



**Ministry of Health Iraq and the
WHO Representative's Office Iraq**



Weekly Situation Report on Diarrhoea and Cholera in Iraq

Sitrep no. 87 for international week 14 ending 05 April 2009

1. SUMMARY:

- No cholera case was reported in the first 14 weeks of 2009.
- Since cholera is endemic in Iraq, sporadic cases are expected here and there from time to time.
- During week 14 all 19 DOHs reported timely. 1012 surveillance sites out of 1046 sent the weekly DIARRHOEA disease report on time i.e. 97% completeness and timeliness.
- Total Diarrhea cases reported this week were 11723 cases; out of them 6992 (60%) stool samples were cultured for cholera organism, but none was found positive.
- Out of 6992 stool specimens cultured, none (0%) samples were positive for cholera organism.
- 2574 water samples were tested for bacteriological contamination, 715 (28%) of them were contaminated.

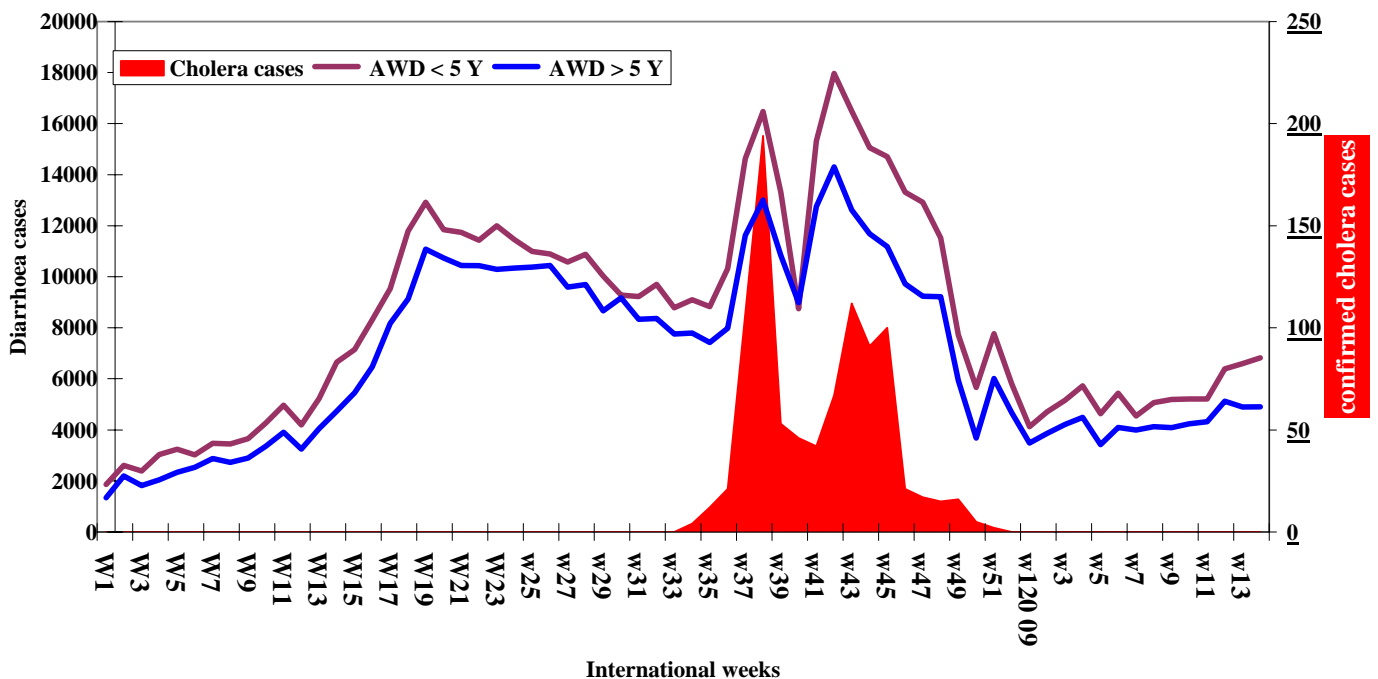
2. TABLE (1) NUMBER OF DIARRHOEA CASES REPORTED, STOOL SAMPLES TESTED AND % OF DIARRHOEA SPECIMENS CULTURED FOR CHOLERA BY INTERNATIONAL WEEK

International Week	Total Diarrhea cases	Stool samples tested for cholera	% of Diarrhea cultured for cholera organisms
Week 1 ending 04/01/09	7604	3985	52%
Week 2 ending 11/01/09	8566	4412	52%
Week 3 ending 18/01/09	9375	5051	54%
Week 04 ending 25/01/09	10215	6084	60%
Week 05 ending 04/02/09	8057	4160	52%
Week 06 ending 11/02/09	9532	4910	52%
Week 07 ending 18/02/09	8537	4893	57%
Week 08 ending 25/02/09	9190	5375	58%
Week 09 ending 01/03/09	9282	6261	67%
Week 10 ending 08/03/09	9609	5586	57%
Week 11 ending 15/03/09	9528	5488	58%
Week 12 ending 22/03/09	11513	6742	59%
Week 13 ending 22/03/09	11498	6751	59%
Week 14 ending 22/03/09	11723	6992	60%
Total 2009	134229	76690	57%

3. DIARRHOEA BY AGE GROUP AND CONFIRMED CHOLERA:

Fig 1 Shows, Diarrhea seems to have peaked in week 20 and then started a very slow and gradual down trend up to week 32, the reason for this slow down trend is not clear (may be reporting fatigue), however, coinciding with the reporting of the first suspect cholera case in Missan, the number of reported DIARRHOEA started shooting up. This sudden increase in DIARRHEA that came in 2 waves peaking in weeks 38 and 42 coincided perfectly with the cholera epidemic curve. In week 44 a steep drop in the number of reported diarrhea and cholera is noted which may be due to drop in atmospheric temperature and improvement of power and water supply. Cholera cases started in week 33 and increased to reach the first peak of 96 cases in week 38 this was followed by slight drop in week 39, another wave of cases mainly from Diwanyia resulted in another peak (161 cases) in week 42. The last cholera cases were reported in week 51. No cholera case was reported in 2009. Since the beginning of 2009 the weekly reported diarrhea cases among below 5 and above 5 populations returned to the weekly average reported during the first 20 weeks of 2008... The weekly reported diarrhea cases seems to be a sensitive indicator of cholera out breaks but it may not assist in detecting sporadic cholera cases.

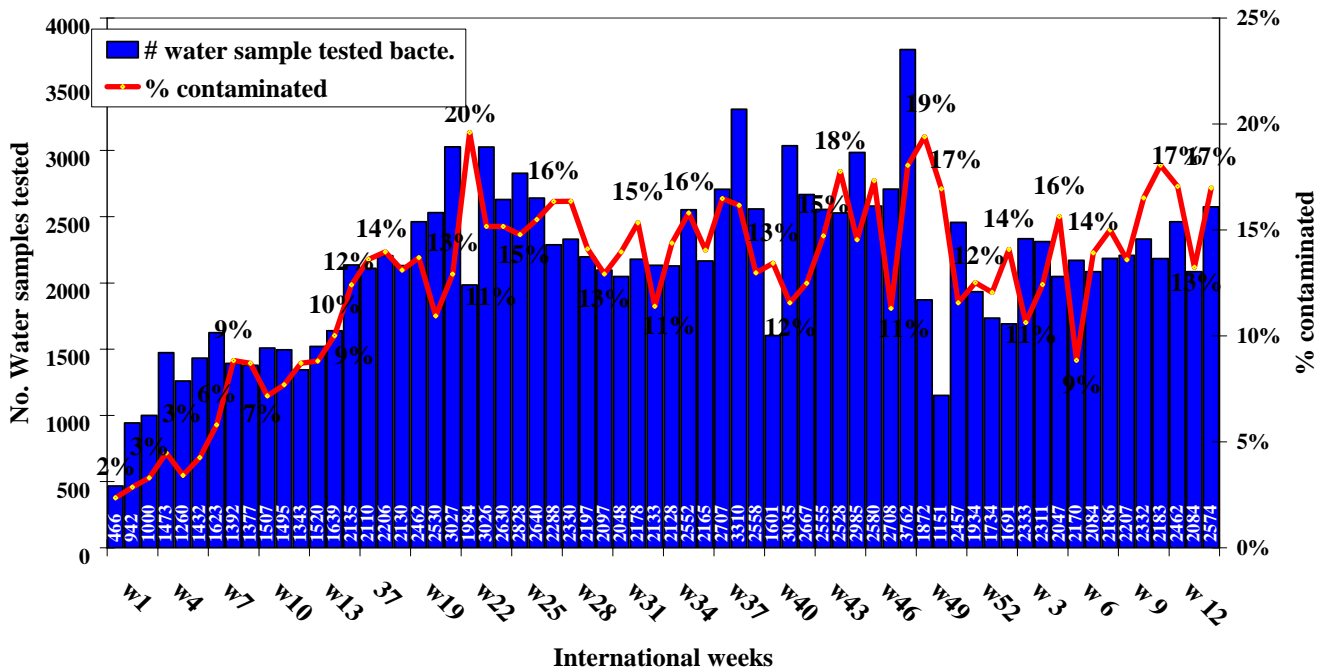
Fig (1) Diarrhoea and laboratory confirmed cholera by international week, 2008, and up to week 14 2009, Iraq



4. CUMULATIVE SITUATION FOR THE YEAR 2009:

- 19 Directorates of Health reported 134229 cases of Diarrhoea during the first 14 weeks of this year. No cholera case was isolated from 6992 stool samples tested.
- 30441 water samples have been tested for the presence of faecal contaminants, 4602 water samples (15%) were found to be contaminated with coliform bacteria.
- As shown in fig. (2) The percentage of contaminated water samples during the first 14 weeks of 2009 is still alarming and ranges between 9 to 18%. The methods for water collection and testing needs to be standardized and a system for laboratory quality control should be established within MoH and between other line ministries.

Fig. 2 Number of water samples tested for fecal coliforms, % that failed the test, Iraq, 2008 and first 14 weeks of 2009



5. WATER CONTAMINATION

Fig (3) shows the percentage of water samples contaminated by coliform bacteria during the first 14 weeks of 2009. It is clear that the contamination is above average in the provinces of Basra, Najaf, Kirkuk, Salahadin, and Muthana. However as mentioned earlier the method for water collection and testing need to be standardized and a system for laboratory quality control need to be established within MoH and between other line ministries

Fig (3) % water samples contaminated by coliform bacteria, Iraq, by province, first 14 weeks of 2009

