



KEY PRIORITIES

+5,900

SUSPECTED
CASES

6%

OF THE POPULATION
IN THE NORTHEASTERN
REGIONS ARE WITHOUT
ACCESS TO ENOUGH
WATER

45%

OF THE PUBLIC
HEALTH CENTRES
ARE NOT FULLY
FUNCTIONING

CRISIS IMPACT OVERVIEW

- On 10 September 2022, the Syrian Ministry of Health announced a cholera outbreak after 15 confirmed cases and one death. By that time, at least 936 cases of severe acute watery diarrhoea and six related deaths had been identified in the country, possibly linked to the cholera outbreak (OCHA 12/09/2022). As at 27 September, the outbreak was rapidly extending in the northeastern governorates of Ar-Raqqa, Deir-ez-Zor, and Hasake. There were over 5,900 suspected cholera cases, around 98 confirmed cases, and 36 related deaths. Most of the cases are reported from Aleppo, Deir-ez-Zor and Al-Hasakeh governorates (OCHA 27/09/2022). Testing capacity has been limited, meaning cases may be underreported (IRC 21/09/2022).
- The increase in cholera cases is suspected to be related to the fact that around five million people use the Euphrates River as their main water source despite its direct contamination with the regular discharge of sewerage directly into the water (France 24 22/09/2022; OCHA 22/02/2022). The river has had low water levels since January 2021, also possibly leading to a higher concentration of cholera-causing bacteria (TNH 06/09/2022 and 23/09/2022).
- Syria has been facing water shortages because of drought, and the lack of electricity has been limiting the functionality of water treatment plants (REACH 19/04/2022; WASH Working Group accessed 23/09/2022). With no other drinking water sources in the short term, cases are likely to increase (REACH 21/09/2022).
- While cholera cases treated immediately only lead to deaths in 1% of patients, without immediate care, the mortality rate can be between 25–50% of cases (WHO 30/03/2022; REACH 21/09/2022). At least 45% of health facilities in Syria are partially or not functional (OCHA 22/02/2022). Armed conflict, economic sanctions, and shortages of fuel, water, and electricity already challenge the healthcare system. It lacks the capacity to deal with a cholera outbreak, increasing the risk of deaths (WHO 21/09/2022).

ANTICIPATED SCOPE AND SCALE

- Syria is currently facing a drought that has been limiting people's access to water (REACH 19/04/2022). KIs interviewed by REACH reported that, in less than a third of assessed communities, all households had access to sufficient water (REACH 21/09/2022). One of the coping mechanisms of the population has been purchasing water from private vendors (OCHA 09/09/2021). Most of this water comes from the Euphrates River, which deals with contamination from sewage discharge; it has been established that the water being sold is not treated (WHO 18/09/2022). Given current conditions and limited options to avoid the consumption of contaminated water, cholera cases are expected to rise.
- War is significantly affecting the Syrian health system. In northeastern Syria, an estimated 50% of physicians have left because of the violence (WHO 27/01/2022). As at September 2021, 45% of the 1,800 public health centres in the country were not fully functioning (IRC 31/03/2022; Health Cluster/WHO 13/01/2022). Given the inability to test for, confirm, and adequately manage all cholera cases, complications and underreporting are possible, which could lead to more cases (WHO 18/09/2022).

HUMANITARIAN CONSTRAINTS

- Some Syrian provinces in the northeast are under a Kurdish autonomous administration (SACD 11/01/2022). The difference in leadership may imply varying coordination levels for the humanitarian response.
- Northeastern Syria has the least access to electricity in the country. In July 2022, households had an average of seven hours of electricity per day (REACH accessed 23/09/2022). This situation and a nationwide gasoline shortage could limit communications and transport for humanitarian assistance (France 24 07/08/2022; UNDP 21/07/2022).
- In Deir-ez-Zor, there is still fighting between armed groups and attacks on civilians, which could restrict humanitarian operations (Al-Monitor 11/05/2022; ACLED 09/09/2022; ACAPS 07/07/2022).

NEEDS

WASH

Since 2020, low rainfall has been contributing to drought in Syria. The worst affected regions are in the northeast, which the cholera outbreak is also currently hitting the hardest (OCHA 22/06/2021). At the same time, the war has damaged two-thirds of water treatment plants, half of pumping stations, and one-third of water towers across Syria (UNICEF 28/07/2022; France 24 22/09/2022). At least 70% of discharged sewage is untreated (UNICEF 28/07/2022). At least half of all sewage systems are also dysfunctional (Daher 25/07/2022). In the northeastern regions, in around 79% of the KIIs conducted by REACH it was reported that assessed communities are not connected to the sewage system (REACH 21/09/2022).

Faced with rising water prices because of drought and the limited capacity of water treatment plants, people have started using surface water from the Euphrates River or water purchased from private sources (ECHO 18/07/2022; The National 22/09/2022). The water from the Euphrates River is polluted, including with the direct discharge of sewerage, meaning at least five million Syrians (the number of people who depend on the waters of this river) are probably consuming polluted water (OCHA 22/02/2022). Unregulated private companies sell this water without sterilisation for the consumption of the population (Save the Children 20/09/2022; OCHA 12/09/2022). In at least 37% of the KIIs conducted by REACH it was reported that assessed communities were relying mainly on water from private companies. KIIs in 91% of the communities assessed reported that households were not treating the water before consumption (REACH 21/09/2022).

Access to water, electricity, and healthcare are interconnected, as failure in one area highly affects the others. A lack of electricity in the northeastern regions is related to the limited capacity of the water supply infrastructure. As power generation capacity is down by 60–70%, access to drinking water is scarce, which is one of the reasons more people have started relying on private vendors (ICRC 01/10/2021; OCHA 24/07/2022).

The risk of the epidemic spreading is higher in IDP camps because the sites are densely populated and have poor sanitary conditions (ECHO 20/09/2022). In May 2022, a quarter of IDP sites reported cases of waterborne diseases, 65% of which were diarrhoea. In August 2022, reported cases of acute diarrhoea in IDP camps increased by 58% compared to 2021. In at least 40% of the KIIs conducted by REACH it was reported that assessed communities did not have latrines available, and 44% mentioned open defecation as a common practice in their sites (REACH 21/09/2022).

Health

Armed conflict has destroyed or damaged more than half of the medical facilities in Syria (PHR 15/12/2021; OCHA 22/02/2022). Under these conditions, in the absence of adequate medical care, the cholera outbreak is likely to be even more severe.

As at 27 September 2022, around 5,900 suspected cholera cases had been reported, and around 98 had been confirmed (OCHA 27/09/2022). NGOs responding to the outbreak are in need of cholera response kits and pharmaceutical supplies (NES-Health Working Group et al. 19/09/2022). The WHO reports that in some of the governorates with cholera outbreaks, cholera testing facilities are inadequate (WHO 18/09/2022). NGOs responding to the outbreak are in need of cholera response kits and pharmaceutical supplies (NES-Health Working Group et al. 19/09/2022). The WHO reports that in some of the governorates with cholera outbreaks, cholera testing facilities are inadequate (WHO 18/09/2022).

The number of health facilities is insufficient. Where health services are available, they are unaffordable to many. KIIs interviewed by REACH in 90% of the assessed communities and 95% of IDP sites reported health services were unaffordable. In 41% of the assessed communities, it was reported that there were no functioning health facilities, and in 47% of the assessed sites, overcrowding was reported (REACH 21/09/2022).

There is a lack of trained staff to provide basic health services. At least half of the country does not have enough health personnel to serve the population (PHR 15/12/2021).

Constant electricity and water failures affect medical facilities, as the lack of electricity and water prevents basic operations and procedures (OCHA 22/02/2022).

The governorates of Ar-Raqqa, Al-Hasakeh, and Deir-ez-Zor have the highest costs and lowest availability of health services in the country (OCHA 22/02/2022).

AGGRAVATING FACTORS

Drought

Access to safe water is critical to good hygiene and preventing the spread of cholera. Drought, low water levels of the Euphrates River, and a lack of functional water treatment plants make access to safe water challenging in Syria.

Low levels of rainfall since 2020 have been resulting in water scarcity throughout the country, leading to higher prices and less availability of safe water for the population (OCHA accessed 27/09/2022). The Euphrates River is one of the major water sources and currently has low levels (BBC 06/05/2021; Al-Monitor 27/08/2022). In June 2022, approximately 44% of communities connected to the piped network only received water for a maximum of two days per week. In total, 70% of communities have had decreased access to water over the past few years, with Deir-ez-Zor and Ar-Raqqa being the most affected (OCHA 09/09/2021).

Food insecurity

Low water levels of the Euphrates River and a lack of rainfall have been heavily affecting the northeastern governorates, where much of agricultural production in the country is concentrated (OCHA 22/06/2021). The lack of water limits the irrigation of crop areas, leading to lower yields. According to some estimates, between 75–90% of the rain-fed crop yield in Syria will be lost as a result of drought (OCHA 09/09/2021). Crops are also being irrigated with contaminated water, possibly making them sources of cholera as well (AP News 21/09/2022; CARE 16/09/2022).

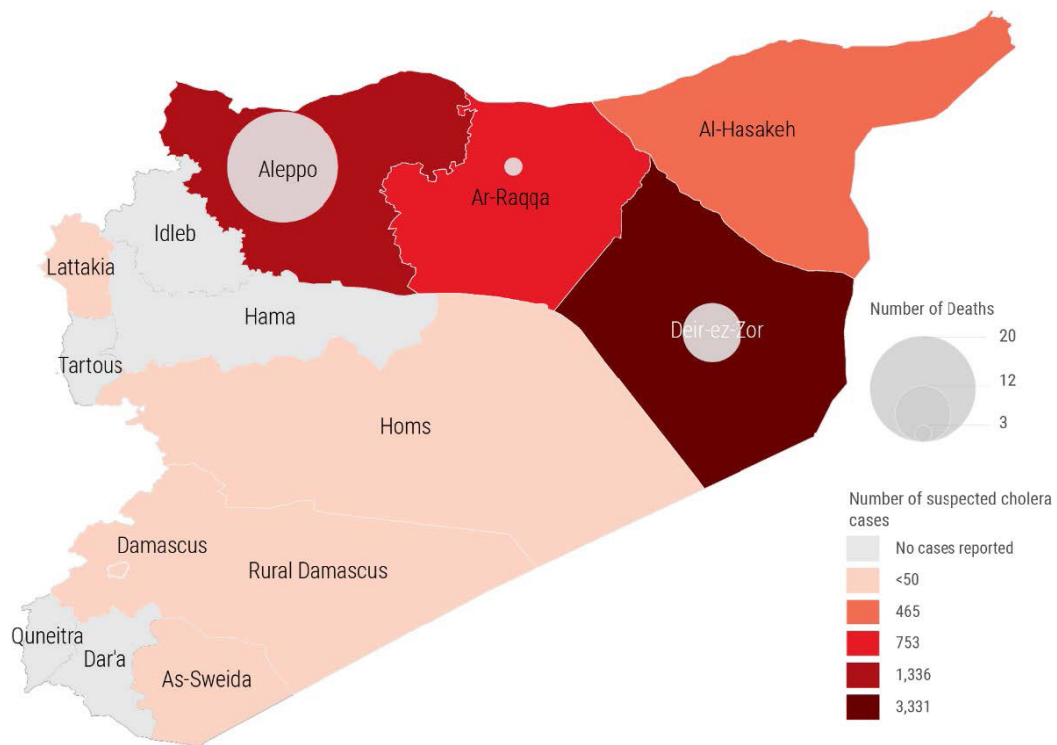
Approximately 12.4 million people in Syria (around 70% of the population) are food insecure (WFP accessed 24/09/2022; AAH 15/03/2022). Around 5.5 million are malnourished, and half of them are in the northeastern regions (WHO 19/05/2022). In areas with a high prevalence of malnutrition, there is more potential for cholera to spread amid an outbreak (Hove-Musekwa et al. 07/12/2010). Cholera cases tend to be more severe and last longer in people who are malnourished (Bragança Lima et al. 21/06/2021). That the cholera outbreak is occurring in the region with the most malnutrition cases in Syria could imply a higher rate of fatal cases.

Armed conflict

Armed conflict has been active in Syria since 2011, displacing around 5.6 million people to other countries and 6.9 million people internally. These figures imply that more than 40% of the total population of the country is currently internally displaced (UNHCR 18/07/2022 and 15/03/2022). The war has damaged or destroyed a good part of healthcare infrastructure (at least 55% of public health facilities) and WASH infrastructure (two-thirds of water treatment plants across Syria, half of pumping stations, and one-third of water towers) (UNICEF 28/07/2022; OCHA 22/02/2022; France 24 22/09/2022). As mentioned above, this situation may aggravate the cholera outbreak, as reduced human and infrastructural capacities to care for infected people and identify cases may lead to increased mortality and contagion. The limited capacity to make water potable also means that affected populations will continue to be at risk of drinking contaminated water.

The majority of war-displaced people in Syria are in the northwest or northeast, two of the regions most affected by the cholera outbreak. About 54% of these people live in substandard, damaged, and/or inadequate shelters. In the governorates of Al-Hasakeh, Deir-ez-Zor, and Ar-Raqqa, shelter density in several cases reaches between 81–100% above the capacity for which they were built (OCHA 22/02/2022). Sanitation facilities in many IDP shelters are also inadequate, as several are not connected to the water mains or sewerage system (UNICEF 05/2022). In this context of overcrowding and limited WASH facilities, the IDP population could be one of the most affected by the cholera outbreak (ECHO 20/09/2022).

DISTRIBUTION OF SUSPECTED AND CONFIRMED CHOLERA CASES (23 SEPTEMBER 2022)



Source: OCHA (27/09/2022)