

WHO Representative's Office in Iraq

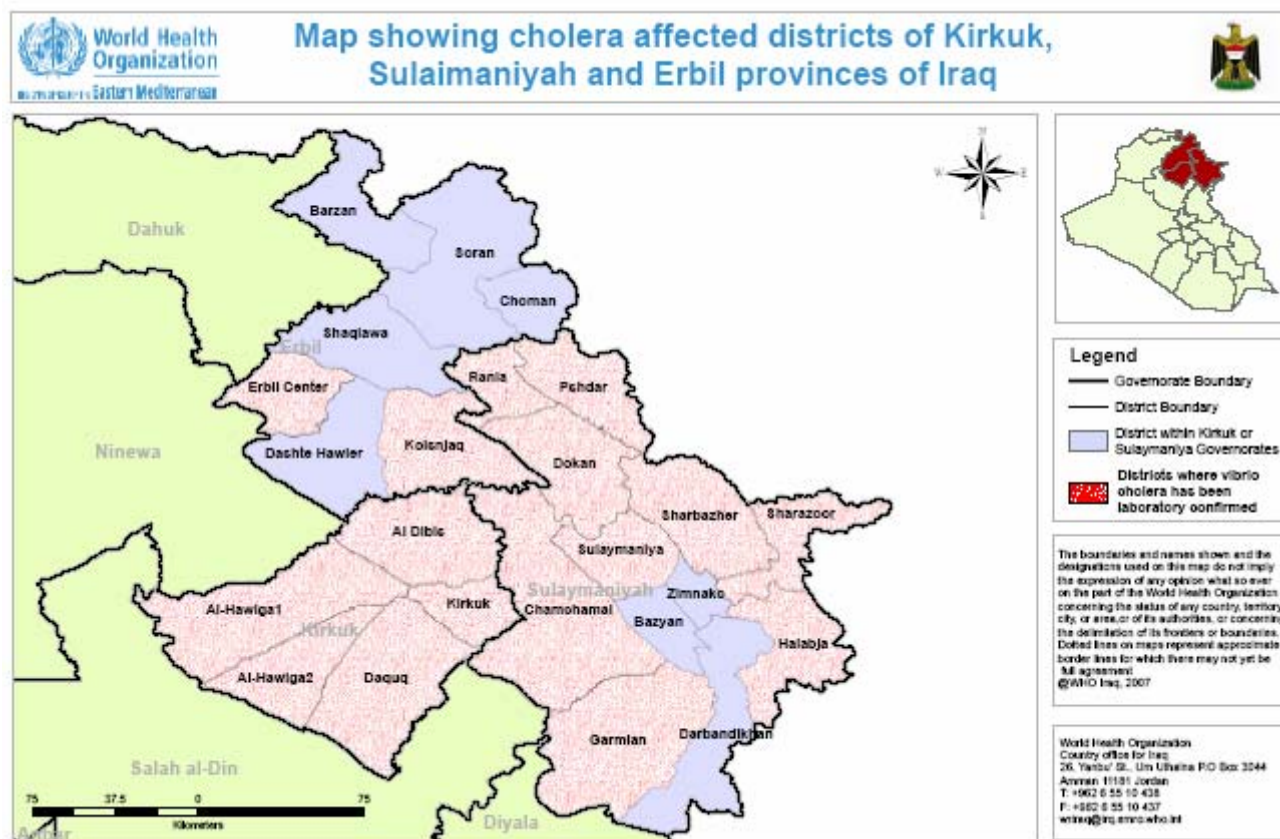
Daily Situation Report on Cholera Outbreak in Northern Iraq

Sitrep number: 9; Date of Reporting: 16th of September 2007

1. OVERVIEW

As of 12th of September 2007, twenty-three districts of Northern Iraq have reported laboratory-confirmed cases of cholera. All the sixteen districts of Sulaymaniyah governorate, all five districts of Kirkuk governorate and two out of seven districts of Erbil governorate are now affected by this cholera outbreak.

This outbreak, first unfolded in Kirkuk province on 14 August spread to Sulaymaniyah governorate on 23 August and then to Erbil governorate on 6th of September. The outbreak has so far caused 10 deaths and continues to be a major threat to public health in the region. Over 3.4 million people living in these areas are presumed to be exposed to this epidemic risk.



Although, accurate data on number of cholera cases reported from these three affected governorates are not yet available, the disease surveillance system of these three governorates, since the outbreak started, showed that between 23 August and 10 September, a total of 6,142 cases of diarrhoeal disease with 9 deaths (CFR: 0.14%) were reported from Sulaymaniyah governorate while between 29 July to 14 September a total of 6,879 cases of diarrhoeal disease with 1 death (CFR: 0.01%) were reported from Kirkuk governorate. On the other hand, 11,641 cases of diarrhoeal disease with no death (CFR: 0%) were reported from Erbil governorate from 01 to 10 September 2007. Of these reported cases, 1,150 laboratory confirmed cases of cholera have been reported so far.

Table-1: Cases of diarrhoeal diseases reported from three provinces of Northern Iraq

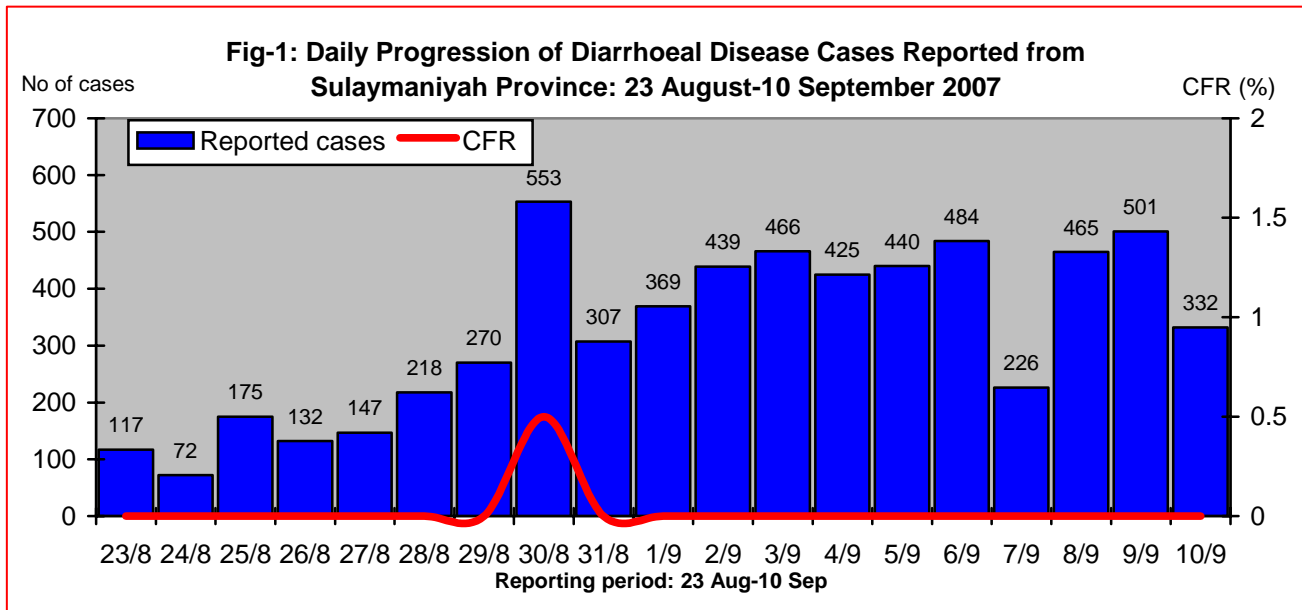
Province	No of districts affected	Date outbreak started	No of DDs reported	No of deaths reported	CFR (%)	No of laboratory-confirmed case of cholera
Sulaymaniyah	16	23/08/07	6,142	9	0.14	392
Kirkuk	5	14/08/07	6,879	1	0.01	717
Erbil	2	06/09/07	11,641	0	0	41

Specific control measures to contain this ongoing outbreak and limit its spread to other areas have been reinforced by the health authorities of the affected provinces with technical support from WHO

2. PATTERN OF TRANSMISSION IN SULAYMANIYAH PROVINCE

The daily progression of cases, as plotted in figure-1, shows that barring some inadequacies and incompleteness in reporting during the earlier part of this outbreak in Sulaymaniyah province, the number of cases are now gradually increasing and possibly after 1st of September, the reported cases are appearing to come in a wave which seems to be more consistent with any outbreak. The apparent increase in number of reported cases in recent time compared to the immediate past may also be attributed to improvement in surveillance system in the province as the recent reports received from the field suggests that surveillance data are now being collected and assimilated from all the hospitals as well as from primary health centers in the province. The sudden drop in cases reported on 7th of September may be due to the weekly holiday (Friday) in the province wherein reports were, possibly, not received or available from all health centres.

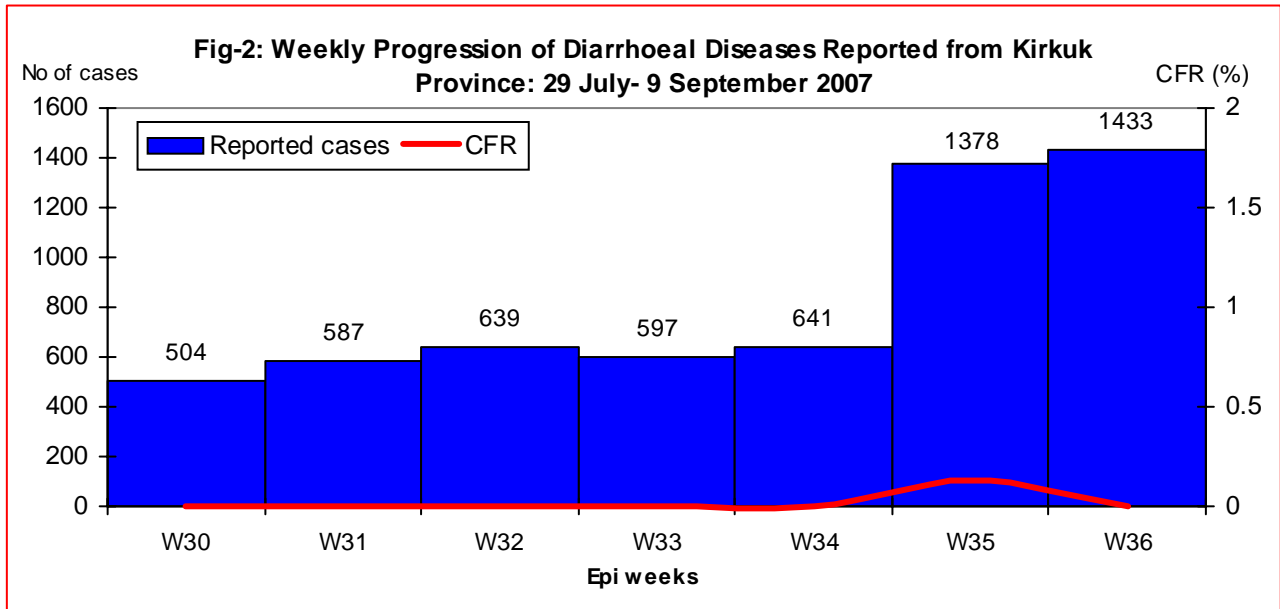
Although the outbreak, as illustrated in figure-1, has not shown any definite peak, it is expected that with the improvement of surveillance system, already visible, the transmission pattern of this outbreak could be better explained in the coming weeks. Therefore, owing to lack of comprehensive surveillance data, the overall epidemiological trend of the prevailing situation needs to be interpreted with caution.



3. PATTERN OF TRANSMISSION IN KIRKUK PROVINCE

The weekly progression of cases reported from Kirkuk province and as shown in figure-2 clearly indicates an increase of case load in recent week compared to the preceding weeks. This increased number could be due to improved reporting, increased public awareness resulting in more cases seeking consultation in health centres, an actual increase of case load as the outbreak keeps unfolding and more and more people are being exposed to the source of infection or a combination of both. As the surveillance systems for cholera improves throughout the province with more comprehensive data on cholera available from the field, the real

extent of the burden of disease from cholera in the province could be better recognized. The mapping of cases have shown that majority of cases are localized in kirkuk city (Over 90%) itself.



Note: The figure shows weekly progression of cases of diarrhoeal diseases from epidemiological week no 30 to 36 (Reporting period: 29 July to 09 September 2007)

The number of diarrhoeal diseases reported in 2007 between epidemiological weeks no 30 and 36 shows an overall increase of 14% compared with the number of diarrhoeal disease cases reported from Kirkuk during the same period in 2006. While the increase in cases reported in the under 5 year age group is less (8%), there is an overall increase of 21% between the cases reported in the above 5 year age group between the comparable periods of 2006 and 2007.

4. PATTERN OF TRANSMISSION IN ERBIL PROVINCE

Apart from Erbil centre and Koisnjaq district, no other district in the province has, so far, reported any laboratory-confirmed case of *Vibrio cholerae*. The total number of cases of diarrhoeal disease reported from this province from 1st of September to 10th of September stands at 11,641 with no death. In the absence of data on daily progression of cases in Erbil province, it was not possible to determine any epidemiological trend on the evolution of the outbreak.

5. SITUATION IN REST OF IRAQ

Apart from three affected provinces of Northern Iraq, there is no sign that the disease has spread to any other part of Iraq. One stool sample collected from Mousul has shown positive growth for *Vibrio Cholera* at the local public health laboratory which is now being investigated further. Another stool sample collected from a suspected case in Baghdad has tested negative for *Vibrio Cholerae*.

All preventive measures have been taken to reduce the risk of transmission of cholera to other high risk areas. Epidemic preparedness for cholera has been geared up in all the neighbouring provinces of cholera affected areas and as part of it, surveillance system for diarrhoeal disease has been intensified in all these neighbouring provinces which are considered to be at high risk for spread of this outbreak.

Operations rooms have also been set up in all these potentially high risk provinces and the prevailing situation, particularly the stock position of emergency drugs and medical supplies are being reviewed regularly by the local coordination committees.

6. ONGOING CONTROL MEASURES FOR CONTAINMENT OF OUTBREAK

The provincial health authorities of Sulaymaniyah and Kirkuk province have initiated a number of public health control measures to contain the current wave of cholera outbreak. WHO-Iraq is actively involved in the containment of this outbreak providing technical assistance to the health authorities for risk assessment, strengthening surveillance, improving coordination and information flow, standardizing case management, mobilizing medical and other essential supplies as well as in organizing social mobilization and health education campaigns for risk communication.

- **Coordination and Information management:** A high level national committee on cholera preparedness and outbreak has been established in Iraq under the leadership of H.E. Dr Abdul Samad, the Acting Minister of Health. The committee draws members from all related sectors and disciplines who are involved in response operations. The OIC of WHO Office in Baghdad is also a member of this committee. The committee regularly reviews the situations and takes important strategic decisions to improve the quality of interventions that are aimed at both controlling as well as limiting the spread of present outbreak. Necessary operational support in terms of mobilizing financial, logistics and human resources are also being extended by this high level committee to the health authorities of the affected provinces. Similar mirror image committees are set up in all Directorates of Iraq which are chaired by the respective Governors while there are technical committees in each of the affected provinces to back up the decisions of these coordination committees in terms of operational response which are usually chaired by the Director General of Health Services. Operations rooms have been set up at the provincial ministry of health in order to better manage information flow.
- **Surveillance for cholera:** WHO-Iraq office is continuing to support all the health authorities in Iraq to strengthen its surveillance system for generating better quality comprehensive data on the current outbreak. Necessary surveillance guidelines, case definitions and reporting forms have been distributed to all hospitals and health centres for notifying cases. A number of training courses have also been organized for the surveillance officers on data management. Five training courses are being organized for the laboratory technicians to improve the competency of the local laboratory technicians on cholera diagnostic assay. A laboratory based surveillance system has been established in all the districts of the provinces which are in geographic proximity to the affected areas. Stool samples are being collected regularly from suspected cases and tested in order to detect any cholera case early as well as to provide an early alert for an impending outbreak. In addition, a daily reporting system for diarrhoeal diseases has been introduced in all the potentially high risk districts
- **Case management:** WHO-Iraq office has printed 5000 posters on WHO's standard case management guideline for cholera and 5000 posters on cholera outbreak assessment which have been distributed to the health authorities of the affected provinces in an attempt to standardize case management of cholera cases in all health-care settings. WHO-Iraq has also conducted a series of hands-on training courses on case management for health care providers.
- **Risk communication:** Religious leaders, community heads, medical, nursing and pharmacy students have been involved in organizing health education campaigns in the affected areas in order to raise public awareness for maintaining minimum hygiene standards and food safety at every household level WHO-Iraq office has reproduced 7,000 posters on WHO's Key Food safety messages in Kurdish language.
- **Improving environmental management:** All the public water supply systems (Piped water supply, household tanks, deep wells, private wells, deep tubewells, etc).in the affected provinces have been chlorinated by the provincial authority. In addition, water samples from the public water supply sources are being collected and tested routinely to detect water contamination. In Sulaymaniyah province, several field teams have been formed and necessary logistics and transports provided by the authority for water quality surveillance and control programme. The chlorinators have been trained by WHO on treating contaminated water using chlorination before they have been deployed in the field. Chlorine powders and chlorine tablets have been made

available in all the affected areas. More than 1100 families who were without public water supply have been distributed family hygiene kits containing soap, bucket and chlorine tablets. The chlorine tablets are being distributed along with necessary instructions on how to use the chlorine tablets. Clean and safe water are also being distributed to the families living in the affected areas through water tankers. Improving the sanitation situation of the affected families have been promoted through hygienic disposal of sewage.
