



WHO Representative's Office in Iraq

Daily Situation Report on Cholera in Iraq

Sitrep number: 21; Date of Reporting: First of October 2007

1. New Developments:

- a. **Baghdad and Basra:** Despite the rigorous epidemiological, clinical and laboratory scrutiny no secondary cholera confirmed cases were reported from Baghdad and Basra following the reported 2 cases 12 days ago.
- b. **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 out break (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.
- c. **Diala:** During the 15-30 September 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 31 patients presented to Baladruz, salahaddin, Hibhib, Al-Udhem and Baquba hospitals and PHCs 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. The results of 22 cases tested negative to V cholera while 9 are still pending. Negative isolates have been sent to the Central Lab in Baghdad for further testing. Despite the difficult security situation the DoH surveillance staff were able to visit affected areas, supply them with fresh CB transport medium, train them on the correct method of collection and shipping of samples.
- d. **Tikrit:** During the period 11-29 September 1617 diarrhea cases were reported; 1143 stool specimens collected, 8 of them were positive for O1 vibrio cholera, 4 were for cases and 4 for healthy carriers.
- e. **Mosul :** Nothing to add to yesterday's report..
- f. **Wassit:** One cholera case was confirmed in Wassit on 25th of September.

2. OVERVIEW

As of 27th of September 2007, 26 districts of Northern Iraq and 7 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, all seven districts of Erbil governorate; 3 districts in Tikrit as well as one district in each of Wassit, Mosul, Baghdad and Basra are now affected by this cholera outbreak. The results of the samples of vibrio cholera isolates from Sulymania were received today from US Navy Advanced Research Unit Laboratory in Cairo. NAMRU 3 results confirmed Sulymania and CPHL results. Another 54 cholera isolates (some dating back to the 2000 out break) sent by the Central Public health Laboratory in Baghdad were received in NAMRU3 in Cairo.

96% of Iraq's cholera cases were reported from Sulymania and Kirkuk in north Iraq, the out break seems to be slowly spreading to the neighboring provinces of Erbil and Diala with 111 laboratory confirmed cases in Erbil and 31 cases from Diala diagnosed on clinical grounds.

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

One of the important features in this out break 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 2803 lab confirmed cases; only 14 death were reported, most the deceased have another serious underlying cause.

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 show the distribution of confirmed cholera case by district in Kirkuk, Sulymania, Erbil and Dahuk.

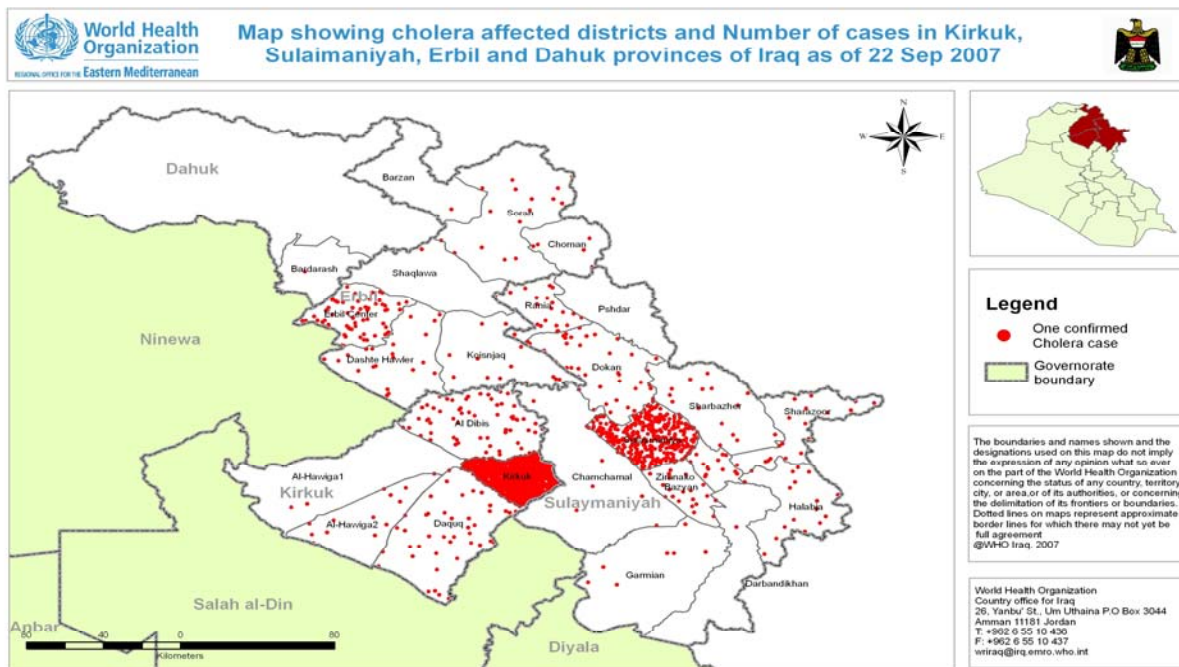


Table-1: Cases of laboratory confirmed cholera cases reported from Iraq

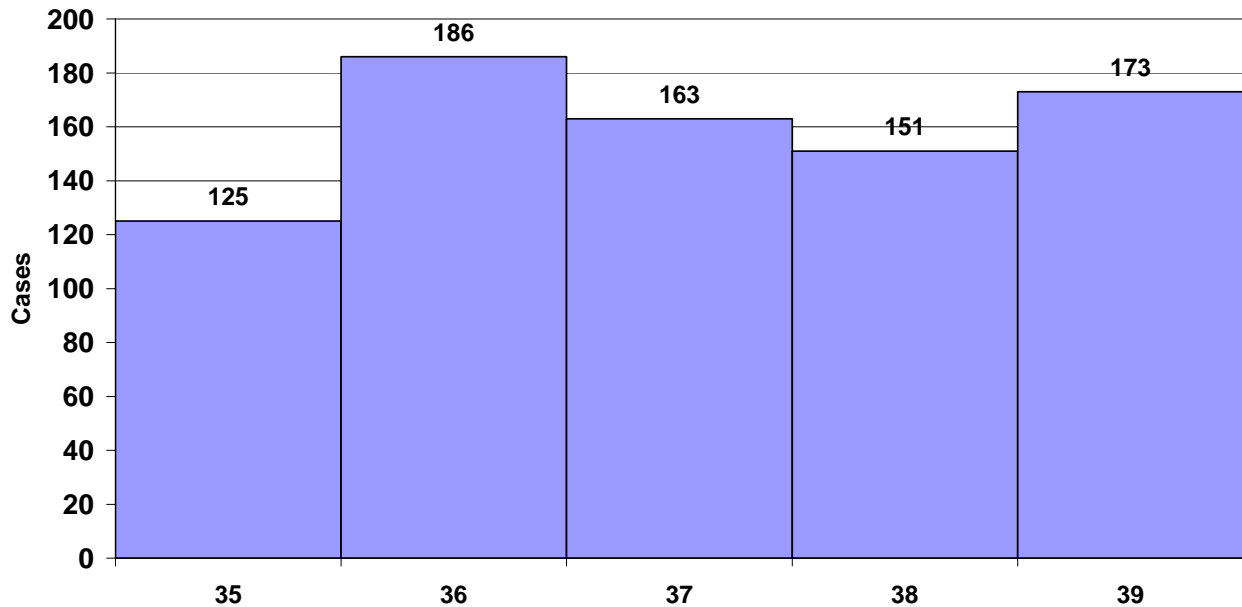
Province	No of districts affected	Date first case reported	No of deaths reported	laboratory- confirmed case of cholera
Sulaymaniyah	13	23/08/07	11	806
Kirkuk	5	14/08/07	2	1874
Erbil	7	06/09/07	0	111
Dahuk	1	23/09/07	0	1
Tikrit	3	12/09/07	0	4
Mosul	1	15/09/07	0	3
Baghdad-Resafa	1	19/09/07	1	2
Wasit	1	20/09/07	0	1
Basra	1	19/09/07	0	1
Total	33		14	2803

***carriers**

3. PATTERN OF TRANSMISSION IN SULAYMANIYAH PROVINCE

Figure 1

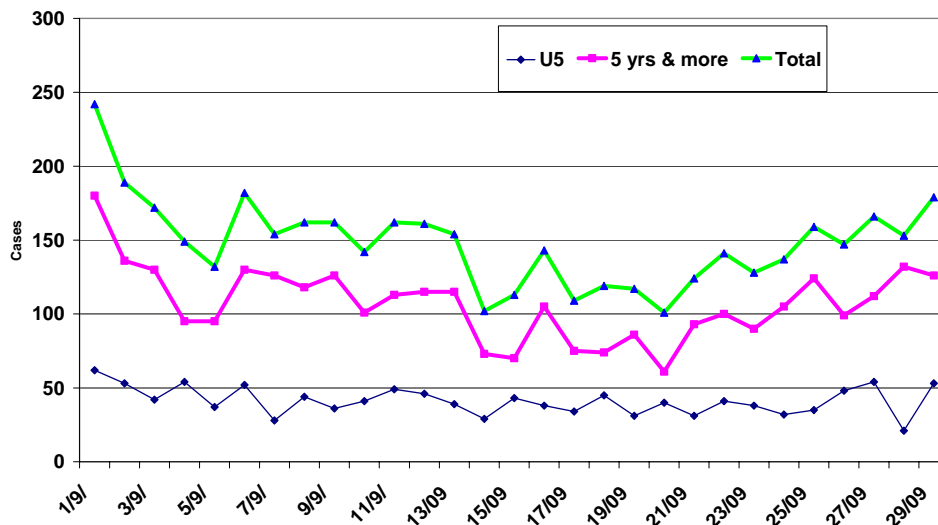
Weekly laboratory confirmed cholera cases, Sulaymania governorate, 27 August - 29 September 2007



The total number of laboratory confirmed cases up to the 30th of September reached 806. Fig 1; shows that confirmed cases peaked in week 36 and then showed a slight down trend during weeks 37 & 38 however; a definite upward trend is seen during week 39.

Figure 2

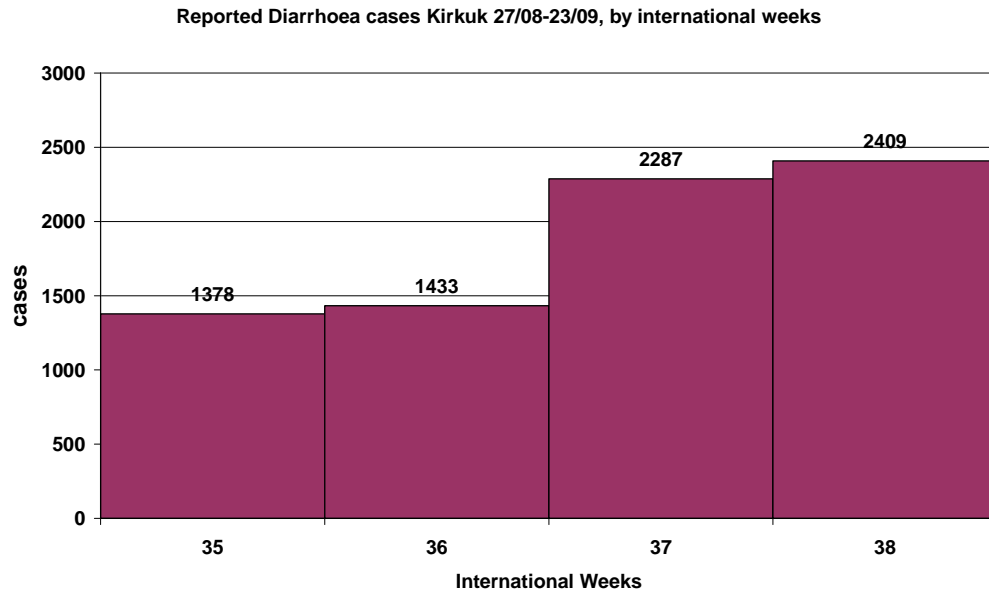
Diarrhoea cases admitted to the 2 main hospitals in Sulaymania town by date of onset, September 2007



70% of confirmed cholera cases were reported from within the capital of Sulymania governorates. Fig 2 shows admitted diarrhoea cases to the pediatric and teaching hospitals in Sulymania during the period 1-29 September 2007. It is clear that there is slight upward trend the number of admitted below 5 children in the last 4 days, as for admission for those above 5 year of age, fig 1 shows a clear upward trend in the last 9 days.

4. PATTERN OF TRANSMISSION IN KIRKUK PROVINCE

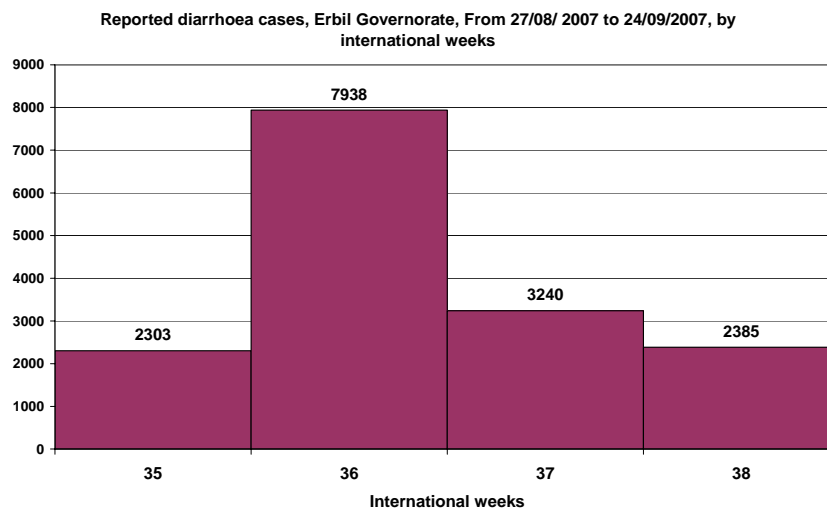
Figure 3



Data received during the period 27/08 up to 23/09 show a step wise increase in the number of reported diarrhoea cases, which may be a reflection of better reporting and community awareness. The number of confirmed cholera cases as expected is showing a similar trend, however, we do not have the complete data for week 38 and 39 to reach any plausible conclusion. 68% of the total confirmed cholera cases reported from Iraq, are from Kirkuk province. 90% of Kirkuk province cases are from Kirkuk town. Despite DoH authorities efforts; the daily reported diarrhoea 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.

5. PATTERN OF TRANSMISSION IN ERBIL PROVINCE

Figure 4

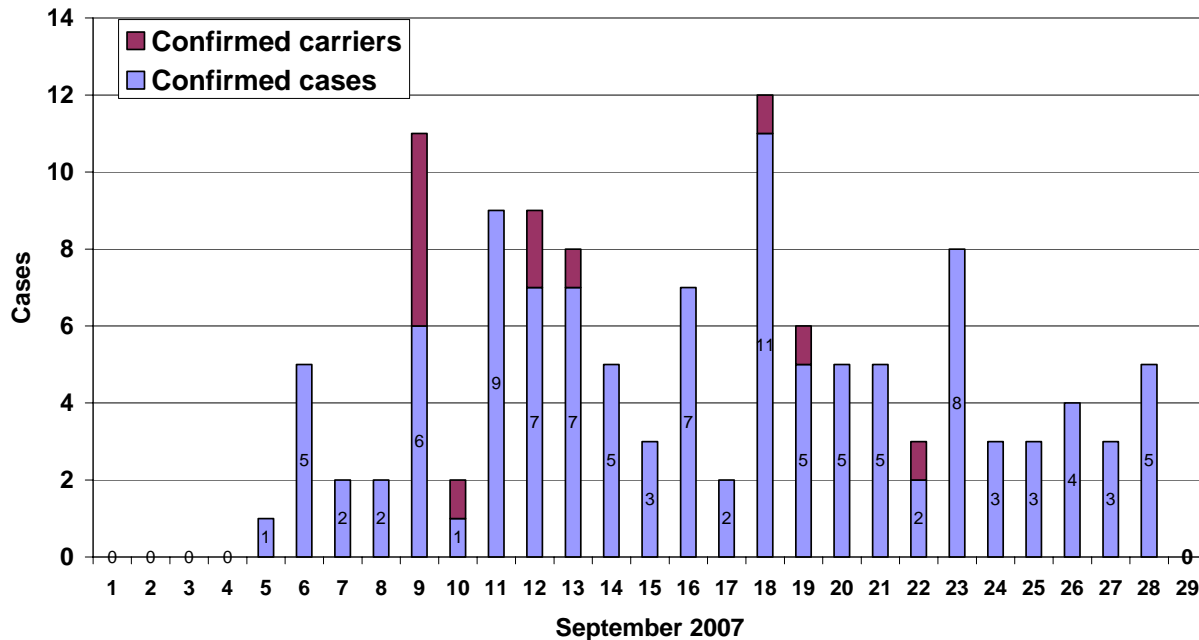


Unlike the situation in both Kirkuk and Sullymania, figure 4 above shows a definite down ward trend in reported diarrhea cases. The number of cases in week 38 is almost the same as the pre-out break figure. The very high number of cases in week 36 is most likely due to the feeling of panic following the declaration by MoH of the occurrence of cholera in Kirkuk and Sulymania.

Figure 5 below; show the number of confirmed V cholera by date of onset for the period 05-29 September 2007. Although it is too early to detect any pattern but the general trend shows slight down trend in the number of the daily confirmed cases.

Figure 5

Confirmed cholera cases and contacts, by date of onset, Erbil Governorate, September 2007



The 7 districts in Erbil governorate have reported 111 laboratory-confirmed case of *O1 El Tor Inaba*. The total number of cases of diarrhoeal disease reported from this province from 1st of September to 29th of September stands at 17906 with no death; 4361 stool samples were collected out of which 123 were positive; 111 for cases and 12 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 Kirkuk, Baghdad, Basra, DIALA; Tikrit Wassit 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.