



WHO Representative's Office in Iraq

Daily Situation Report on Cholera Outbreak in Iraq

Sitrep number: 17; Date of Reporting: 24th of September 2007

1. New Developments:

- a. **Dahuk:** On 23rd of September; Duhok health authority reported the first laboratory confirmed V cholera in a 5 year old female child from Bardarash district in Dahuk governorate. It is important to note that the first index case for 1999 outbreak (over 900 cases) started in the same area which the WHO requested to visit during her last mission to north Iraq, however, the request was denied. The case was detected during the routine testing of cases presenting to health facilities with watery diarrhea. Further investigation of contacts and water supply was negative for V cholera organism.
- b. **Baghdad and Basra:** The only confirmed cholera case from Baghdad died on 22nd of September; bringing the total death from cholera to 11 cases. Stool sample of one of her contacts who later developed symptoms was also positive as vibrio cholera of the inaba sero type bringing the confirmed cases in Baghdad to 2.
- c. **Diala:** Nothing During the last 7 days we received reports of a new focus of acute watery diarrhoea in Diala province which is down to the south of the original focus in Sulymania and Kirkuk. In this new focus 17 patients presented to Baladruz, salahaddin and Baquba hospitals with severe dehydrating diarrhea with renal shut down in one of them. Unfortunately, specimen collection was done late after patient had antibiotics for the majority of cases
- d. **Tikrit:** Nothing to add to yesterday's report. Another 2 cases were confirmed positive for vibrio cholera bring the total cholera cases to 4.
- e. **Mosul :** Nothing to add to yesterday's report..
- f. **Babil and Wassit:** There are reports of 2 suspect cases of cholera, one in each of Wassit and Babil, confirmatory laboratory test is expected within 48 hours.

2. OVERVIEW

As of 23rd of September 2007, 25 districts of Northern Iraq and 6 districts in the south and center have reported laboratory-confirmed cases of cholera. 13 out of the 14 districts of Sulaymaniyah governorate, all five districts of Kirkuk governorate, 6 out of seven districts of Erbil governorate; 3 districts in Tikrit as well as one district in each of Dahuk, Mosul, Baghdad and Basra are now affected by this cholera outbreak. A representative sample of vibrio cholera isolates from Sulymania sent by WHO reached today US Navy Advanced Research Unit Laboratory in Cairo for further confirmation and phenotypic characterization. Up to this day 2116 lab confirmed cholera cases (all of the inaba serotype except 25 isolates of the ogawa serotype) were officially reported from Iraq.

95% of cases were reported from Sulymania and Kirkuk in north Iraq, the outbreak seems to be slowly spreading to the neighboring provinces of Erbil and Diala with 105 cases (out of which 12 cases from Diala diagnosed on clinical grounds) reported during last week.

Sporadic cases with definite history of travel and food consumption in Kirkuk were reported from Mosul and Tikrit provinces; however, isolated cases with no epidemiological link to north Iraq were also confirmed in Baghdad and Basra.

One of the important features in this outbreak is that most of the cases seen have mild to moderate signs and symptoms. The traditional signs and symptoms of severe dehydrating diarrhea were seen only very occasionally, out of the 2116 lab confirmed cases; only 11 death were reported, all the deceased have another serious underlying cause.

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Specific control measures to contain this ongoing outbreak and limit its spread to other areas have been reinforced by the concerned governmental departments of the affected provinces with technical support from WHO. The below map shows the distribution of confirmed cholera cases by district in Kirkuk, Sulaymaniyah, Erbil and Dahuk.

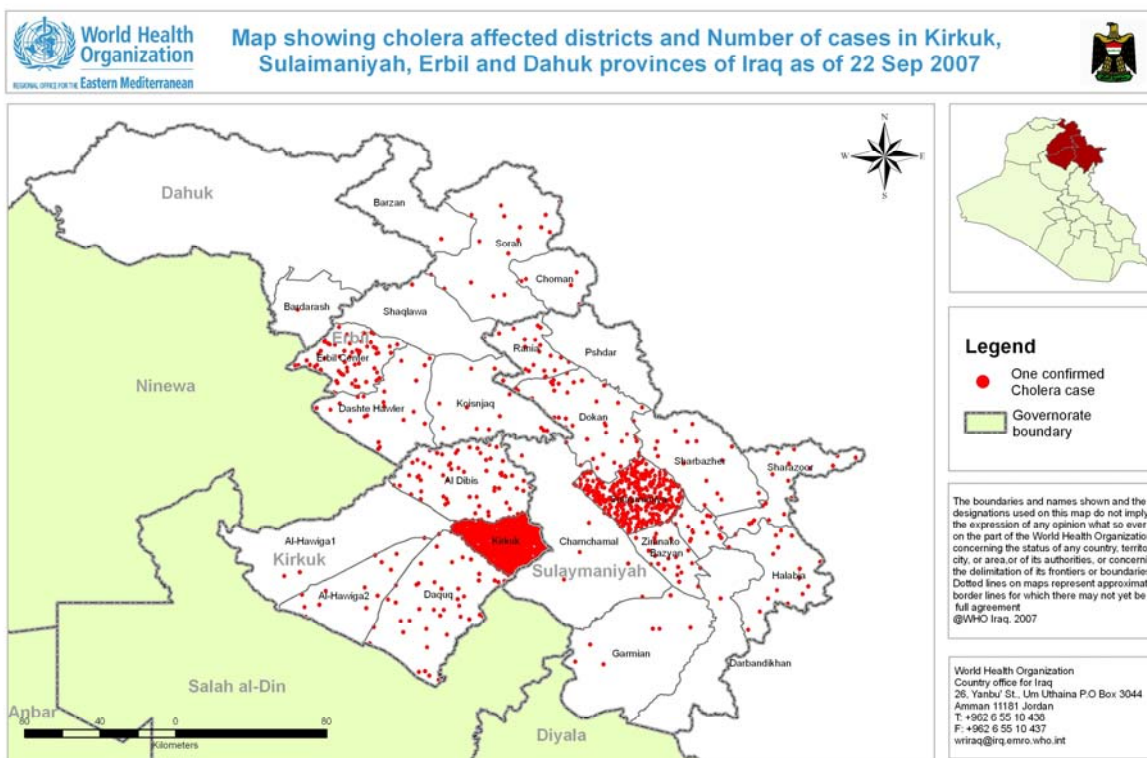


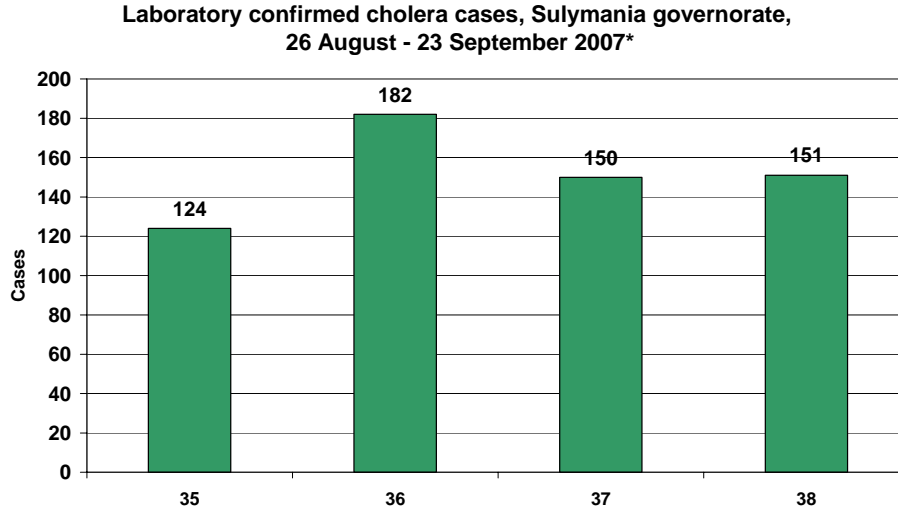
Table-1: Cases of laboratory confirmed cholera cases reported from Iraq

Province	No of districts affected	Date outbreak started	No of deaths reported	laboratory- confirmed case of cholera
Sulaymaniyah	13	23/08/07	9	638
Kirkuk	5	14/08/07	1	1375 including 25 Ogawa
Erbil	6	06/09/07	0	96
Dahuk	1	23/09/07	0	1
Tikrit	1	12/09/07	0	4
Mosul	1	15/09/07	0	2 + 1

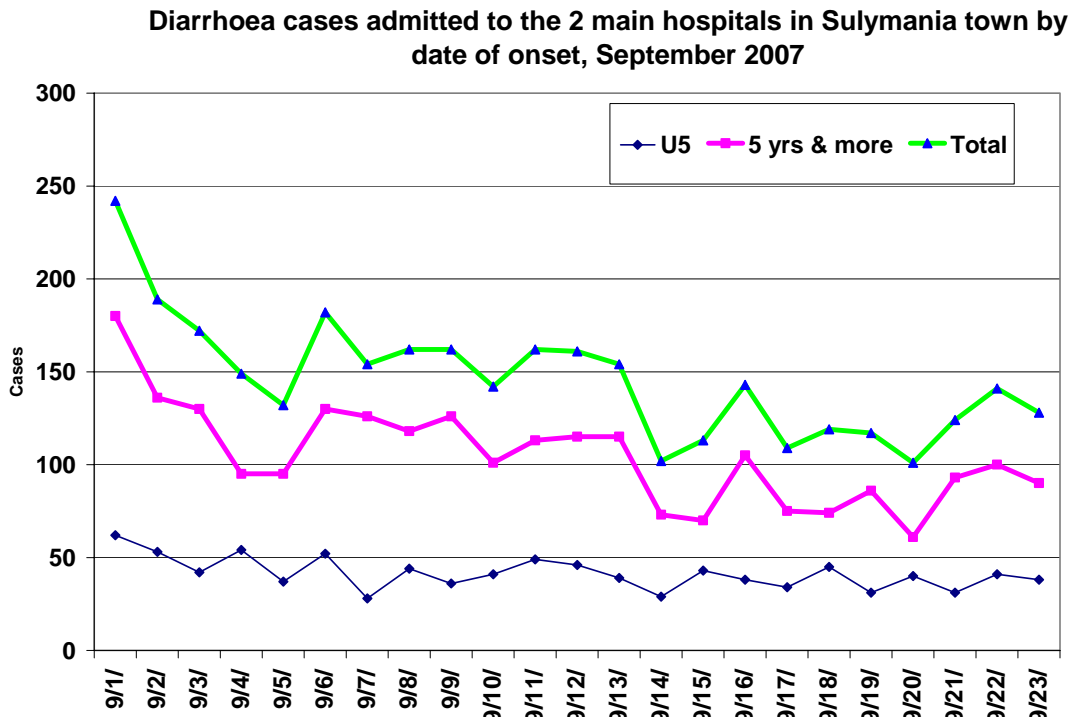
Baghdad-Resafa	1	19/09/07	1	2
Basra	1	19/09/07	0	1

*One case from Mosul and another from Tikrit are pending central public health lab confirmation

2. PATTERN OF TRANSMISSION IN SULAYMANIYAH PROVINCE



The total number of laboratory confirmed cases up to the 23rd of September reached 638; the above chart shows that confirmed cases peaked in week 36 and then leveled during the last 2 weeks. It is not yet clear whether this pattern will prevail for some weeks or cases will start to decrease during the upcoming weeks.



70% of confirmed cholera cases were reported from within the capital of Sulymania governorates. The above Chart showing admitted diarrhoea cases to the pediatric and teaching hospitals in Sulymania during the period

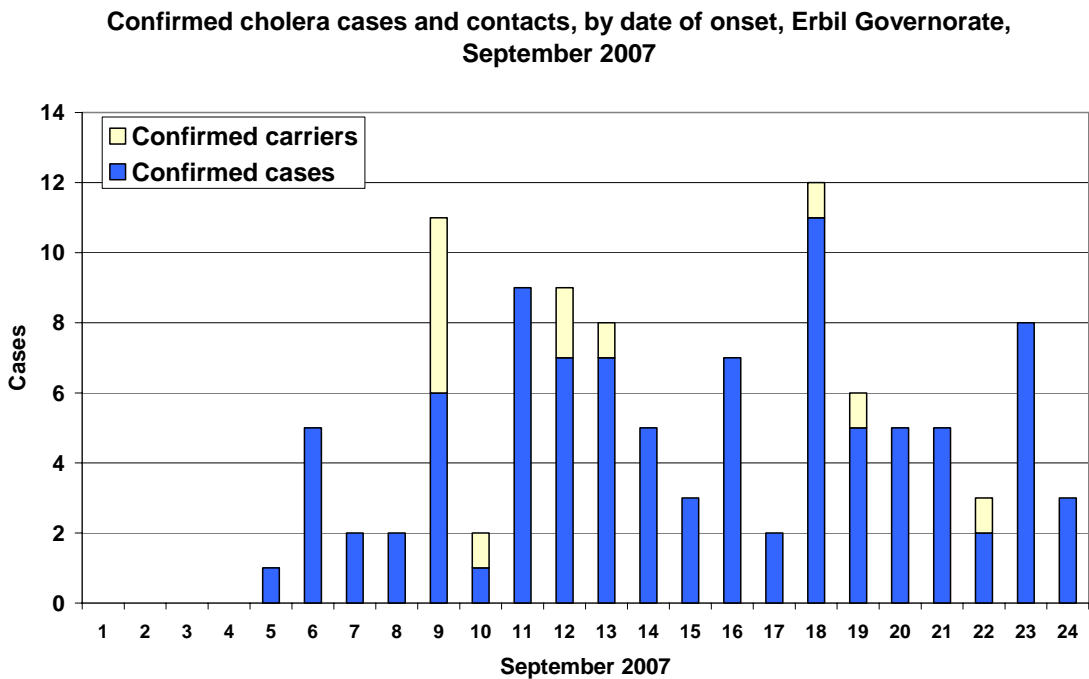
1-23 September 2007. It is clear that there is hardly any change in the number of admitted below 5 children, as for above 5 cases there is a definite down trend in the number of admitted cases.

2. PATTERN OF TRANSMISSION IN KIRKUK PROVINCE

68% of the total confirmed cholera cases reported from Iraq, are from Kirkuk province. 90% of Kirkuk province cases are from Kirkuk town. Despite the effort exerted by the DoH authorities; the daily reported diarrhea cases, confirmed cholera cases and severity of the disease seems to be on the increase. In order to coordinate the efforts of the different actors, enhance control and case ascertainment, case management and laboratory performance; HE acting Minister of Health instructed MoH deputy minister Dr. Isam Mamiq to travel to Kirkuk and lead the cholera containment measures for 10 days as of 26/09/2007.

4. PATTERN OF TRANSMISSION IN ERBIL PROVINCE

The below figure; show the number of confirmed V cholera by date of onset for the period 05-24 September 2007. Although it is too early to detect any pattern but the general trend show slight decrease in the daily confirmed cases.



6 out of the 7 districts in Erbil governorate have reported 96 laboratory-confirmed case of *Vibrio cholerae*. The total number of cases of diarrhoeal disease reported from this province from 1st of September to 21 of September stands at 16326 with no death; 3436 stool samples were collected out of which 109 were positive; 96 for cases and 13 from contacts. Erbil seems to have a fairly sensitive diarrhea disease surveillance system that was able to pick up cholera cases very early and swiftly responded and seems to have succeeded in halting and limiting the spread and magnitude of the out break.

5. SITUATION IN REST OF IRAQ

Apart from three affected provinces of Northern Iraq, in addition to Baghdad, Basra, DIALA; Tikrit and Mosul; there is no sign that the disease has spread to any other part of Iraq. However, as the weather cools and become more favorable for transmission, the organism is expected to spread to other provinces.

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 provinces. Surveillance system for diarrhoeal disease has been intensified in all provinces.

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.