. This work was done in collaboration with the health authorities.

The Essential Medicines and Pharmaceutical Policies Programme provided key support to WHO's Malaria Control and Elimination Programme by coordinating and following up on collecting and testing of samples of antimalarial medicines (artemether–lumefantrine tablets) used

The WHO Essential Medicines Programme has supported health authorities to ensure the rational use of medicines and medical products to avoid their misuse and side-effects to patients. Over 100 health workers in Somalia were trained in 2018 on the rational use of drugs

to treat malaria caused by *Plasmodium falciparum*.

In July 2018, the Essential Medicines and Pharmaceutical Policies Programme facilitated the participation of representatives of the Somali medicines regulatory authorities in the Eastern Mediterranean Drug Regulatory Authorities Conference in Oman. WHO also developed and facilitated a two-day training workshop for the board of the medicines' regulatory authorities. This workshop included ten national regulatory staff in Somaliland and covered regulatory topics discussed at the 2018 Eastern Mediterranean Drug Regulatory Authorities Conference. WHO also supported the participation of a representative of the Somali medicines regulatory authorities in the 2018 International Conference of Drug Regulatory Authorities (ICDRA) held in Ireland.

All these activities, with support of donors, have contributed to Somalia making strides in building a technically sound, robust and sustainable health system in the country in which access to essential medicines is an integral part.

The WHO Essential Medicines Programme provided key support in 2018 to the Somali National Malaria Control and Elimination Programme on collecting and testing samples of antimalarial medicines (artemether–lumefantrine tablets) used to treat malaria caused by Plasmodium falciparum

The Health Cluster, which coordinates humanitarian actors in health, has played a vital role in bringing together key players in Somalia's health sector. Regular rapid assessments in the field and situation analyses help the cluster to identify the availability of health services and gaps

91 Million USD
mobilized for health response plan

2.4 million people
targeted for emergency health care

105
parttners in health cluster

The Somali Health Cluster: Coordinating with health partners to save lives and plan for the future

Without a central public health system in place, Somalia has spent close to three decades working to cope with health emergencies, while at the same time responding to the daily health needs of the people. To support both these crucial endeavours, the UN and national and international nongovernmental organizations have stepped in to address short-term needs and, more recently, focus on building resilience to prevent emergencies in the long term. Since 2012, the Health Cluster, which coordinates humanitarian actors in health, has played a vital role in bringing together key players in Somalia's health sector, including more than 100 health cluster partners, community representatives, health authorities and UN agencies.

This increased coordination enables participating organizations to work together with health authorities at all levels, harmonize efforts, integrate key cross-cutting issues and use available

"The Somalia Humanitarian Fund, a multidonor, country-based, pooled mechanism set up by the Health Cluster provided funding worth US$ 91 million to partners in 2018 to implement the most urgent and life-saving interventions. WHO as lead of Health Cluster remained responsible for allocating funds and also monitoring the effective use of funds for priority health projects."

resources efficiently within the framework of agreed priorities. Organizations that form the Health Cluster are expected to be proactive partners in assessing Somalis' needs, developing strategies and plans for an effective health response, implementing cross-cutting programmes and adhering to agreed standards. The Health Cluster works with partners to develop overall priorities based on the country's needs, and formulates plans to evaluate the implementation and impact of strategies.

Support to the Somalia humanitarian community

In 2018, the Health Cluster worked with the UN Office for the Coordination of Humanitarian Affairs (OCHA), health authorities and other partners to develop the Somalia Humanitarian Fund, a multidonor, country-based pooled mechanism that allocates funds to the most urgent and life-saving interventions.

WARDI Relief and Development Initiatives (a Somali nongovernmental organization), commenting on support provided by the Health Cluster and other clusters

The Somali Health Cluster collaborates closely with other clusters, particularly the Nutrition, and Water, Sanitation and Hygiene (WASH) clusters, and other stakeholders for the provision of emergency and recovery health services in Somalia.

In 2018, the Health Cluster played an important role in averting the effects of famine in Somalia, which included acute watery diarrhoea/cholera and measles outbreaks, both of which contributed to a substantial number of deaths following the 2017/2018 drought. The

The Somali Health Cluster organizes monthly coordination meetings and collaborates closely with health partners and other clusters, particularly the Nutrition, and Water, Sanitation and Hygiene (WASH) clusters, and other stakeholders to provide emergency and recovery health services in Somalia

cluster effectively coordinated the emergency health response to deal with these disease outbreaks. This entailed facilitating funding worth US$ 91 million to partners that were directly implementing health projects in locations in need, and establishing cholera control centres, cholera treatment units and rehydration centres to deal with cases of acute watery diarrhoea/cholera.

To prepare agencies for working in a difficult setting like Somalia, the cluster rolled out an initiative to train health partners on how to report on and respond to attacks on healthcare workers.

The Health Cluster is currently involved in capacity-building of partners to better respond to emergencies by integrating the health response with some parts of WASH and Nutrition as well as involving the Ministry of Health in its activities to foster long-term planning.

A technical advisory group, comprising members of partner agencies, guides activities of and decisions undertaken by the Health Cluster.

In 2018, the Health Cluster played an important role in averting the effects of famine in Somalia, which included regular assessment of areas affected by drought, especially in camps for internally displaced people, to determine the health needs and prioritize life-saving health interventions

WHO manages three stores of medicines in Somalia. In 2018, the supply and logistics programme of WHO procured 452 tonnes of emergency medicines and reagents. Out of this, 342 tonnes were distributed to support health programmes and their response to emergencies and disease outbreaks in Somalia

Stocking up to save lives

3
warehouses established

342 tonnes
life-saving supplies distributed

51 818
beneficiaries served

An essential part of responding to and preventing emergencies and disease outbreaks is having the necessary supplies in place before such an event. These supplies include medications, reagents and medical tools. In Somalia, WHO manages three stores of medicines – in Hargeisa, Mogadishu and Garowe – through the Supply and Logistics Unit. In 2018, the unit procured 452 tonnes of emergency medicines and reagents. Out of this, 342 tonnes were distributed to support programmes and their response to various emergencies and disease outbreaks in Somalia.

In 2018, WHO delivered: emergency health kits to hospitals in Banadir, Medina, Mogadishu, Kismayo, Baidoa, Beletweyne, Cadado, Garowe and Galkayo; antiTB drugs to 95 TB treatment centres across the country; and antimalaria drugs and HIV/AIDS screening kits to other health facilities.

From April to June 2018, during the flooding that took place in Somalia, the Supply and Logistics Unit was able to deliver supplies to affected areas, such as Jowhar, Kismayo, Xudur and Beletweyne, in a timely manner. Table 1 and Table 2 show the medicines and supplies distributed to support emergency response activities in 2018 and the supplies available at the end of 2018.

"Through the effective management of three stores of medicines – in Hargeisa, Mogadishu and Garowe – by the supply and logistics unit of the WHO Country Office, WHO procured over 452 tonnes of emergency medicines and diagnostic reagents in 2018, out of which 342 tonnes were distributed for life-saving interventions during various emergencies and disease outbreaks."

Table 1. Medicines and supplies distributed in 2018

Items	Quantity	No. of beneficiaries
Diarrhoeal disease kits, complete with four modules (basic, infusion, oral rehydration salts and supplementary) for 500 cases	2 kits	1 000
Ringer lactate (boxes of 10 litres)	3 375 boxes	4 218
Trauma kit A – medicines, including 70 cartons of intravenous fluids (sodium chloride and dextrose 5%)= 94 boxes in total per kit	20 kits	2 000
Trauma kit B – dressings and orthopaedic materials = 31 cartons per kit	26 kits	2 600
Cholera reference central kit complete – medicines, renewable equipment, logistics and stationery = 64 boxes for 100 patients (80S/20M) 1.1 to1.5	12 kits	1 200
Cholera reference peripheral kit complete – medicines, renewable equipment, logistics and stationery = 42 boxes for 100 patients (20S/80M), 2.1 to 2.5	8 kits	800
IAEHK kits complete for 10 000 people for three months; each kit consists of 51 cartons, version of 2011, with basic, malaria basic, supplementary of drugs, renewable equipment, PEP	4 kits	40 000
Tents: cholera hardware kit shelters , Module 6.1	4 pieces	

From April to June 2018, Somalia faced unusual flooding in the country. Despite challenges in moving people and materials, WHO was able to deliver supplies to all affected areas in a timely manner thus avoiding any major shortages and crises

Table 2. Medicines and supplies in stock in December 2018

Items	Unit	Total balance in three stores	Total weight in kg
Diarrhoeal disease kits complete of four modules for 500 cases	1 630 kits	1	1 630
Ringer lactate (boxes of 10 litres)	11 litres	1 880	20 680
Trauma kit A – 94 boxes per kit	1 308 kits	17	22 236
Trauma kit B –31 cartons per kit	565 kits	15	8 475
Cholera kits – central	1 368 kits	44	60 192
IAEHK kits complete for 10 000 people for three months	1 007 kits	2	2 014
Severe malnutrition kits	91 kits	20	1 820
Water-testing kits	20 kits	7	140
Cholera laboratory checklists	15 lists	4	60
Doxycycline 100 mg, 100 tablets per box	0.1 boxes	2 200	220
Gramme staining kits	18 kits	2	36

Think big and achieve more: this inspirational motto is driving members of WHO's national logistics and warehouse management team in Somalia to save lives through their tireless work in storing, distributing and delivering life-saving and emergency medical supplies to health facilities across the country in a timely way

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We will continue to strive to meet the expectations of all stakeholders and enhance cooperation, complementary endeavours and partnerships.

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Somalia

URL: http://www.emro.who.int/countries/som/index.html