

WHO Representative's Office in Iraq

Situation Report on Cholera Outbreak in Northern Iraq

Date of Reporting: 6th of September 2007

1. Overview

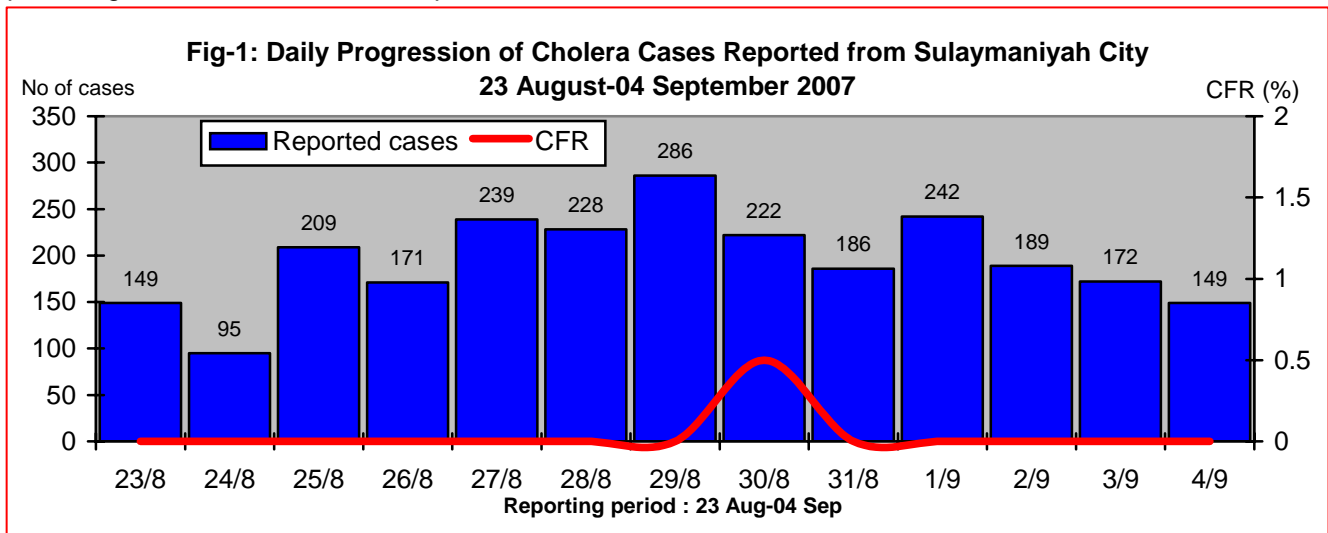
As of today (6th of September 2007) eleven districts of Northern Iraq has reported laboratory-confirmed cases of cholera. One more district in Sulaymaniyah province has reported laboratory-confirmed cases of cholera bringing the total number of districts reporting positive cases of *vibrio cholerae* in the province to five out of eleven. So far between 23 August and 03 September 2007, the cumulative number of cases of acute watery diarrhoea reported from five out of eleven districts of Sulaymaniyah province stands at 3,182¹ including 9 deaths with an overall case fatality rate of 0.28%. In Sulaymaniyah province, *Vibrio cholerae* has been laboratory confirmed in 283 stool specimens so far.

While during the period from 29 July to 2 September 2007, the health authority of Kirkuk province reported a total of 3,728 cases of acute diarrhoeal disease including 1 death (CFR: 0.026%). The first index case of cholera, confirmed by laboratory test, was reported from Kirkuk province on 14 August 2007.

On 6th of September, six stool specimens collected from suspected cases in Erbil centre district of Erbil province has been tested positive for *Vibrio cholerae* serogroup 01 Inaba signifying that cholera has spread to three provinces of Northern Iraq now (Sulaymaniyah, Kirkuk and Erbil)

2. Update on Cholera Situation in Sulaymaniyah City

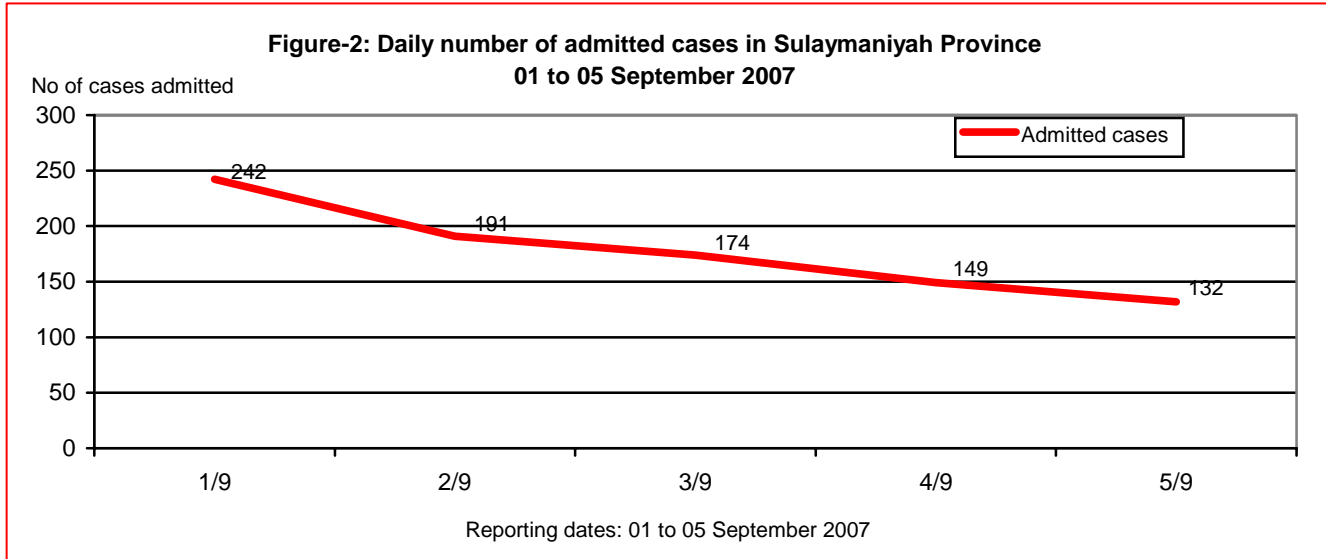
Up to date data on cumulative number of cases reported from Sulaymaniyah city (excluding other districts of the province) are available today and the data reveals that from 23 August to 04 September 2007, a total of 2,537 cases of cholera including 1 related death (CFR: 0.04%) were reported from Sulaymaniah city (Excluding the other affected districts of Sulaymaniyah province). The daily progression of cases reported from Sulaymaniyah city and as shown in figure-1 shows a slight decrease in case load in recent days as compared to the previous days. However due to incomplete reporting and inconsistent data flow, the epidemiological trend of the prevailing situation needs to be interpreted with caution.



Note: The epi curve has been plotted based on the daily update on cholera situation received from the field either by text message, voice message or by e-mail. Therefore, the figure should be regarded as "preliminary" and subject to revision retrospectively as the surveillance system improves.

¹ The cumulative number of cases reported from the entire province till date is still awaiting.

The assessment mission conducted recently by the Medical Officer (CSR) of WRO-Iraq has also observed that the patient flow in all the hospitals of Sulaymaniyah province is gradually decreasing with mainly cases of mild dehydration currently reporting to the hospitals. Data received from the hospitals of Sulaymaniyah province (Figure-2) also reveals that the trend of admitted patients with severe dehydration from cholera is also on the decline in recent days as compared to the beginning of the outbreak. However, the transmission of *Vibrio cholerae* is still circulating in the province and from 4 districts in the province, it has now spread to another new district (Garmian). So far, 5 out of 11 districts of Sulaymaniyah province have reported laboratory-confirmed cases of cholera



3. Update on Cholera Situation in Kirkuk Province

Nothing to report than what has been presented in the 2nd situation report published on 5th of September. All the five districts of Kirkuk province have reported laboratory-confirmed cases of cholera. As more updates are available from the field, the sitrep would be posted with new figure.



4. Situation in Erbil province

Because of the close geographic proximity of Erbil province to Sulaymaniyah and Kirkuk, the two provinces of Northern Iraq which are currently affected by the ongoing cholera outbreak, it was always feared that cholera might spread to Erbil province as well. With the laboratory confirmation of six stool specimens for *Vibrio cholerae* serogroup 01 Inaba, it has now been established that cholera has spread to this province as well. So far only one out of seven districts in the province has reported laboratory–confirmed cases of cholera.

Before reporting of these laboratory-confirmed cases, epidemic preparedness measures for early alert and prompt response to any probable outbreak from cholera was strengthened. The Water Quality Engineer and the Medical officer (CSR) of WRO-Iraq recently conducted an assessment mission to Erbil province to check the preparedness measures in the province and their findings were as follows:

4.1 Water quality

- All the main water resources in the province have a well maintained chlorination system and the residual chlorine level as the water leaves the source was measured to be of 2-2.5mg/l.
- The residual chlorine was available at the network and at household level with a concentration varying between 0.2-0.5 mg/l which was in compliance with WHO's standards for safe water;
- There was no shortage of chlorine at the Department of Water Supply.
- Joint monitoring teams from DOH & DWS were doing the sanitary inspection and collecting water samples from different locations including delivering hygiene messages to the household wives.
- DOH teams were distributing chlorine tablets and soap at some of the villages.
- The team needed some support in terms of increasing number of vehicles and provision of DPD1 tablets which are used for measurement of residual chlorine.(WHO-Iraq office would be supporting the DWS with supply of DPD1 tablets).
- The water quality control laboratory set up by WHO at the department of Water Supply during the Oil for Food program were still functioning in excellent conditions in terms of cleanliness, work environment, test performance, data management and reporting;
- The laboratory technicians of this water quality control laboratory were found short of training (WHO-Iraq office would be conducting some training courses for these laboratory technicians to upgrade their skills on some specific areas)
- Some shortage of DPDI tablets for residual chlorine measurement was noted (WHO-Iraq would provide the required amount of DPDI tablets)

4.2 Surveillance for cholera

- Active surveillance was introduced through out the province;
- Collection of stool samples from all suspected cases were scaled up in order to detect any case of cholera early;
- The surge capacity of the rapid response teams of provincial health authority were improved through necessary training so that field investigation could be conducted immediately following any rumour received from the community so as to detect and confirm any possible case/cluster of cases quickly ;

Following this assessment mission conducted by WHO, two major decisions have been taken and already implemented:

- WHO has recruited a Water and Sanitation Engineer for Erbil province who would work in coordination with three ministries of the province- Ministry of Health, Municipalities and Ministry of Environment to support these agencies in improving environmental health situation in the province (mainly in the areas of water treatment, ensuring safe sanitation and maintaining safety standards for drinking water)
- The MO (CSR) of WRO-Iraq would conduct a training course in Erbil province for the health care providers on case management, outbreak investigation and data collection.

5. Meeting of the High level National Committee on Cholera Preparedness and Outbreak in Baghdad

WR-Iraq, today, participated in the meeting of the high level national committee on cholera preparedness and outbreak held in Baghdad. WR-Iraq briefed the committee on the epidemiological trend of the outbreak, WHO's engagement in the affected provinces to respond to the ongoing outbreak and the strategic actions that needs to be undertaken to contain the outbreak and limit its spread. After the meeting, a press briefing was held jointly participated by the Undersecretary of the Ministry of Health and WR-Iraq and both the WR-Iraq and the Undersecretary of Health briefed the media on the prevailing situation and the measures undertaken by the government to contain the outbreak

6. Urgent needs for combating the cholera epidemic in Northern Iraq

The urgent needs specified in sitrep-1 are being revised in light with discussion with WR-Iraq who is currently in the field.
