



**WHO SYRIA  
DONOR UPDATE**  
Q2, 2018



**World Health  
Organization**

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DONOR UPDATE  
Q2, 2018

WHO team visit to the rehabilitaed  
health center in Mouadamieh.

Credit: WHO



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## FOREWORD

Credit: WHO

By the end of the second quarter of 2018, the longstanding government sieges of areas in Syria held by non-state armed groups had come to an end. The siege of eastern Ghouta was lifted in April and those in southern Damascus and northern Homs ended soon thereafter. The siege of Yarmouk camp was lifted in May.

Although the government sieges have ended, the suffering of the Syrian people continues. In June 2018, heavy and sustained air and ground offensives in southern Syria killed dozens of civilians including children and injured hundreds of others. By the end of the month, up to 160 000 people had reportedly fled their homes and villages. Several hospitals and health care centres had been damaged and forced to close, and cross-border aid convoys from Jordan had been temporarily suspended due to the intensive bombardments.

In early April, reports emerged concerning the new use of chemical weapons in the town of Douma in eastern Ghouta. The signs and symptoms reported to WHO were consistent with exposure to toxic chemicals. At the time of writing, the incident is still under investigation by the Organization for the Prohibition of Chemical Weapons.

The second quarter of 2018 saw outbreaks of acute diarrhoea (in Deir-ez-Zor governorate) and typhoid fever (in Al Hasakeh governorate). Both diseases are almost always the result of unclean water and poor sanitation. There were also outbreaks of measles across the country, indicating low vaccination coverage rates among children. Rates of cutaneous leishmaniasis, which is endemic in Syria, rose sharply, highlighting Syrians' increasing vulnerability to communicable diseases. This quarterly update highlights WHO's work preventing, controlling and responding to communicable diseases in Syria.

In May 2018, WHO released the report of its visit to north-east Syria to assess the health situation in four major camps that are hosting over 11 300 displaced families. North-east Syria is one of the regions that has been worst hit by the conflict. Access to the area is limited: many places have been heavily mined and there are high levels of insecurity. Almost all health care facilities have been severely disrupted and there has been a sharp decline in routine immunization activities. The team found that more than one third of camp households had a family member who suffered from a chronic illness but who had limited access to inexpensive treatment that would be readily available in normal times. Health care services in the camps were erratic and there were frequent shortages of essential medicines. Although polio vaccination coverage rates were high, the rate for measles vaccine coverage was not high enough to ensure herd immunity. The mission's findings emphasize the need for WHO and its partners to have access to all areas of Syria to deliver essential health services, including vaccinations to interrupt the transmission of measles and other vaccine-preventable diseases.

WHO is continuing to work with national authorities and health sector partners to restore severely disrupted public health care services, especially in areas with high numbers of internally displaced people (IDPs). In Q2, 2018, WHO delivered 404 tons of medicines, supplies and equipment and supported more than 757 300 outpatient consultations. A total of 2 450 358 children were vaccinated against polio and 966 280 were vaccinated against measles.

In late April 2018, the European Union and the United Nations co-hosted the second Brussels Conference on "Supporting the Future of Syria and the Region". Participants pledged to donate over US\$ 4 billion in aid for 2018 and another US \$3.4 billion over the next several years. Beyond the immediate challenge of providing humanitarian assistance to millions of people in Syria and neighbouring countries, the conference participants agreed to focus on the long and complex process of rebuilding Syria and the region. WHO will continue to work with all partners to respond to acute needs while gradually increasing its support for transition and recovery. Donor support will be needed more than ever to help rebuild the country's shattered health care system and infrastructure.

## 1. THE SITUATION IN Q2, 2018

In southern Syria, dozens of people were killed and hundreds more were injured following a dramatic escalation of hostilities that began on 17 June. By the end of the month, up to 160 000 people had reportedly fled their homes and villages. In conflict-torn Idleb governorate, the arrival of another 80 000 IDPs from eastern Ghouta, Hama, Homs and Yarmouk added to severe overcrowding in camps and further strained already overwhelmed health care facilities. There are now well over 1.2 million IDPs in the governorate. In Afrin district (Aleppo governorate), most health care facilities in rural areas remain closed, depriving 136 000 people of health care. In the three north-eastern governorates of Al-Hasakeh, Ar-Raqqa and Deir-ez-Zor, almost all health care facilities are closed or working at minimum capacity.

### Access to people in need

The overall scope and complexity of humanitarian needs in Syria continue to deepen. People in need of assistance are spread across the country, with the highest concentrations in Rural Damascus, Idleb and Aleppo governorates and north-east Syria. Continuing shortages of health care staff and functioning health care facilities mean that many people have very limited or no access to health care. Approximately 61% of people in need are in areas under government control, with the remainder in areas controlled by non-state armed groups and other forces.

### Eastern Ghouta

In Rural Damascus, WHO is supporting health care services in seven shelters hosting around 20 000 IDPs from eastern Ghouta. Up to 85 mobile teams, clinics and medical points have been mobilized to provide round-the-clock primary health care. A total of 2177 critically ill or wounded patients have been referred to hospitals in Damascus. Ten teams of community workers are providing basic psychosocial support and referring people who require specialist assistance. Thirty-six health care facilities are reporting to the disease surveillance system (EWARS). Despite repeated requests, WHO has not yet been authorized to enter eastern Ghouta itself<sup>1</sup>, where around 125 000 people remain. However, the Ministry of Health (MOH) has agreed in principle to conduct an in-depth public health assessment in the area and has requested WHO's assistance. WHO is preparing the assessment methodology and discussing the composition of the assessment team<sup>2</sup> and the timing of its mission with the MOH and the Syrian Arab Red Crescent (SARC).

<sup>1</sup> With the exception of one inter-agency assessment mission to Kafr Batna and Saqba on 14 May 2018.

<sup>2</sup> WHO has proposed a joint assessment team comprising representatives from WHO, the MOH, the SARC and NGOs, under the leadership of an international consultant.

## Situation in Q2, 2018

**13 million** people throughout Syria need humanitarian assistance.

**1.5 million** people are living in hard-to-reach areas.

Over **920 000** people have been newly displaced thus far in 2018.

**54 %** of health care facilities are either closed or functioning only partially.

**29** separate attacks on health care facilities were reported in Q2, 2018.

**US\$ 142 549 161** was requested by WHO under the Humanitarian Response Plan for 2018.

**\$22 484 020** has been received thus far by WHO in 2018.



WHO participates in an inter-agency assessment of a shelter hosting IDPs from eastern Ghouta.

Credit: WHO

## North-east Syria

Almost all health care facilities in the three north-eastern governorates<sup>3</sup> are either closed or only partially functioning. There have been several disease outbreaks as a result of high levels of displacement and severely disrupted basic infrastructure including water and sanitation and health care services. In Q2, 2018, WHO detected an increase in cases of acute bloody diarrhoea in Deir-ez-Zor governorate and a typhoid outbreak in Al Hol camp in Al-Hasakeh governorate. (See pages 32 and 36 of this report for information on WHO's response.)

In May 2018, WHO published the report of its mission to north-east Syria in early 2018 to assess the health situation in four IDP camps. The team found that more than two thirds of households considered distress to be a major problem. One third of households had a family member who suffered from a chronic illness but who had limited access to inexpensive treatment. Although polio vaccine coverage rates were high, the rate of measles vaccine coverage was not high enough to ensure herd immunity<sup>4</sup>. Referral services were severely limited and most public hospitals had no capacity to treat referred patients. WHO and its partners are working closely with the camp managers and residents to address gaps in health care coverage and improve mental health and referral services. WHO is also supporting the MOH's efforts to restore routine immunization services, especially in Ar-Raqqa governorate (in Q2, 2018, routine vaccination services were reactivated in 28 health care facilities in the governorate).



A WHO team carries out a monitoring visit of a health care facility in an IDP camp in north-east Syria.

Credit: WHO

<sup>3</sup> Al-Hasakeh, Ar-Raqqa and Deir-ez-Zor.

<sup>4</sup> Notably, nearly 90% of reported cases of measles in Q2, 2018 were from north-east Syria.



A WHO team carries out a field visit to Ein-Issa camp in Ar-Raqqa.

Credit: WHO

Approximately 138 000 people have returned to the main city of Ar-Raqqa in Ar-Raqqa governorate since the withdrawal of the Islamic State of Iraq and the Levant in October 2017, but the area in and around the city has been heavily mined and is extremely hazardous. Although the city's public hospital has been destroyed, other hospitals are reopening and access to health care services is gradually improving. International health NGOs are providing the main support since the city remains off limits to UN agencies.



WHO participates in an inter-agency assessment mission to Ar-Raqqa governorate, April 2018.

Credit: WHO

## Idleb governorate

Growing levels of crime and inter-factional fighting in the governorate are adding to the insecurity and affecting humanitarian access. Another 130 000 IDPs from eastern Ghouta, northern Hama and Ar-Raqqa arrived in Idleb and neighbouring Aleppo in Q2, 2018. Over half a million people have been displaced to and within the governorate since the beginning of the year, exacerbating the severe overcrowding in camps and further straining severely overstretched health care facilities. IDPs now account for around half of Idleb's population of around 2.5 million.

Health care facilities are overwhelmed and there are acute shortages of medicines to treat common diseases. People in rural settlements and camps are especially vulnerable. Even in urban areas where health care services are more available, around half the population has had to resort to private doctors and expensive pharmacies. In Q2, 2018, WHO's hub in Gaziantep distributed 95 tons of essential medicines (representing over 780 000 treatments) to health care facilities through cross-border deliveries. It also delivered supplies to mobile clinics operating in Qalaat Al Madiq, the main transit point for IDPs from eastern Ghouta.

## Yarmouk camp

After weeks of intense fighting followed by a local ceasefire agreement, 400 people from Yarmouk camp were evacuated to Qalaat Al Madiq in northern Hama governorate on 22 May 2018. People from Yarmouk were also displaced to the nearby towns of Yalda, Babila and Beit Sahem in southern Damascus. WHO delivered essential medicines (mainly anaesthetics, analgesics and antibiotics) to the three towns and is supporting mobile medical teams in Yalda and Beit Sahem. WHO is coordinating its response closely with the United Nations Relief and Works Agency for Palestine Refugees in the Near East.

## Northern rural Homs

Northern rural Homs has only 10 doctors and 10 midwives to cover a population of over 270 000. The national hospital in the main city of Homs was destroyed in 2012 and has not been rehabilitated. Fewer than half the area's 22 primary health care (PHC) centres have re-opened, and they are providing only limited vaccination, nutritional screening and other basic services. The UN has not been granted sustained access to the enclave; only the SARC and one national NGO are authorized to work there.

Very few hospitals and clinics in the whole of Homs governorate remain open. WHO is supporting the strengthening of the referral system so that seriously ill and wounded patients can be transferred to hospitals in the neighbouring governorate of Hama. Mobile medical teams, including several supported by WHO, are providing PHC services including mental health care. WHO has delivered medicines, equipment and supplies to the SARC for distribution to health care facilities in the area and is strengthening the disease surveillance system.

## Southern Syria

Following a dramatic escalation of the conflict in June 2018, over 450 000 people in southern Syria require humanitarian assistance. As of the end of June, up to 160 000 people had fled heavy and sustained air and ground offensives that reportedly killed dozens of civilians (including children) and injured hundreds more. Airstrikes caused widespread damage to civilian infrastructure, including hospitals and health care centres. A hospital in Al-Hirak was badly damaged and forced to close. Another hospital in Eastern Ghariyeh suspended its operations due to the insecurity. In all, a total of eight health care facilities came under attack in the last two weeks of June 2018. UN cross-border and cross-line convoys had to be postponed. The UN called on all parties to the conflict to ensure that cross-border humanitarian deliveries would be able to continue in a sustained, safe and unimpeded manner to reach all those in need, including the newly displaced.

WHO's hubs in Damascus and Amman activated their health sector response plans for southern Syria. The plans aim to recover the largely disrupted public health services inside Dar'a and in areas of displacement. WHO's office in Damascus dispatched over 27 tons of medical supplies and equipment to respond to urgent humanitarian health needs. Items included operating tables, intravenous fluids, antibiotics, trauma supplies, burn medications and emergency health kits. Health care facilities in southern Syria also drew on regular cross-border stocks delivered by WHO and its health partners based in Amman. Current stocks are enough to treat up to 300 000 people for three months. As of the end of June, WHO and its partners in Amman were planning to pre-position another 51 tons of emergency supplies in warehouses throughout the area, ready for dispatch to health care facilities in southern Syria as and when needed.



WHO's first shipment of 27.5 tons of medical supplies for southern Syria is made ready for delivery.

Credit: WHO

Recent data from WHO's Health Resources Availability Monitoring System (HeRAMS) show that 40% of public health care centres in Dar'a and Quneitra are closed. WHO is working with partners to increase the coverage of PHC, immunization and mental health and psychosocial support services through fixed clinics and mobile medical teams. The Organization is also supporting the establishment of referral services for wounded and seriously ill patients, as well as nutritional screening for children

## Afrin district (Aleppo governorate)

### Status of functionality of public health care facilities in Afrin



The Tall Refaat, Nabul, Zahraa and Fafin areas of northern Aleppo governorate are hosting approximately 134 000 people who were displaced from Afrin district in early 2018 following intense fighting. Another 136 000 individuals are estimated to remain in Afrin district, including over 40 000 in Afrin city.

Over 85% of communities in rural areas have no access to health care services. Although one in six families has a member who suffers from at least one chronic illness, only 25% of them are receiving proper treatment. There are very limited treatment options for patients with tuberculosis and leishmaniasis and there are no mental health or rehabilitation centres. The referral system is rudimentary and piecemeal.

WHO's office in Damascus is supporting 13 mobile medical teams and one PHC centre that are providing health care including mental health and psychosocial support and nutritional surveillance. WHO is working with health NGOs to ensure the teams are evenly spread over the area to maximize coverage and avoid duplication. There is a basic system in place to refer patients to a local hospital in Zahraa. Critically ill and wounded patients are being referred to hospitals in Aleppo city.





WHO's hub in Gaziantep is supporting 14 health care facilities, including six mobile clinics and one hospital, in Afrin city and surrounding areas. WHO is supporting the strengthening of referral services and is developing standard operating procedures for infection prevention and control and screening patients for risk factors. The office in Gaziantep is supporting the expansion of PHC services in northern Aleppo via a network of 32 primary and secondary health care facilities for a catchment area of 800 000 people. In June 2018, WHO distributed a first batch of essential medicines to health care facilities and mobile clinics in Aleppo. The supplies were sufficient to provide 3840 treatments for common diseases and trauma cases.

## Removal of items from inter-agency convoys

In Q2, 2018, WHO participated in five inter-agency convoys to hard-to-reach locations in Hama, Homs and Rural Damascus<sup>5</sup>. The Organization delivered 31.58 tons of medical supplies (enough for approximately 83 470 treatment courses) to these areas. However, government security forces continued to reject essential medical supplies. Life-saving medicines, plasma expanders and surgical supplies accounted for most of the items that were rejected without justification.

WHO is continuing to advocate for regular access to people living in hard-to-reach areas to help ensure that they receive the health care they need.

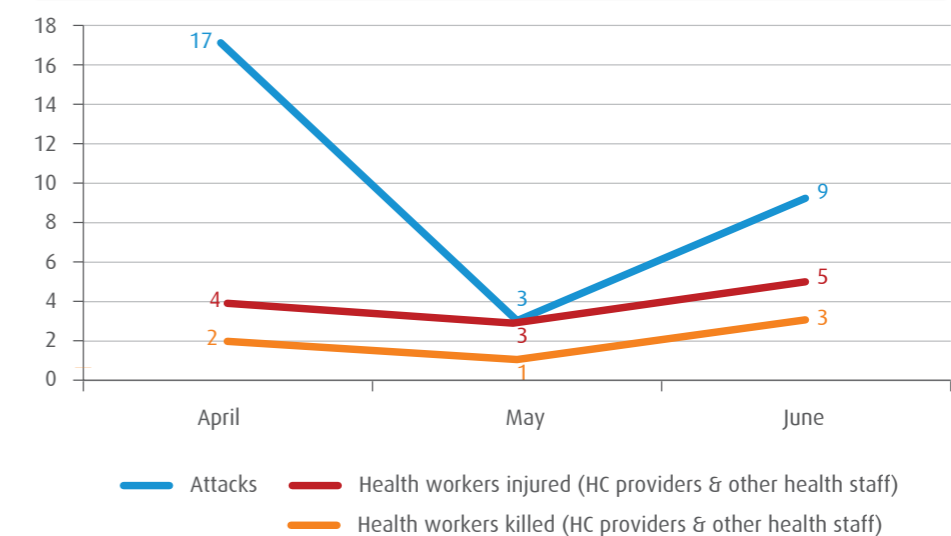
<sup>5</sup> Tlol Al Homer in Hama, Talbissa and Arr-astan in Homs, and Babila, Beit Sahem, Duma and Yalda in Rural Damascus.

## Attacks on health care

In the words of Jan Egeland, the Special Advisor to the UN Special Envoy for Syria, "health care ... is a horrific catastrophe in what is the worst war of this generation. We have had more attacks on health in Syria than in any other war of our time..."

WHO is using the Organization's new online system – the global Surveillance System for Attacks on Health Care (SSA)<sup>6</sup> – to track attacks in Syria. The SSA uses a standardized methodology to allow it to identify global and context-specific trends and allow comparisons between regions and contexts. Syria now accounts for a staggering 70% of all reported attacks on health care facilities documented by WHO worldwide. In the first half of 2018, there were more attacks on health care in Syria than for the whole of 2017.

monitoring violence against health care - Q2, 2018



Of the 29 attacks registered in Q2, 2018, 10 were from Dar'a governorate, where there was a significant escalation in military operations. Three health care workers were killed and six were injured in Q2, 2018.

Hundreds of thousands of Syrians are being deprived of essential health care due to the continuing destruction of the country's hospitals and clinics. In early May 2018, Kafr Zeta Hospital in rural Hama was destroyed by an airstrike. One staff member was killed and three were wounded. Before it was destroyed, the hospital was providing 1600 consultations, admitting 140 patients and conducting 60 major surgeries each month. It also provided PHC services for a catchment area of up to 40 000 people.

<sup>6</sup> <https://publicspace.who.int/sites/ssa/SitePages/PublicDashboard.aspx>

## 2. FOCUS ON: COMMUNICABLE DISEASES

### Overview

Communicable diseases are one of the main causes of increased mortality and morbidity in complex emergencies. Disrupted health services and vaccination programmes, limited access to health care, malnutrition, poor sanitary facilities and inadequate supplies of clean water often co-exist and greatly increase the risk of disease outbreaks. More than 6 million IDPs in Syria are living in overcrowded temporary settlements without adequate water, sanitation and health care, creating the perfect conditions for the rapid spread of disease. Another 1.5 million Syrians in hard-to-reach areas have only limited access to health care and other basic services.

WHO's main activities to prevent and control communicable diseases in Syria are as follows:

1. **Identify** the main communicable disease threats:
  - a. Assess the risks of outbreaks of these diseases
  - b. Identify potential measures to mitigate these risks
  - c. Monitor the overall health status of the population
  
2. **Prepare for and help prevent** disease outbreaks:
  - a. Stockpile essential medicines, vaccines and supplies
  - b. Strengthen vaccination programmes
  - c. Improve the availability of clean water and sanitation
  - d. Promote good hygiene practices
  - e. Conduct disease surveillance
  - f. Prepare case definitions and treatment protocols for specific diseases
  - g. Train health care staff on the case management of communicable diseases
  
3. **Respond** to outbreaks:
  - a. Distribute essential medicines, supplies and equipment to health care facilities in the affected areas
  - b. Work with partners to implement mass vaccination campaigns
  - c. Support the collection, transportation and diagnosis of disease specimens
  - d. Facilitate laboratory testing and analysis to identify disease pathogens
  - e. Identify gaps in the response and ensure they are filled
  - f. Support health promotion and risk communication campaigns
  - g. Support the case management of patients
  - h. Train health care staff
  - i. Track the progression of outbreaks from beginning to end.

WHO's main partners include the MOH, UNICEF, the SARC, the Organization's network of health NGOs, and the health care staff in over 1600 health care facilities that report to the disease surveillance system (EWARS/N).



This collapsed building in eastern Ghouta was once a functioning health care facility.

Credit: WHO

In late June 2018, five hospitals in Dar'a were damaged by airstrikes. Before they were forced to close, they were providing an average of 15 755 consultations per month for services including trauma and surgical care, emergency obstetric care, haemodialysis, physical rehabilitation and mental health. Three PHC centres in Dar'a were attacked during the same period. They were providing an average of 4775 consultations per month. The only functioning blood bank in areas of southern Syria controlled by non-state armed groups also came under attack.



Credit: WHO

Al Khalidieh health care facility in Aleppo city. The photo on the left, taken in December 2016, shows the building had been destroyed. The photo on the right, taken in May 2018, shows the rebuilt and re-equipped health care facility. WHO supported the cost of its rehabilitation.

## The main communicable disease threats in Syria

Since the crisis began in 2011, Syria has witnessed outbreaks of vaccine-preventable communicable diseases such as polio and measles. Other outbreaks have included acute bloody diarrhoea, typhoid and hepatitis A.

### Vaccine-preventable diseases

#### Polio

The disruption of Syria's national vaccination programme led to the re-emergence of polio in 2013, jeopardizing WHO's efforts to eradicate the disease worldwide. The outbreak was brought under control in January 2014, but an outbreak of circulating vaccine-derived poliovirus type 2 (cVDPV2) disease in March 2017 again emphasized the dangers of disrupted immunization services. (Cases of vaccine-derived polio are rare and occur when vaccination coverage rates are low; if a population is fully immunized, it will be protected against both vaccine-derived and wild poliovirus disease.)

The cVDPV2 outbreak occurred close to the border with Iraq and in an area with continuous population movements; it raised fears that the virus would spread into neighbouring countries. The Emergency Committee of the International Health Regulations issued temporary recommendations to help prevent the further spread of the disease. There have been no further cases of cVDPV since September 2017, but Syria remains classified as a country infected with cVDPV2, with potential risk of international spread<sup>7</sup>.

While the absence of outbreaks of wild poliovirus since 2014 indicates that Syria's polio eradication efforts are meeting with success, the cVDPV2 outbreak indicates that the country must continue with mass vaccination campaigns against the disease to ensure that every last child is reached.

Oral polio vaccine needs to be administered many times to be fully effective. The number of doses it takes to immunize a child depends entirely on the child's health and nutritional status, and how many other viruses s/he has been exposed to. Children who are not fully immunized are still at risk from polio. This emphasizes the need for all children to be vaccinated during every round of national immunization days.

<sup>7</sup> <http://polioeradication.org/polio-today/polio-now/public-health-emergency-status/>. In April 2018, the Emergency Committee extended the temporary recommendations for Syria for another three months.

## International Health Regulations (2005)

All countries of the world have a responsibility to protect themselves and other countries from outbreaks of infectious diseases and other health threats. The International Health Regulations (2005) or "IHR (2005)" represent a powerful tool to help safeguard global health.

The IHR (2005) is a binding international legal agreement involving 196 countries, including all Member States of WHO. It aims to help countries prevent and respond to acute public health risks that have the potential to cross borders and threaten people worldwide. States are required to notify WHO of all events that may constitute a public health emergency of international concern.

The IHR's Emergency Committee is made up of international experts who provide technical advice to WHO on:

1. Whether an event constitutes a public health emergency of international concern;
2. The temporary recommendations to be taken by a country faced with a public health emergency of international concern in order to prevent or reduce the international spread of disease and avoid unnecessary interference with international travel and trade.

Under the IHR (2005), temporary recommendations automatically expire three months after their issuance. The IHR Emergency Committee reconvenes at least every three months to review the epidemiological situation and determine whether the event remains a public health emergency of international concern and whether the temporary recommendations need to be modified.

### Measles

Measles is a highly contagious viral disease and it remains an important cause of death among young children globally, despite the availability of a safe and effective vaccine. In the first six months of 2018, disease data collected by WHO's office in Damascus showed that the incidence of measles had risen dramatically compared with the same period in 2017 (4056 compared with 1521, representing a 2.67-fold increase).

Due to measles' high infectivity, high population immunity is required to interrupt transmission of the virus. The herd protection threshold for measles is the highest of all vaccine-preventable diseases and varies in different settings, ranging from 89% to 94%. WHO is supporting efforts to increase the number of children in Syria who are vaccinated against this life-threatening disease. Mobile teams and fixed health care facilities are vaccinating children under five years of age, and children between five and 17 years of age are being targeted through school vaccination programmes. Children arriving in IDP camps are systematically identified and vaccinated against measles, polio and other childhood illnesses according to Syria's national immunization schedule. A total of 966 280 children in seven governorates were vaccinated against the disease during National Immunization Week in late April 2018. However, access to children in hard-to-reach areas remains a major concern.

In the current measles outbreak in Idleb governorate, around 550 children have suffered medical complications related to measles, and eight of them have died.

Nine-year old Ibrahim was one of these children. He and his four siblings were infected, but he was the only one who developed severe symptoms: a high fever, acute cough, conjunctivitis and convulsions. After three days, Ibrahim went into a coma. He was referred to a hospital in Idleb city, where he was placed in the intensive care unit. Despite round-the-clock treatment, his condition deteriorated and he died.

Ibrahim had developed one of the worst complications of measles: encephalitis. He developed severe respiratory depression and oxygen desaturation and was placed on an artificial ventilator. He suffered a series of heart attacks and initially responded to cardio-pulmonary resuscitation. However, he could not be revived after a final fatal heart attack.

After the loss of their child to measles, Ibrahim's parents wanted all other parents to understand the vital importance of vaccinating their children. "Children do not need to die of measles, because there is a vaccine that protects them against this awful disease. We urge all parents to vaccinate their children and avoid the heartbreak that we suffered when we lost Ibrahim."

### Averting outbreaks of vaccine-preventable diseases

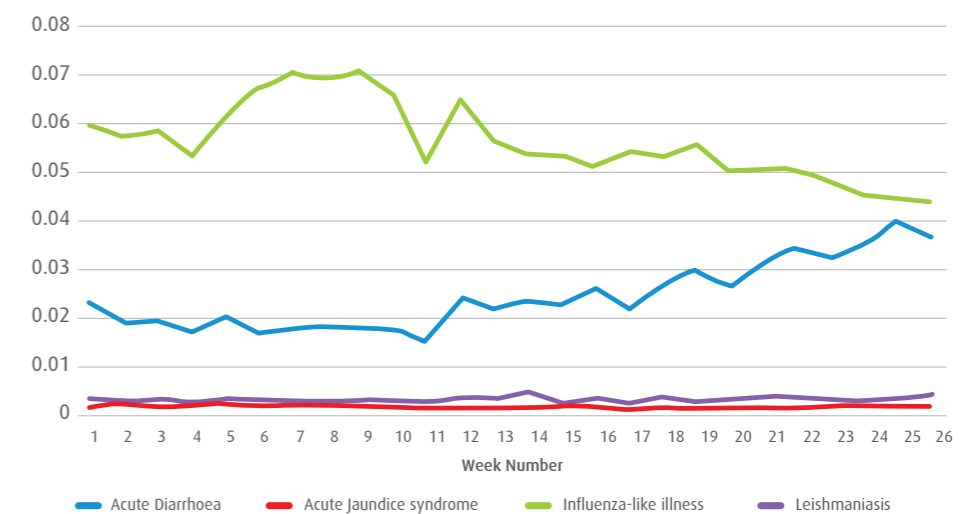
Maintaining routine vaccination services is the most important public health intervention to preserve high levels of immunization coverage and avert outbreaks of vaccine-preventable diseases. WHO is focusing on restoring routine immunization services in health care facilities and using mobile teams in hard-to-reach areas to help Syria regain its previous strong immunization coverage rates. In the governorates of Aleppo, Hama and Idleb in northern Syria, 86 vaccination centres are now up and running, compared with just five a year ago.

### Other communicable disease threats

Other main threats include diarrhoeal diseases, acute respiratory infections, leishmaniasis, tuberculosis, typhoid fever and hepatitis. WHO's response to a recent outbreak of typhoid fever in Al Hol camp is described on page 36 of this report.

The graph below shows the top four causes of consultations for communicable diseases thus far in 2018. There was a sharp increase in consultations for influenza-like illness in the winter months, and an increase in cases of acute diarrhoea in the spring, in line with seasonal trends.

Proportional morbidity for the top 4 diseases (to the total consultations) Till week 26 2018, Damascus



Shortages of safe blood and blood products have led to an increased risk of diseases such as HIV and hepatitis B and C, which can be transmitted through unsafe blood transfusions. In southern Syria, WHO is supporting the central blood bank in East Ghariyeh, which supplies fresh and frozen blood units to field and referral hospitals in Dar'a governorate. The bank collects an average of 20-25 blood units per day; when there is a spike in demand, it makes an appeal for new blood donors through campaigns in mosques and public places. The blood bank can store up to 200 units per day.

### Diarrhoeal diseases

Diarrhoeal diseases are the second leading cause of death among children under five years of age. They occur when supplies of clean water are limited and sanitation is poor. Although diarrhoeal diseases are life-threatening for children, they are also easy to treat. Since death occurs due to dehydration following rapid fluid loss because of vomiting and diarrhoea, the primary goal of treatment is to keep patients hydrated until they recover from their infections.

There is a clear link between diarrhoea and malnutrition. Each episode of diarrhoea deprives children of the nutrition necessary for growth, creating a vicious cycle where diarrhoea is a major cause of malnutrition and malnourished children are more likely to fall ill from diarrhoea. WHO works with the MOH, UNICEF and other partners to reduce the burden of diarrhoeal diseases among children by securing essential treatments, promoting early and exclusive breastfeeding and vitamin A supplementation, and improving the quality of water. Children who are diagnosed with acute diarrhoea are screened for malnutrition; those who are identified as acutely malnourished are referred to nutrition stabilization centres in hospitals.

### Leishmaniasis

In May 2018, WHO carried out a detailed risk assessment for leishmaniasis, which is endemic in Syria. There are three main types of leishmaniasis: cutaneous, mucocutaneous and visceral. Cutaneous leishmaniasis is the most commonly reported disease in Syria, but there have also been cases of visceral leishmaniasis, which is the most severe form of the disease and can be fatal if left untreated.

The incidence of leishmaniasis increased by 29% in the first four months of 2018 compared with the same period in 2017. Almost two thirds of reported cases were from Aleppo, Ar-Raqqa, Deir-ez-Zor and Hama governorates. The sharp increase can be attributed to the continuous population movements and the poor shelter and sanitation in camps. (Many people are forced to sleep on the ground, where they come into direct contact with the sandfly that causes leishmaniasis.) The lack of funding for vector control measures has exacerbated the problem and led to a corresponding rise in the incidence of the disease.

Thus far in 2018, WHO has delivered 160 000 vials of meglumine antimoniate and 63 000 bed nets to Syria's north-eastern governorates and has placed orders for additional supplies. WHO has also donated 5000 vials of meglumine antimoniate and related supplies to the MENTOR Initiative, an NGO that works to combat leishmaniasis in Syria.



Bed nets procured by WHO are distributed in Aleppo.

Credit: WHO

### Tuberculosis

Rates of tuberculosis (TB) in Syria are increasing (17.5 per 100 000 people compared with 13 per 100 000 in 2013). Because this disease is not tracked in WHO's disease surveillance system, its real incidence may be much higher. Lack of access to health care services, poverty and severe overcrowding create conditions ripe for the spread of the disease.

Before the conflict began, TB patients received free treatment, care and counselling in dedicated TB centres in all 14 governorates. As a result of the crisis, four out of every ten centres have closed; for example, there are no functioning TB treatment centres in the areas controlled by non-state armed groups in southern Syria. The centres that do remain open do not always provide the full range of services. TB patients, especially those in rural areas, are often forced to travel long distances to obtain treatment; transportation costs are expensive and insecurity is rife. Moreover, TB patients in IDP camps must obtain specific approval to leave the camps to seek treatment.

It is critical for TB patients to adhere to their six-month treatment regimens because stopping treatment early can lead to the development of drug resistance and a relapse in the disease. The risk of disrupted treatment regimens is high since there are frequent shortages of medicines and the continuing hostilities affect patients' access to health care facilities. WHO's hub in Gaziantep is preparing a strategy to combat TB in northern Syria and improve patients' compliance with their strict treatment plans. The strategy includes the establishment of a system to secure a sustainable supply of medicines for TB patients, complemented by increased medical supervision to limit treatment desertions and reduce the risk of the development of multi-drug resistant strains of TB. Gaziantep is also supporting active screening to improve the early detection of the disease, and strengthening the capacity of TB reference laboratories. Lastly, Gaziantep is assessing the quality of care in TB treatment centres in northern Syria. It will use the results to update its TB response plan and prepare targeted training for health care staff in Q3, 2018.

WHO's office in Damascus has donated around 2800 TB treatment courses to the MOH to help curb the further spread of the disease. WHO is supporting TB surveillance and screening activities in hard-to-reach areas and is providing financial aid for food baskets to support around 1000 patients while they undergo treatment. The Organization is training laboratory technicians in state-of-the-art methods for the early diagnosis of TB and instructing national TB control programme staff on new treatment protocols. All of these measures - training, proactive screening and improved diagnosis, combined with new treatments - could mean fresh hope for TB patients in Syria.

### Monitoring population health status

WHO monitors the health status of the population through its disease surveillance system (EWARS/N). WHO analyses weekly disease trends and investigates disease alerts within 24 hours. Disease incidence rates are compared with data for previous years in order to assess whether the disease is likely to become a full-blown outbreak. WHO also carries out public health risk assessments in specific geographic locations and for specific topics. It has recently conducted a public health risk assessment in north-east Syria and a risk assessment for leishmaniasis.

In March 2018, the health sector in Amman published a report of the status of health services and the populations in areas of southern Syria (primarily Dar'a and Quneitra governorates) that could be reached via cross-border activities from Jordan. Although communicable disease accounted for only 1% of disabilities among patients seeking health care, both health professionals and community members cited communicable diseases as one of their main health concerns. Health data showed that typhoid fever, watery diarrhoea and respiratory infections were serious threats across the south. Moreover, reported cases of suspected measles from Dar'a and Quneitra in 2017 were six times higher than the number reported in 2016. The health sector in Jordan has begun implementing the report's recommendations, which include the need to strengthen health care delivery in PHC centres across southern Syria.

## Preparing for and preventing communicable disease outbreaks

### Medical stockpiles

Medicines and emergency medical kits are stored in WHO warehouses in five locations in Syria (Aleppo, Damascus, Homs, Latakia and Qamishli), ready to be deployed when needs arise. Supplies to treat disease outbreaks include diarrhoeal disease kits and treatments for typhoid, meningitis and cutaneous and visceral leishmaniasis.

In southern Syria, WHO's hub in Amman maintains emergency stockpiles of kits to meet a wide range of potential response scenarios including cholera outbreaks and mass casualty events.

WHO's hub in Gaziantep maintains stocks of diarrhoeal disease kits, cholera kits, oral rehydration salts, intravenous fluids and other medicines in its warehouses in Aleppo and Idlib governorates.

When WHO first detected an increase in cases of acute bloody diarrhoea in Deir-ez-Zor, it immediately drew on stocks of diarrhoeal disease kits, IV fluids and oral rehydration salts held in its warehouse in Qamishli. These supplies were delivered to hospitals in the area.



## Vaccination

WHO is working with health authorities to restore routine immunization for children according to the national immunization schedule. In Q2, 2018, in response to the twin threats of measles and polio, WHO supported the vaccination of almost one million children against measles and around 2.5 million children against polio through mass vaccination campaigns, routine vaccination in health care facilities, and national immunization days.

WHO's office in Damascus works in close collaboration with the MOH, UNICEF and the SARC to implement mass vaccination campaigns. WHO's hub in Gaziantep works with partners including the Union of Medical Care and Relief Organizations, Physicians Across Continents and the Qatar Red Crescent Society.

WHO and UNICEF have established a mechanism to secure vaccine supplies. WHO assesses the extent of vaccine-preventable disease outbreaks and estimates the quantity of vaccines needed for each one. Requests are submitted to WHO's Regional Office for the Eastern Mediterranean, which coordinates the transport of vaccines with UNICEF. This ensures that sufficient quantities of vaccine can be made rapidly available in the event of outbreaks.

## Clean water and sanitation

Adequate supplies of clean water are essential to maintain health and reduce the risk of epidemics, especially in overcrowded settings such as IDP camps. Water is essential for cooking, drinking and cleaning. If people do not have adequate supplies of clean water, they will obtain it from sources that are likely to be contaminated. In the first six months of 2018, WHO assessed the quality of water in Aleppo, Homs, north-west and north-east Syria and Rural Damascus. More than 600 ground wells, 250 reservoirs and over 180 jerry cans were tested. WHO worked with national authorities and partners to disinfect polluted water and make it safe to use.

The key to preventing diseases from unclean water is to ensure that water is of a high quality when consumed, not just after treatment or at water distribution points. In the first half of 2018, working in close collaboration with national authorities, WASH sector partners and local communities, WHO provided over 100 000 chlorine tablets for distribution to households and chlorinated approximately 200 000 cubic metres of water in 22 000 water tankers that were used to supply villages and IDP camps in north-east Syria. One cubic metre of water is enough to cover the needs of one family per day.

WHO also works to improve water and sanitation facilities in hospitals to protect the health of patients and medical staff. This includes measures to ensure the safe disposal of medical waste. In the first six months of 2018, WHO strengthened the water supply system of five hospitals in Aleppo, Damascus and Deir-ez-Zor and provided 450 bins to store and transport medical waste in hospitals in Aleppo.

During the summer season, the demand for ice increases substantially. Much of the ice sold by local vendors in Syria is made with water from uncontrolled sources, which greatly increases the risk of diarrhoeal diseases.

In 2016, staff working for WHO's disease surveillance system (EWARN) in Gaziantep were investigating a typhoid outbreak in Idlib governorate. An initial investigation of the water supply in the area of the outbreak revealed that the water had been properly chlorinated and disinfected. Searching for other potential causes, EWARN staff set about investigating ice and food sources. When they visited ice factories in the governorate, they learned that the water used to make the ice was sourced from private wells that were not subjected to any quality control measures. Moreover, the process of making and distributing the ice did not comply with normal hygiene standards.

The EWARN team taught the factory staff how to make ice using safe water and handle it in accordance with standard hygiene procedures. They also launched a health promotion campaign to inform people about the simple measures they could take to ensure that ice was safe to use, e.g., by putting it in plastic bags before immersing it in water to prevent it from infecting the whole water source. They also advised people not to buy ice from mobile vendors without first checking the source of the ice.

A community health worker from Salqin described the potential risk of using contaminated ice. "On a home visit, I discovered a two-year-old child suffering from severe diarrhoea. The ice container was identified as a potential cause of his sickness. When the child stopped drinking iced water, his diarrhoea ceased and he made a full recovery."

EWARN teams continue to raise awareness about the risks of unsafe ice at the onset of summer, when high temperatures and electricity outages intensify the risk of contaminated water.



Stainless steel tanks installed in St. Louis Hospital in Aleppo, with new pumps to lift water to rooftop tanks.

## Health and hygiene promotion

Health promotion and risk communication messages allow people to take informed decisions to protect themselves and their families against disease. Between January and June 2018, WHO supported several health promotion campaigns conducted by community workers, who made door-to-door visits to households in camps and communities to explain the basic hygiene measures that people could take to safeguard their health.

The humanitarian health response often requires coordinated action between different sectors. In April 2018, a diarrhoea outbreak in Al-Faruqiya camp in Idleb governorate brought together the Health and WASH sectors for a joint response.

Al-Faruqiya camp consists of 200 mud huts. There are no health care facilities in the camp; instead, a mobile clinic comes twice a week. A large water tank provides the camp's supply of drinking water.

In mid-April, the mobile clinic reported a spike in cases of diarrhoea in the camp. A subsequent investigation by WHO's EWARN team revealed that the sewage pipes in the camp had broken and the contents had seeped into the water supply. Although some camp residents said they had noticed the water was not clear and had stopped using it, others had continued to drink it.

Health Cluster partners coordinated the response with the WASH network. The Organization donated supplies to the mobile clinic to help it treat patients with diarrhoea. WASH colleagues replaced the broken sewage pipe and set up a new water supply at a safe distance from the sewage line. Both sectors informed camp residents of the basic hygiene measures they could take to protect their health. WASH sector colleagues now test the quality of water in the camp every two weeks and share the information with health partners operating in the area.



A woman collecting water in Sarmada, Idleb.

Credit: WHO

## Surveillance teams risk all to track disease outbreaks in northern Syria

Zakaria was in a rush to reach Turkey. The small blue cooler that he was carrying held suspected polio samples that he had collected from part of northern Syria. He had to get them to the National Polio Laboratory in Turkey as soon as possible and he had to get them there cold, or his work and the efforts of dozens of other Syrian health workers would be wasted. Worse, children's lives would be at risk.

This time, Zakaria would not make it to Turkey. He was killed in an air strike before he could reach the border, and the precious samples he was carrying were destroyed. Zakaria worked for the Early Warning Alert and Response Network (EWARN), set up in Gaziantep, Turkey in 2013 to monitor disease patterns in Syria and respond to outbreaks of diseases such as polio, measles and influenza. The work often requires people like Zakaria to collect samples in highly dangerous areas and deliver them to laboratories, despite facing bombs, armed checkpoints and extreme weather along the way.

"Disease surveillance in Syria is risky, but it's also critical", says Dr Asm Amjad Hossain, who coordinates EWARN. "It was the efforts of these risk-takers that led to the detection of a new polio outbreak in Syria just over a year ago." Dr Naser Mhawish of EWARN remembers how the outbreak was first detected. "The first patient was a little girl in Deir-ez-Zor whose mother took her to see a paediatrician. The girl had a fever and other signs of flu, but she also couldn't walk properly. Her leg was limp, a symptom of paralytic polio," recalled Dr Mhawish.

For polio, suspected samples must be tested and the disease confirmed by a WHO-accredited laboratory. "In this case, the nearest accredited laboratory was in Ankara, Turkey, around 1000 km away as the crow flies," explains Dr Mhawish. "With the destruction of dams and bridges and armed conflict in the middle of the route, it was going to be a long journey to get the samples to the lab."

According to Dr Mhawish, the EWARN staff member assigned to the case was surrounded by fighting for more than three weeks and was unable to communicate his whereabouts. His obstacles seemed endless, but he eventually made it safely to Turkey with the specimens. Tests soon confirmed that the girl had circulating vaccine-derived poliovirus (cVDPV). The disease had previously been wiped out in Syria, but the conflict has significantly hampered routine immunization activities, putting millions of children at risk. "The hygiene and sanitation situation in many villages had become very bad," says Dr Mhawish. "And because polio is transmitted via faeces, EWARN teams knew the disease was likely to spread."

It became urgent to get samples from more suspected cases – even in dangerous or hard-to-reach areas of Syria. In the months that followed, EWARN field staff investigated and sampled hundreds of suspected cases of polio reported by a close network of physicians, nurses and community health workers. WHO worked with partners and field teams to conduct mass polio vaccination campaigns in 2017 that reached hundreds of thousands of children.



Dr Radwan Al-Obeid of EWARN says the effectiveness of EWARN is a credit to the organization's field teams and the network of health workers with whom they coordinate. "The team takes great risks to collect samples and bring them to labs for testing," he says. "It is their groundwork that enables us to study disease trends and work with health partners to figure out where and how to respond."

Dr Al-Obeid said Zakaria was a perfect example of this commitment: "I remember him very well. He loved his work and was killed while doing it. He was one of our best."

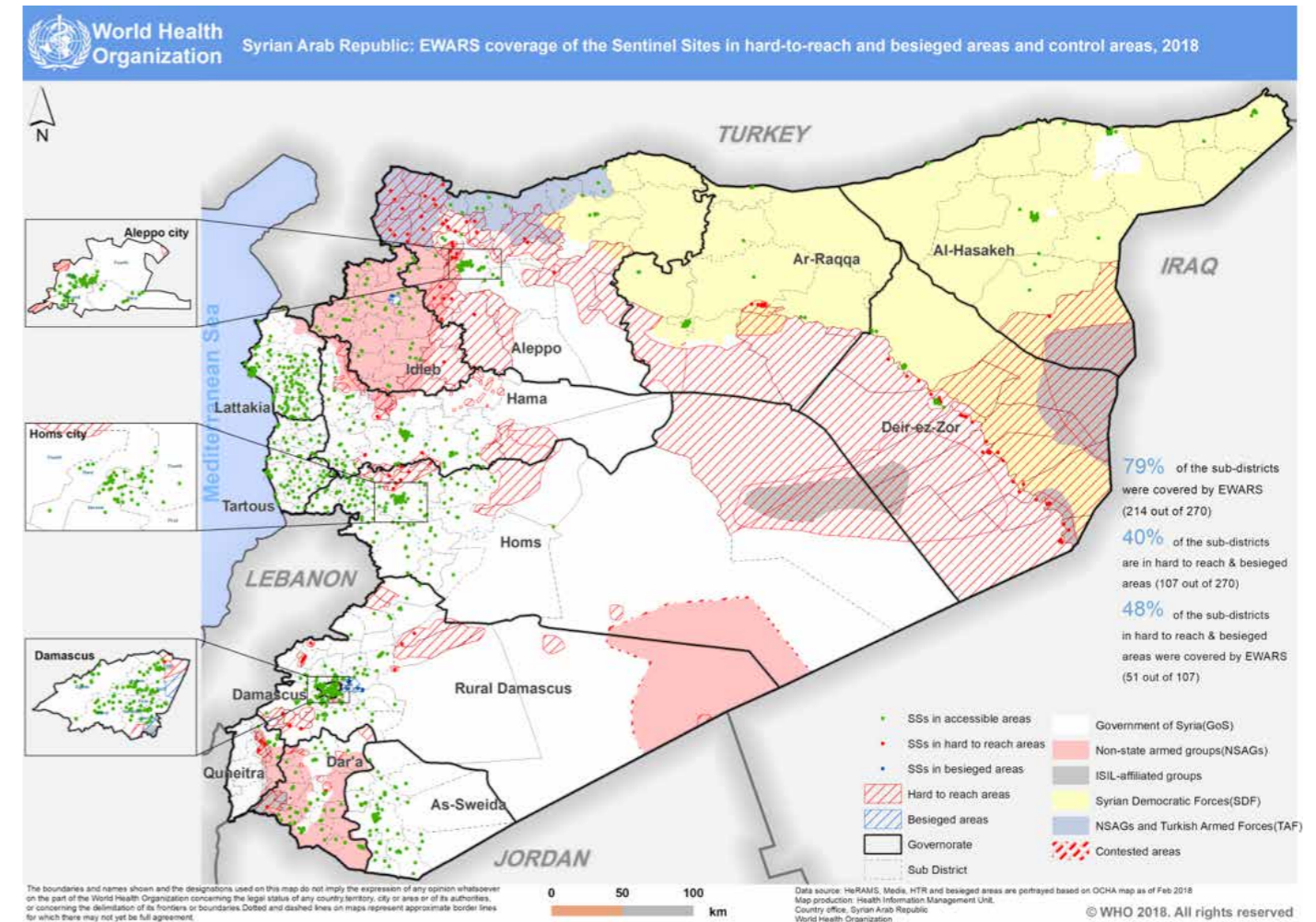
## Disease surveillance

Health care facilities throughout Syria report to the disease surveillance system (known as EWARS/N) set up by WHO<sup>8</sup>. The system relies on a network of health care providers, community health workers, surveillance officers, laboratory technicians and epidemiologists. They are responsible for collecting, investigating, reporting, analysing and disseminating information from the field and reporting it to Damascus and Gaziantep. Factors that can have a significant impact on the ability to measure trends are the number of reporting sites, the quality and periodicity of reporting, training, monitoring and supervision and the availability of laboratory support. Facilities with well-trained staff and adequate resources ensure complete, reliable and regular reporting. EWARS/N has grown from approximately 440 sites in 2013 to over 1600 sites in 2018. WHO has trained thousands of staff on EWARS/N and monitored their performance, developed standardized reporting forms and distributed laptops, tablets and mobile phones to health care facilities throughout the country. Currently, 89% of participating health care facilities are providing regular, high-quality data to EWARS/N. The results are published in a weekly bulletin that is posted on WHO's web site<sup>9</sup>.

WHO's hub in Gaziantep has launched a new EWARN platform for northern Syria. The platform will facilitate data collection and sharing and provide a unified system for data entry, analysis and visualization. WHO has trained EWARN staff on the new system and has distributed over 490 mobile phones to health care facilities reporting to EWARN. Surveillance officers are now using the new system to collect and report disease data and investigate disease alerts.

<sup>8</sup> EWARS/N denotes the two disease surveillance systems managed by WHO. WHO's office in Damascus manages the Early Warning and Response System (EWARS). WHO's hub in Gaziantep manages the Early Warning and Response Network (EWARN).

<sup>9</sup> <http://www.emro.who.int/syr/information-resources/ewars-weekly-bulletins-2018.html>



WHO's hub in Gaziantep has supported the development of a joint cholera response plan developed by NGOs that are members of the WASH and health clusters. The plan, which includes information about previous cholera outbreaks and potential hot spots, sets out NGOs' preparedness and response interventions, including health promotion campaigns.

## Technical standards

WHO works with the MOH to develop protocols for the case management of different communicable diseases. These protocols include an algorithm on the case management of H1N1 influenza in the general population as well as people at increased risk of a severe form of the disease, updated national TB treatment guidelines and guidelines for the case management of cholera.

## Training

Since the crisis began, WHO has trained hundreds of thousands of health care workers on disease surveillance and reporting, outbreak investigation and response, laboratory diagnosis, infection control and the case management of different communicable diseases including acute diarrhoea and cholera. This has helped alleviate the impact of badly disrupted health care services and has allowed WHO and partners to detect and respond to disease outbreaks, preventing their further spread.

In Q2, 2018, WHO's hub in Gaziantep supported the implementation of a two-month training programme in applied biostatistics for EWARN staff. The course was designed and delivered by Gaziantep University. Participants learned how to use statistical software, analyse and interpret epidemiological data, prepare and design methodologies for medical research, and write academic papers.

## Responding to disease outbreaks

The key to effective outbreak control is a rapid response, before an outbreak has a chance to develop into a major epidemic. Once EWARS/N has detected the early stages of an outbreak, rapid response teams are deployed to confirm the outbreak, identify all cases and determine whether control measures are working effectively. WHO and MOH epidemiologists use weekly data from EWARS/N to detect patterns of epidemic spread and use this information to decide on an appropriate response. Contact tracing (i.e., identifying, assessing and managing people who have been exposed to the disease) is an important part of efforts to prevent disease spread.

### Outbreak of acute bloody diarrhoea in Deir-ez-Zor

In May 2018, health partners in Deir-ez-Zor reported outbreaks of acute bloody diarrhoea in two locations in Deir-ez-Zor governorate. Access to these highly insecure areas has been extremely difficult for the past several years, leading to a serious deterioration in basic infrastructure including the water supply network. As of 24 June 2018, more than 650 people had fallen ill and 12 had died.

WHO and UNICEF conducted a joint field mission to the affected areas from 18 to 23 June 2018. Laboratory tests indicated that E.coli was the predominant cause of the outbreak. A bacteriological analysis of three samples taken from the nearby Euphrates river showed that the water was contaminated with E.coli above accepted standards. The team found that many people were swimming in the river or using river water for washing, drinking and cooking.



A WHO-UNICEF team inspects a water storage facility in Deir-ez-Zor in June 2018.

Credit: WHO

The team also found that the components required to obtain safe drinking water were not available in the water treatment stations along the Euphrates river. Merely supplying the missing components would not solve the problem since there were no skilled technicians to maintain the water treatment facilities. The team concluded that the best short-term solution would be to distribute chlorine tablets directly to households to stem the immediate outbreak pending a longer-term solution. As of the end of June 2018, more than 72 000 water purification tablets had been distributed to households and WHO had distributed approximately 145 000 cubic metres of water to around 70 000 people in 13 villages in the most affected areas. (One cubic metre of water is enough to cover the daily needs of one family.)

WHO and UNICEF are working jointly to chlorinate drinking water sources, tankers and reservoirs in the main outbreak areas and other villages along the Euphrates valley. WHO has also established control mechanisms to monitor the effectiveness of activities to reduce the level of contaminated water. Initial tests indicate that there has been a strong reduction in water contamination. UNICEF and WHO plan to conduct community awareness-raising campaigns in the affected villages to brief residents about the importance of washing hands thoroughly with soap and water, treating household water through chlorination, boiling and sieving, and immediately treating sick children with oral rehydration salts.

The humanitarian and health needs along the eastern bank of the Euphrates River are huge. Basic infrastructures such as health care services and water and sanitation networks have been severely disrupted. Most families live below the poverty line and struggle to meet their basic daily needs.

Nine-year-old Heba lives with her family in one of the villages along the river. The water treatment plant for her village was destroyed in the fighting, and her family had to resort to unsafe sources of water for their everyday needs. Heba fell ill with acute bloody diarrhoea, but her family could not afford to visit a doctor. Medicines from the local pharmacy made no difference: her diarrhoea worsened and she grew visibly weaker. Her mother decided to take her to the nearest hospital that offered free medical care, even though it was a long way away and the travel costs were expensive. A physician at the WHO-supported hospital prescribed a proper treatment course for Heba, who made a rapid recovery.

WHO and UNICEF are working to improve the quality of drinking water to safeguard the health of people like Heba and her family.



Heba and her mother at Kesra hospital in Deir-ez-Zor. WHO has donated diarrhoeal disease kits and medicines to the hospital to help it treat patients free of charge.

Credit: WHO



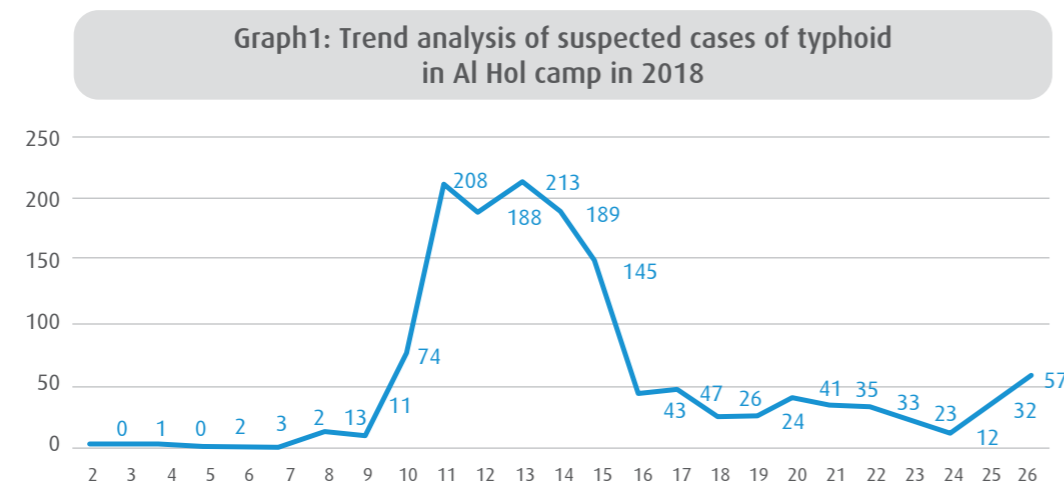
A WHO-UNICEF team inspects a water pump near the Euphrates river in Deir-ez-Zor in June 2018.

Credit: WHO

As part of longer-term measures to improve the quality of water, WHO and UNICEF will expand these water safety measures to other areas along the Euphrates valley. UNICEF plans to install permanent water purification facilities in 11 villages in the most affected areas.

### Outbreak of typhoid in Al Hol camp, Al-Hasakeh governorate

Between 1 March and 9 June 2018, 1219 suspected cases of typhoid fever in Al Hol camp, Al-Hasakeh governorate were reported to EWARS. WHO delivered medicines to hospitals in the area to help them treat patients admitted with the disease. WHO and partners distributed soap and water purification sachets to households and explained the simple measures they could take to reduce the risk of the disease. All water tankers in the camp were sterilized and jerry cans were discarded and replaced. By early April 2018 the number of cases had dropped sharply, in large part due to effective control and response measures.



## 3. OTHER ACTIVITIES IN Q2, 2018

### Trauma care

In Q2 2018, WHO delivered over 428 000 treatments for trauma patients to 10 governorates. The Organization also distributed 54 pieces of equipment including operating theatre tables, X-ray machines, ventilators and defibrillators.

WHO is supporting two physical rehabilitation centres (one in Damascus and one in Homs) that provide free services to disabled patients. In Q2, 2018, they fitted 40 patients with prosthetic limbs and conducted up to 450 physiotherapy sessions per month. WHO is also supporting NGOs that are providing physical rehabilitation services. A total of 2101 disabled patients received treatment and care through health partners supported by WHO.

To help mitigate the severe shortages of materials to manufacture prosthetics, WHO procured local supplies to manufacture 180 prosthetic limbs and delivered them to the MOH. WHO also delivered 400 wheelchairs for adults and 100 wheelchairs for children to the IDP shelters in eastern Ghouta.

In Q2, 2018, in collaboration with MOH specialists and the Syrian Resuscitation Council, WHO trained 945 health care workers on topics including first aid and basic life support, mass casualty management, managing burns and war wounds and physical rehabilitation.

WHO's hub in Gaziantep distributed trauma kits and dressings to north-west Syria to support 14 940 treatment courses in Idlib and northern Aleppo. Gaziantep trained 45 health care workers and surgeons on managing trauma cases. These trainees will go on to train others inside Syria. Gaziantep also continued to provide on-the-job training and supervision to health partners working in north-west Syria. By the end of Q2, 2018, it had completed training on the referral system for 35 health facilities. These facilities are now supporting almost 1600 referrals per month. Gaziantep is also covering the running costs of 70 ambulances in Idlib and Aleppo and supporting several hospitals and one haemodialysis centre.

Gaziantep has established a working group to map and assess all services for people with disabilities. The group will use the findings of the assessment to establish referral pathways for people with disabilities in north-west Syria.

## Achievements in Q2, 2018

**404** tons of medicines, supplies and equipment were distributed across Syria.

**757 300** outpatient consultations were supported.

**2 450 358** children were vaccinated against polio.

**966 280** children were vaccinated against measles.

**86 652** mental health and psycho-social support interventions were provided.

**213 341** children were screened for malnutrition.

### Secondary health care and referral

In Q2, 2018, WHO delivered medicines and supplies to hospitals throughout Syria and worked to strengthen referral services for patients from Afrin, As-Sweida, Dar'a and eastern Ghouta. The Organization also trained health care staff on the provision of high-quality health care services.

WHO's hub in Gaziantep is supporting NGO-managed emergency, surgical and maternity services in Idleb and Aleppo governorate, as well as one dialysis centre. It is also supporting a referral system that is being set up to connect PHC centres and hospitals across Idleb governorate.

### Primary health care

In Q2, 2018, WHO's office in Damascus dispatched a total of 310 449 treatment courses to support PHC centres in Babila, Beit Sahem, Douma, Harasta and Yalda, as well as IDP shelters in Aleppo, Al-Hasakeh, Damascus, Deir-ez-Zor, Hama, Homs and Rural Damascus. The Organization delivered seven mobile clinics to the Directorates of Health of Aleppo, Al-Hasakeh, Dar'a, Hama, Homs and Rural Damascus and one mobile clinic to an NGO health partner. It also delivered medical equipment to support PHC centres and trained 646 health care workers in eight governorates on different primary health care topics.

WHO Gaziantep distributed medicines and supplies to support 676 000 treatments for common diseases. It also delivered insulin to support 23 900 treatments and anti-lice and anti-scurvy medicines to support 31 000 treatments.

Gaziantep has prepared standard operating procedures for 28 PHC facilities in Saraqeb sub-district in Idleb governorate. The SOPs aim to standardize processes for referral mechanisms, infection prevention and control and noncommunicable disease (NCD) care. WHO has donated NCD kits to the nine facilities selected to pilot the new procedures. WHO will begin training health care staff in the PHC centres on the new procedures in Q3, 2018. Gaziantep is also supporting the running costs of seven mobile and fixed PHC clinics in rural Idleb and Aleppo.

As part of its plans to create a workforce of trained community health workers to support PHC services, Gaziantep has prepared and tested training materials on topics such as family health, nutrition, communicable diseases and NCDs. It has completed a service delivery model that sets basic standards for community health workers (e.g., minimum recommended number of visits to households). It plans to train 300 community workers in northern Syria in Q3, 2018.

WHO's hub in Amman continued to pilot-test its project to launch NCD services in four PHC centres in southern Syria. Between 1 April and 31 May 2018, these centres provided a total of 6449 NCD-related consultations and treatments.

### Immunization and polio eradication

In the second quarter of 2018, WHO supported several mass vaccination campaigns (see Annex 2).

### Mental health and psychosocial support

WHO's school mental health programme aims to train around 500 staff working in 200 schools by the end of 2018. As of the end of Q2, 2018, approximately 192 staff had been trained and around 200 schools and community educational centres in six governorates were offering mental health and psychosocial support (MHPSS) services. In Q2, 2018, WHO conducted eight training courses on the school mental health programme in As-Sweida, Hama, Homs and Rural Damascus.

WHO also trained 128 physicians on its Mental Health Gap Action Programme (mhGAP) and 330 community workers on psychological first aid.

Rehabilitation of a community centre in Al-Hasakeh was completed; the centre opened its doors in May 2018. A total of six WHO-supported community centres are now up and running. Mobile teams are providing MHPSS services in camps and shelters in Aleppo, Homs, north-east Syria and Rural Damascus. In Q2, 2018, 27 685 MPHSS services were provided through community centres and mobile teams.

WHO's hub in Gaziantep is supporting seven mobile units and two fixed clinics that are providing mental health services in northern Syria. More than 6000 people per month are benefiting from these services. In Q2, 2018, WHO conducted refresher training for 21 doctors and midwives who had previously been trained on mh-GAP and delivered psychotropic drugs (to cover 34 100 treatment courses) to 32 health care facilities. WHO is re-evaluating MHPSS needs in Idleb and will use the results to adapt its response plan. In Q2, 2018, 63 psychosocial workers were trained on mhGAP, the case management of different mental health problems, referral pathways for survivors of gender-based violence, communication skills and patient interview techniques. WHO will provide clinical supervision and support for these trainees over the next six months. WHO is working with the Child Protection Cluster to improve referrals from psychosocial workers and mhGAP-trained doctors to child protection officers in northern Syria.

In southern Syria, general practitioners previously trained on mh-GAP by WHO's hub in Amman diagnosed and treated 232 patients with mental, neurological and substance abuse disorders, including 215 patients with epilepsy and 17 patients suffering from depression.

## Health information

A health information manager based in Amman, Jordan has recently been recruited to produce standardized Whole of Syria information products, in close collaboration with all three hubs. The following five products will be prepared initially:

1. A monthly epidemiological bulletin
2. A quarterly report showing the status of health care facilities throughout Syria
3. A monthly report documenting attacks on health care
4. A monthly "Who Does What, Where and When" (4Ws) health sector report
5. A monthly report of WHO's progress against key performance indicators

The first reports will be published in Q3, 2018.

## Coordination

WHO's office in Damascus continued to coordinate the health sector's emergency health response on several fronts including Afrin, eastern Ghouta, north-east Syria, northern rural Homs and Yarmouk camp. WHO is leading the development of the health component of the Humanitarian Needs Overview and Humanitarian Response Plan for 2019. It also led the development and activation of the health sector response plan for southern Syria<sup>10</sup> and remains in close contact with health coordinators in Jordan to coordinate the response from both Damascus and Amman. WHO is working with health partners to develop a plan for the comprehensive rehabilitation of health care services in and around Yarmouk camp.

In May 2018, WHO staff from Amman, Damascus and Gaziantep attended a two-day workshop in Beirut to discuss how to prepare for changes in lines of control in Syria and improve coordination and information sharing, with the goal of ensuring the continuity of health care services in affected areas while safeguarding patients and humanitarian workers.

There has been an improvement in the rate of health sector partners' reporting to the "Who Does What, Where and When" (4W) matrix. Reporting to the 4Ws matrix is mandatory.

WHO's hub in Gaziantep coordinated the health response for around 27 000 IDPs evacuated from eastern Ghouta to northern Syria. It supported the referral of over 450 patients who required hospitalization. To help meet acute needs in Idleb, Gaziantep's health partners have increased their capacity from 70 to 100 mobile clinics. The health cluster in Gaziantep has finalized priority proposals for the Humanitarian Pooled Fund for northern Aleppo. Another five NGOs have received permission to provide humanitarian aid in the area through five PHC centres and eight mobile units. The health cluster has also established an advisory group on advocacy and communications and a coordination mechanism to allow NGOs to report attacks on health care.

WHO's office in Amman brought together 39 participants from 21 agencies (including cross-border health partners and conflict analysts) to review the staff, logistics, systems and structures required for the humanitarian response in Dar'a and Quneitra. The result of the meeting was a costed sector preparedness and operational response plan<sup>11</sup>.

<sup>10</sup> The health cluster in Amman has developed its own plan for the response in southern Syria; to ensure complementarity and avoid overlap, the two offices (Damascus and Amman) have consulted each other in the course of preparing their respective plans.

<sup>11</sup> <https://www.humanitarianresponse.info/en/operations/jordan-cross-border/document/jordan-cross-border-health-sector-preparedness-plan-southern>

## Nutrition

A total of 719 PHC centres in 13 governorates in Syria are offering nutritional surveillance services for children under five years of age. In Q2, 2018, they screened 213 341 children for malnutrition; those who were severely malnourished were referred for specialized treatment in stabilization centres. A total of 201 malnourished children were referred in Q2, 2018, compared to 281 for the same period in Q2, 2017. This decrease can be partly attributed to better screening and preventive measures such as the Infant and Young Child Feeding programme and the Baby-Friendly Hospitals initiative. UNICEF is the lead agency of the Nutrition sector in Syria.

## Working with partners

NGO health partners supported by WHO were instrumental in providing round-the-clock health care services to tens of thousands of people from eastern Ghouta who were displaced to eight shelters in Rural Damascus. More than 179 800 consultations were provided, mainly for chronic diseases and child health care.

WHO has hired an external organization to monitor the quality of health care services offered by its NGO partners, as well as their financial and project management capacities. Thus far, 11 NGOs in four governorates have been evaluated. WHO is reviewing the results of these evaluations and plans to build the capacity of its NGO partners by providing targeted training on identified areas of weakness.

## 4. FINANCIAL OVERVIEW FOR Q2, 2018

Under the Humanitarian Response Plan for 2018, WHO appealed for US\$142 549 161 to implement the activities outlined in sections 2 and 3 of this report. As of the end of Q2, 2018, it had received 16% of the required amount. The table below shows the funds received by WHO thus far in 2018:

Donor	Amount received (US\$)
European Commission Directorate-General for European Civil Protection and Humanitarian Aid Operations (ECHO)	5,495,819
Japan	5,568,723
Norway	6,268,806
Sweden	3,953,909
United Nations Office for the Coordination of Humanitarian Affairs - Syria Humanitarian Fund	1,196,763
<b>TOTAL</b>	<b>22,484,020</b>

### Funds allocated by project

Project	Amount required (US\$)	Amount received (US\$)	Funding gap (US\$)
Strengthen trauma care/mass casualty management and physical rehabilitation	21,506,125	2,962,233	18,543,892
Improve sustainable and quality secondary health care, obstetric care and referral services across the country	49,573,989	7,162,154	42,411,835
Sustain & improve delivery of primary health care services addressing chronic diseases & child & maternal health services	24,090,513	6,866,390	17,224,123
Scale up the national and sub-national immunization programme and polio eradication activities	21,910,796	849,468	21,061,328
Reinforce national and sub-national surveillance systems for the early detection, prevention and control of potential epidemic prone diseases in Syria	6,082,326	982,100	5,100,226
Enhance mental health and psychosocial support services	8,031,551	1,063,080	6,968,471
Strengthen health information systems for emergency response and resilience	3,311,719	674,208	2,637,511
Reinforce inter- and intra-hub health sector coordination for effective health response in Syria	2,731,000	824,751	1,906,249
Strengthen the prevention & early detection of malnutrition in children under five years of age, & referral for treatment of severe acute malnutrition with complications	1,212,000	353,100	858,900
Establish water quality monitoring & integrated medical waste management systems in areas of returnees & IDP camps	4,099,143	235,400	2,790,140
Pending allocation		511,134	
<b>TOTAL</b>	<b>142,549,161</b>	<b>22,484,020</b>	

## Annex 1 Summary of results in Q2, 2018 (Based on selected key performance indicators)

#	Project	Damascus	Amman	Gaziantep	Total
1	Number of outpatient PHC consultations supported	360,066	9,051	388,183	757,300
2	Number of mental health and psycho-social support interventions provided	71,704	422	14,526	86,652
3	Number of NGOs as implementing partners	38	2	21	61
4	Number of rolled out mobile medical teams	116	0	63	179
5	Total weight of delivered health supplies	309	1	94	404
6	Total number of healthcare providers trained	4,607	0	1,632	6,239

## Annex 2 Vaccination campaigns implemented in Q2, 2018

Governorate	Type of campaign	Date of campaign	Implementing partners	Age group	N° of children targeted	N° of children vaccinated	Coverage rate	Comments
Aleppo Homs Hama Al-Hasakeh Deir-ez-Zor Ar-Raqqa Damascus	bOPV*	22- 30 April 2018	MOH	Under 5	900 000	929 599	103.9%	
Aleppo Al-Hasakeh Deir-ez-Zor Ar-Raqqa Rural Damascus	Measles	22-30 April 2018	MOH	Under 5	540 910	425 019	79%	
Idleb, Aleppo, Hama and Homs	Polio (OPV) supplementary immunization campaign	from 17 March to 13 April 2018	UOSSM, PAC, QRCS	Under 5	764 550	739 634	97%	
Idleb, Aleppo, Hama and Homs	Polio (OPV) supplementary immunization campaign	7-14 May 2018	UOSSM, PAC, QRCS	Under 5	718 977	781 125	109%	The increase in administrative coverage of the second campaign is related to the population influx from Damascus, Rural Damascus, Homs and Hama.
Idleb, Aleppo and Hama	Measles and rubella	April 2018	UOSSM, PAC, QRCS	Under 5	629 959	541 261	86%	Six vaccination centres (9% of the total target, including the whole of Homs governorate) postponed activities due to security and access constraints.

\* Bivalent oral polio vaccine



## Annex 3

### Web stories and media updates for Q2, 2018

<http://www.emro.who.int/syr/syria-news/who-health-supplies-reach-southern-syria-as-needs-grow-amid-increased-fighting.html>

<http://www.emro.who.int/syr/syria-news/primary-health-care-centre-in-rural-damascus-reopens-with-who-support.html>

<http://www.emro.who.int/syr/syria-news/who-concerned-about-suspected-chemical-attacks-in-syria.html>

<http://www.emro.who.int/syr/syria-news/japan-assistance-healthcare.html>

<http://www.emro.who.int/syr/syria-news/explosive-hazards-pose-fatal-risks-to-children-and-families-in-syria.html>

<http://www.euro.who.int/en/health-topics/emergencies/syria-crisis-health-response-from-turkey/news/news/2018/03/who-supports-large-scale-polio-and-measles-vaccination-campaigns-in-northern-syria>

<http://www.euro.who.int/en/health-topics/emergencies/syria-crisis-health-response-from-turkey/news/news/2018/03/japan-boosts-assistance-for-vital-health-care-in-syria>

<http://www.euro.who.int/en/health-topics/emergencies/syria-crisis-health-response-from-turkey/news/news/2018/04/northern-syria-access-to-primary-health-care-gives-hope-to-malnourished-child>

<http://www.euro.who.int/en/health-topics/emergencies/syria-crisis-health-response-from-turkey/news/news/2018/04/surveillance-teams-risk-all-to-track-disease-outbreaks-in-northern-syria>

<http://www.euro.who.int/en/health-topics/emergencies/syria-crisis-health-response-from-turkey/news/news/2018/04/who-delivers-185-tonnes-of-medical-supplies-to-improve-access-to-health-services-in-northern-syria>

<http://www.euro.who.int/en/health-topics/emergencies/pages/news/news/2018/4/investing-in-the-health-of-syrians-is-an-investment-in-the-future-of-syria,-who-says2>

<http://www.euro.who.int/en/health-topics/emergencies/syria-crisis-health-response-from-turkey/news/news/2018/04/photo-story-leaving-no-one-behind-saving-lives-through-immunization-exhibit>

<http://www.euro.who.int/en/health-topics/emergencies/syria-crisis-health-response-from-turkey/news/news/2018/05/new-report-on-who-europe-health-emergency-response-to-the-crisis-in-the-syrian-arab-republic-in-2017>

<http://www.euro.who.int/en/health-topics/emergencies/syria-crisis-health-response-from-turkey/news/news/2018/05/reaching-out-with-mental-health-services-for-displaced-syrians>

<http://www.euro.who.int/en/health-topics/emergencies/syria-crisis-health-response-from-turkey/news/news/2018/05/who-and-health-partners-immunize-hundreds-of-thousands-of-children-in-northern-syria>

## Annex 4

### WHO strategic interventions under the Humanitarian Response Plan for 2018

- Strengthen trauma care/mass casualty management and physical rehabilitation.  
US\$ 21,506,125
- Improve sustainable and quality secondary health care, obstetric care and referral services.  
US\$ 49,573,989
- Sustain and improve delivery of primary health care services addressing chronic diseases & child & maternal health.  
US\$ 24,090,513
- Scale up the national and sub-national immunization programme and polio eradication activities.  
US\$ 21,910,796
- Reinforce national and sub-national surveillance systems for the early detection, prevention and control of potential epidemic prone diseases.  
US\$ 6,082,326
- Enhance mental health and psychosocial support services.  
US\$ 8,031,551
- Strengthen health information systems for emergency response and resilience.  
US\$ 3,311,719
- Reinforce inter- and intra-hub health sector coordination for effective health response.  
US\$ 2,731,000
- Strengthen the prevention and early detection of malnutrition in children under five years of age, and referral for treatment of severe acute malnutrition with complications.  
US\$ 1,212,000
- Establish water quality monitoring and integrated medical waste management systems in areas of returnees and IDP camps.  
US\$ 4,099,143

