

**General Country Information:**

The Republic of Chad is located in central Africa and borders Libya, Sudan, the Central African Republic, Cameroon, Nigeria and Niger. Chad is divided in 22 regions which are subdivided into 61 departments. N'Djamena, the capital, is the largest city. Lake Chad was once the second-largest lake in Africa but has shrunk down to less than 10% of its former size during the last few decades.

Chad became a part of France's colonial system in 1900 and the French mostly settled in the south while governing the Muslim north through indirect rule.

Independence was proclaimed on August 1960. In 1965, northern regions dissatisfaction with the president erupted in a civil war that was to continue without interruption until 1993.

More than three-quarters of the Chadian population is rural. Chad's primarily agricultural economy has long been handicapped by its landlocked position and its instability. Since 2000, major foreign investments took place in the oil sector.

In December 2005, fighting between the Chadian regular army and rebel groups from Chad and Sudan resumed in the north-eastern region of Chad. Despite a peace agreement signed in Dakar in July 2006, the Chadian-Sudanese relations remained tense with regular attacks. Early 2010, a strengthening of relations between Chad and the Sudan has led to a dramatic improvement in security in eastern Chad. As a result of the ongoing conflict in Darfur, an estimated 350 000 Sudanese have fled their country to seek refuge in Chad. The overcrowding, low standards of environmental hygiene and inadequate supplies of potable water lead to a precarious situation for both refugees and host population.

Outbreaks of measles, meningitis and cholera are frequent all over the country. In the UNDP index, Chad is ranking 163 out of 169 which is below the regional average.

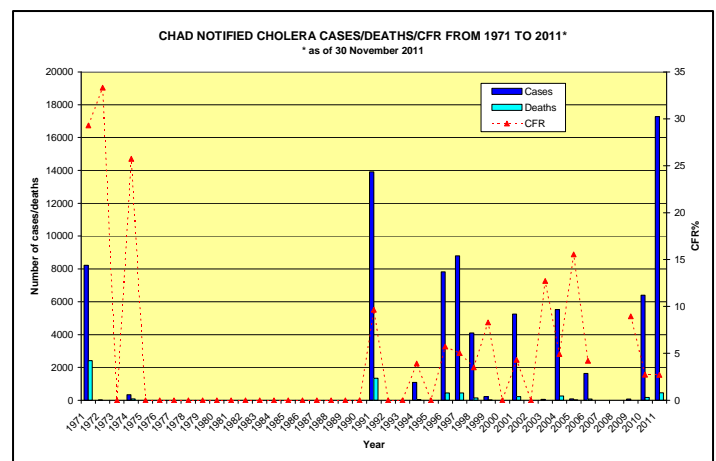
**Cholera Background History:**

The first cases of cholera were reported in 1971 when the current pandemic hit the African continent, previously free of this scourge since the end of the nineteenth century.

In 1971, following outbreaks in the north-eastern areas of Nigeria and Cameroon, Chad suffered a short but intense outbreak at the height of the hot, dry season, accounting for 8 230 cases and 2 411 deaths. (case fatality rate, CFR of 29.3%). In 1974, Chad reported 338 cases and 87 deaths, again with a high CFR of 25%.

From 1975 until 1990 (during the internal conflict), no cholera case was reported. In 1991, Chad was hit by a large outbreak with 13 915 cases and 1344 deaths.

Since then and until 2006, cholera was reported each year except in 1992, 1993, 1995, 2000 and 2002 and has thus become endemic.



Between **1996 and 2004**, cases ranged between 4000 and 8800 per year with a CFR between 3.5% and 5.7%. Outbreaks tend to follow the same pattern originating in the Lake and Kanem regions, close to Lake Chad, then spreading towards Hadjer-Lamis and N'Djamena. Cross-border transmission often occur in the Lake Chad basin between Chad, Cameroon, Niger and Nigeria.

In **2006**, the first cases were registered on 2 June 2006 in Karassoua Moussari (Hadjer Lamis region). Three weeks later, cases were also reported in Bol district on the islands of Lake Chad. Soon after N'djamena and Kanem regions were also affected respectively in July and August. Laboratory tests confirmed the presence of *V. cholerae* 01 Ogawa in all the affected regions. After reaching a peak between 16 and 22 October, the outbreak was brought under control. The total number of cases and deaths were respectively 1633 and 68, CFR of 4.1%. A comparison of the attack rates and CFRs in the four affected regions shows that the risk of dying of cholera is more important outside of the capital where the density of healthcare facilities is low. This scenario was equally confirmed during the 2001 outbreak.

In **2007 and 2008**, Chad did not report any cholera cases to WHO. In **2009**, Chad reported 67 cases including

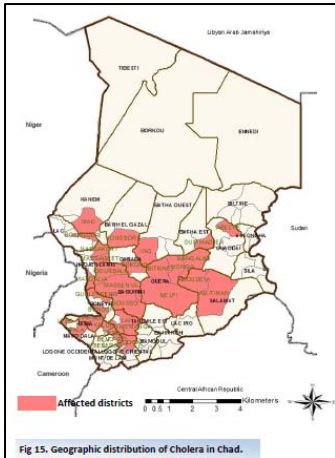


Fig 15. Geographic distribution of Cholera in Chad.

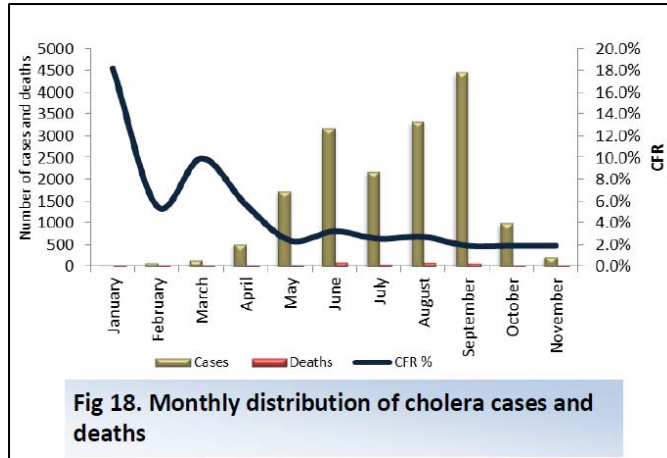


Fig 18. Monthly distribution of cholera cases and deaths

**2010-2011:** Since July 2010, cholera cases started to be reported in the Lac and Mayo-Kebbi-Est regions bordering Nigeria, Niger and Cameroon where an epidemic is currently still ongoing. The government of Chad officially declared a cholera epidemic on 30 August 2010. The peak was reached during the first week of October before a progressive decrease in cases until the end of 2010.

In January 2011, the number of cases started to increase again and during September, 4 410 including 83 deaths were reported. (see map & graph)

**Map of affected districts as of 30 Sept 2011 and distribution of cases and deaths per month**

**WHO Support Actions:**

- **2011:** distribution of kits, sensitization of the population, enhancement of surveillance, case management, strengthening of laboratory capacity for early detection and monitoring of the outbreak and treatment of water sources and coordination.
- **November 2006:** Multidisciplinary investigation mission
- **2004:** Assessment and support mission to Eastern Chad (refugees from Darfur) for preparedness of EDD (Epidemic Diarrhoeal Diseases) focusing on water and sanitation
- **2001:** Assessment mission for use of OCV (Oral Cholera Vaccine) in nomadic populations

**Demographic and Socio-Economic Data:**

(Sources for Document: WHO, UNHCR, UNICEF, UNDP)

<b>Geography</b>	Total surface	1 284 000 km <sup>2</sup> (landlocked)
	Capital	N'Djamena (population: 721 000)
	Regions	22 regions (61 depts)
	Official language	Arabic and French
<b>Environment</b>	Climate	Tropical in south, desert in north, arid plains in center, dry mountains in northwest
	Rainy season	from June to early September (Sahelian region)
	Dry Season	from October to May (Sahelian region)
	Floods and droughts	Periodic droughts and locust plagues Lake Chad doubles in size during the rainy season (in the past few decades, Lake Chad has shrunk down to 10% of its original size)
	Natural resources	Petroleum, uranium, kaolin, fish (Lake Chad), gold, limestone, sand and gravel, s
<b>Demographics</b>	Population	9 944 201
	Religions	51% Muslim (north), 35% Christian (south), 7% indigenous religions
	Ethnic groups	More than 200, (Baggara, Buduma, Fur, Knembu, Kim, Lisi, Masalit, Sara, Toubou)
	Migrants (refugees)	131 000 IDPs in eastern Chad (as of June 2011) 350 000 refugees from Sudan & Central African Republic (as of January 2011)
	Nomadic people	Very important nomadic pastoralist community (mostly in central Chad)
<b>Economy</b>	Industry	Oil, cotton textiles, meatpacking, construction materials
	Farming	Cotton, sorghum, millet, peanuts, rice, potatoes; cattle, sheep, goats, camels
<b>Health Indicators</b>	Per capita total expenditure on health	94Int\$ (2009)
	Life expectancy at birth (yrs)	Male: 47      Female: 48 (2009)
	Probability of dying under five (per 1000)	209 (2009)
	Number of physicians	345 (2004)
<b>Communicable Diseases</b>	Malaria, tuberculosis, meningitis, measles, Adults HIV prevalence rate (age 15-49): 3.4% (2009)	
<b>Risk Factors for Cholera</b>	Population using improved drinking-water sources	50% (2010)
	Population using improved sanitation facilities	9% (2010)
	Population undernourished	35% (2002-2004)

