



Ministry of Health and WHO Representative's Office in Iraq

Weekly Situation Report on Influenza Like Illness (ILI) Diarrhoea and Cholera in Iraq

Sitrep no. 112 for international week 43 ending 26 October 2009

1. SUMMARY:

- **Influenza like Illness (ILI)** surveillance has been included in the list of the MoH- WHO weekly report as of week (42).
 - During week (43) 18 out of the 19 DoHs were able to report on timely basis, except the DOH of Babel.
 - ILI cases were reported during weeks 42 & 43; **The reported cases have an equal sex ratio**
 - Table one below shows that ILI reporting cases increased from 2356 episodes in week 42 to 9984 episodes in week 43, this increase reflects an improvement in surveillance.
- **Cholera:** 6 cholera cases were reported from Iraq since the beginning of 2009. 3 out of the 6 were reported from Babel, 2 from Muthana and one from Basra.
 - During week 43 all 19 DOHs reported cases on timely basis. 1.089 surveillance sites out of 1.118 sent the weekly diarrhea disease report on time i.e. 97% completeness and timeliness.
 - 22.662 diarrhea cases were reported this week; 12.402 (55%) stool samples were cultured for cholera organism. however none were found to be positive.
 - Out of 12.402 stool specimens cultured, none (one) sample were positive for cholera organism.
 - **2595** water samples were tested for bacteriological contamination, 378 (15%) of them were contaminated.

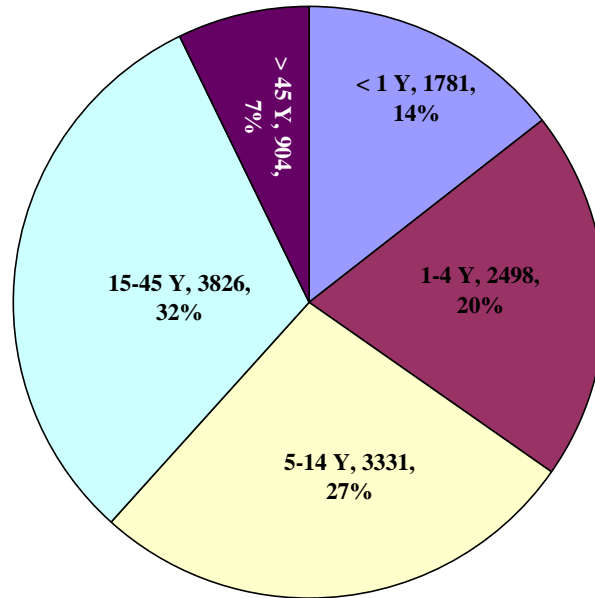
2. Table (1) Reported ILI by Directorate of Health, Iraq, week 42

Influenza Like Illness by Directorate of health and international week, Iraq, 2009

provinces	w 42	w 43	Total
ANBAR		10	10
Babel	0	0	0
BAGHDAD-KARKH	116	983	1099
BAGHDAD-RESAFA	0	963	963
BASRAH	213	752	965
DAHUK	175	599	774
DIWANIYA	0	455	455
DIYALA	0	258	258
ERBIL	0	1782	1782
KERBALA	0	5	5
KIRKUK	0	189	189
MISSAN	17	227	244
MUTHANNA	102	284	386
NAJAF	979	1591	2570
NINEWA	34	350	384
SALAH AL-DIN	7	26	33
SULAYMANIYAH	477	1171	1648
THI-QAR	0	26	26
WASSIT	236	313	549
Iraq	2356	9984	12340

3. **Fig. 1 Reported ILI by age groups**, 61% of the cases are among <15 year old children, mostly school children while 32% are among young adults 15-44 years. Only a small fraction 7% of cases were reported among those above 45 years of age

Fig. 1) ILI by age group week 42&43, Iraq, 2009



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

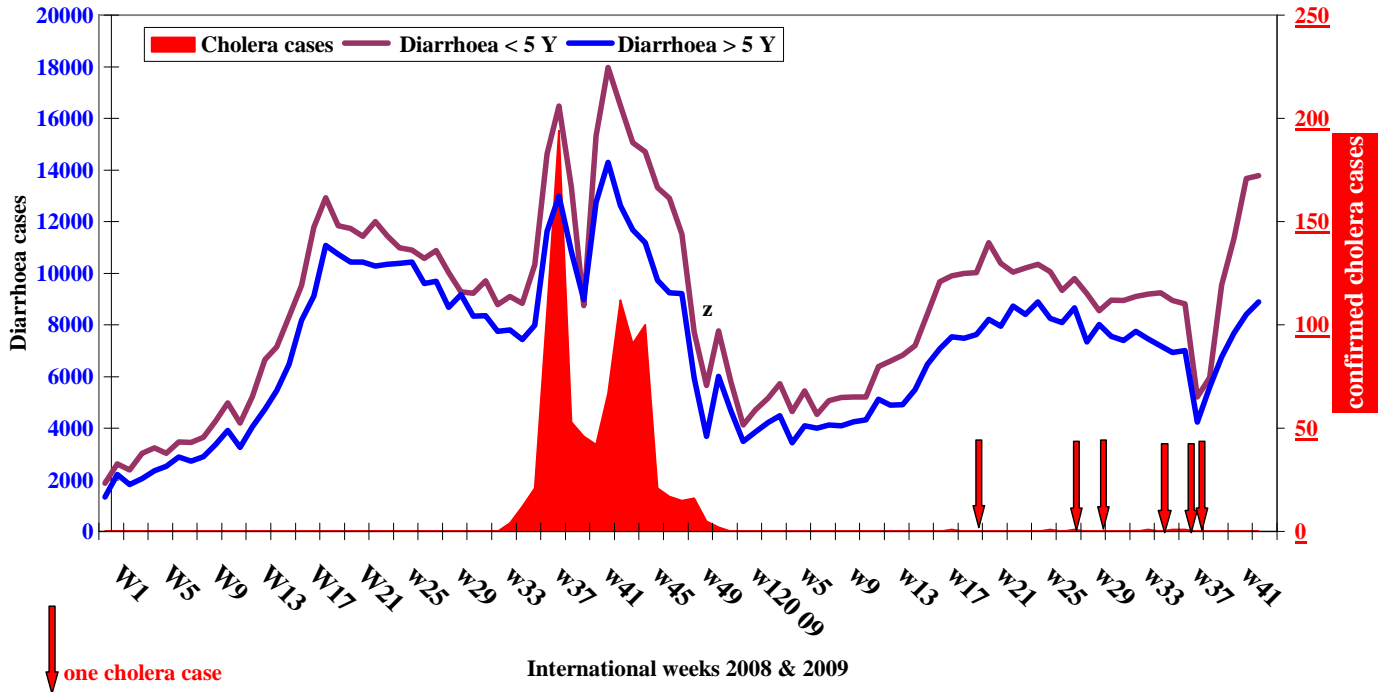
International Week	Total Diarrhea cases	Stool samples tested for cholera	% of Diarrhea cultured for VC
Total for the first 36 weeks	512070	294099	57%
Week 37 ending 14/09/09	15835	8634	55%
Week 38 ending 21/09/09	9438	4701	50%
Week 39 ending 28/09/09	11547	4613	40%
Week 40 ending 05/10/09	16288	8485	52%
Week 41 ending 12/10/09	19026	9709	51%
Week 42 ending 19/10/09	22083	11495	52%
Week 43 ending 26/10/09	22662	12402	55%
Total 2009	628949	354138	56%

5. **DIARRHOEA BY WEEKS AND CONFIRMED CHOLERA:**

Fig 1 Shows, Diarrhea seems to have peaked in week 19(2008) and then started a very slow and gradual down trend up to week 33, 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 supplies. Cholera cases started being reported 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. in 2009 only six sporadic cholera cases were reported up to now; at the rate of one case; in weeks 18, 26, 28, 34, 36 and 37 of the year 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 week 24 weeks of 2008... The weekly reported diarrhea cases seems to be a sensitive indicator of cholera out breaks which have proved valuable in detecting sporadic cholera cases. Since week 7 there is a continuous but gradual increase in the number of diarrhea cases in all age group, the increase seems to follow the rise in

atmospheric temperature. In the weeks 37-39 a sudden drop in Diarrhea cases is noted. No plausible explanation can be found; this drop may be reporting fatigue or reporting relaxation, since the cholera season seems to be over. However in the last 4 weeks diarrhea reporting approached the usual average for the season.

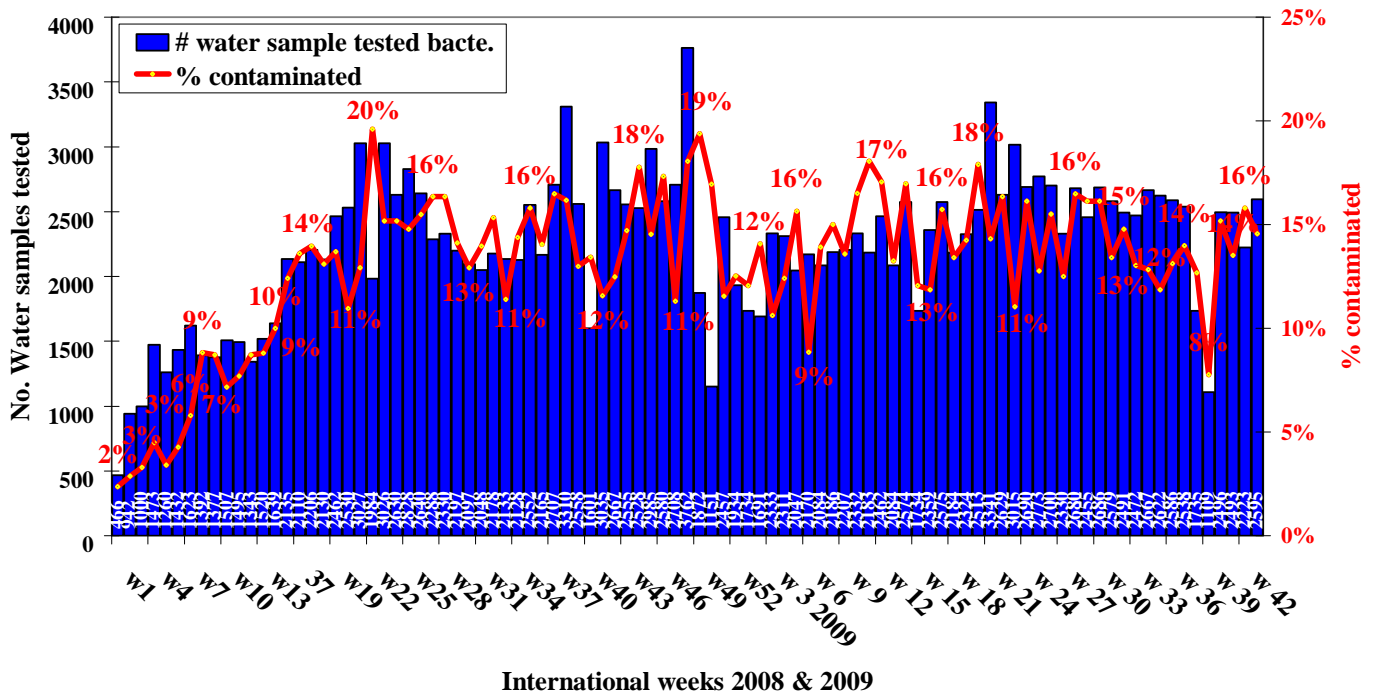
Fig (2) Diarrhoea and laboratory confirmed cholera by international week, 2008, and up to week 43, 2009, Iraq



6. CUMULATIVE SITUATION FOR THE YEAR 2009:

- 19 Directorates of Health reported **628949** cases of Diarrhoea during the first 43 weeks of this year. Only 6 cholera cases were isolated and tested from 354,138 stool samples tested.
- 102907 water samples have been tested for the presence of faecal contaminants and 14.772 water samples (14%) were found to be contaminated with coliform bacteria.
- As shown in fig. (3) The percentage of contaminated water samples during the first 43 weeks of 2009 is still alarming and ranges between 8 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. 3 Number of water samples tested for fecal coliforms, % that failed the test, Iraq, 2008 and first 43 weeks of 2009



7. WATER CONTAMINATION

Fig (4) shows the percentage of water samples contaminated by coliform bacteria during the first 43 weeks of 2009. It is clear that the contamination is above average in the provinces of, Wasit, Ninewa, Erbil, Thi-Qar, Anbar, Salahadin, Kirkuk, and Basra,. The water contamination by coliform bacteria in Diyala may not reflect the reality, thus CPHL and NRI should immediately review the situation to understand the reason for this under estimation of water contamination. As mentioned earlier the method for water collection and testing needs to be standardized and a system for laboratory quality control in laboratories needs to be established within MoH and between other line ministries

Fig (4) % water samples contaminated by coliform bacteria, Iraq, by province, first 43 weeks of 2009

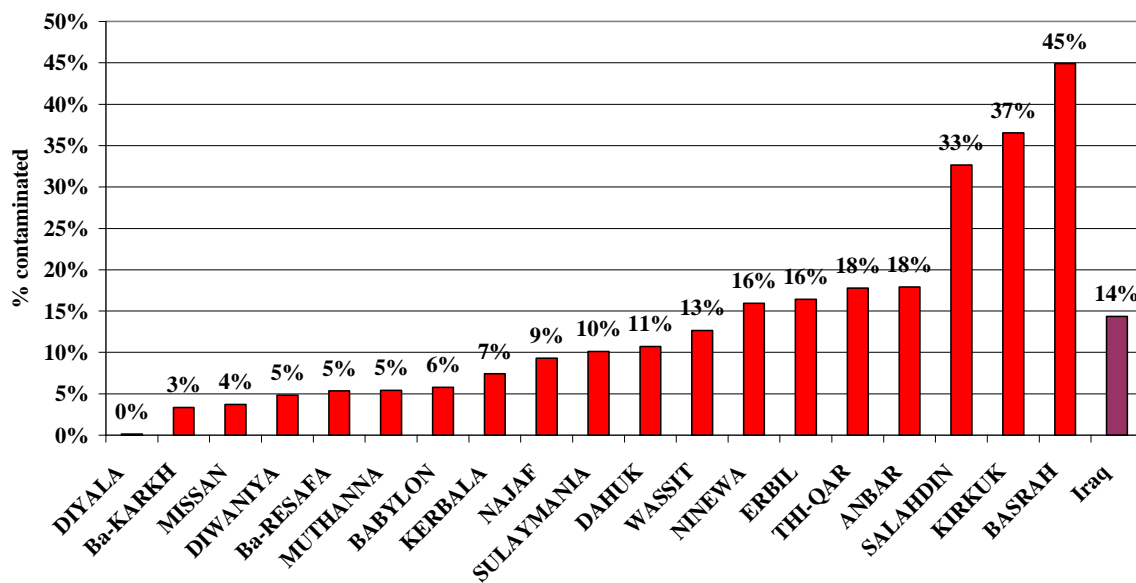


chart 5 Reported Diarrhoea cases, first 43 weeks, Iraq, 2008 & 2009

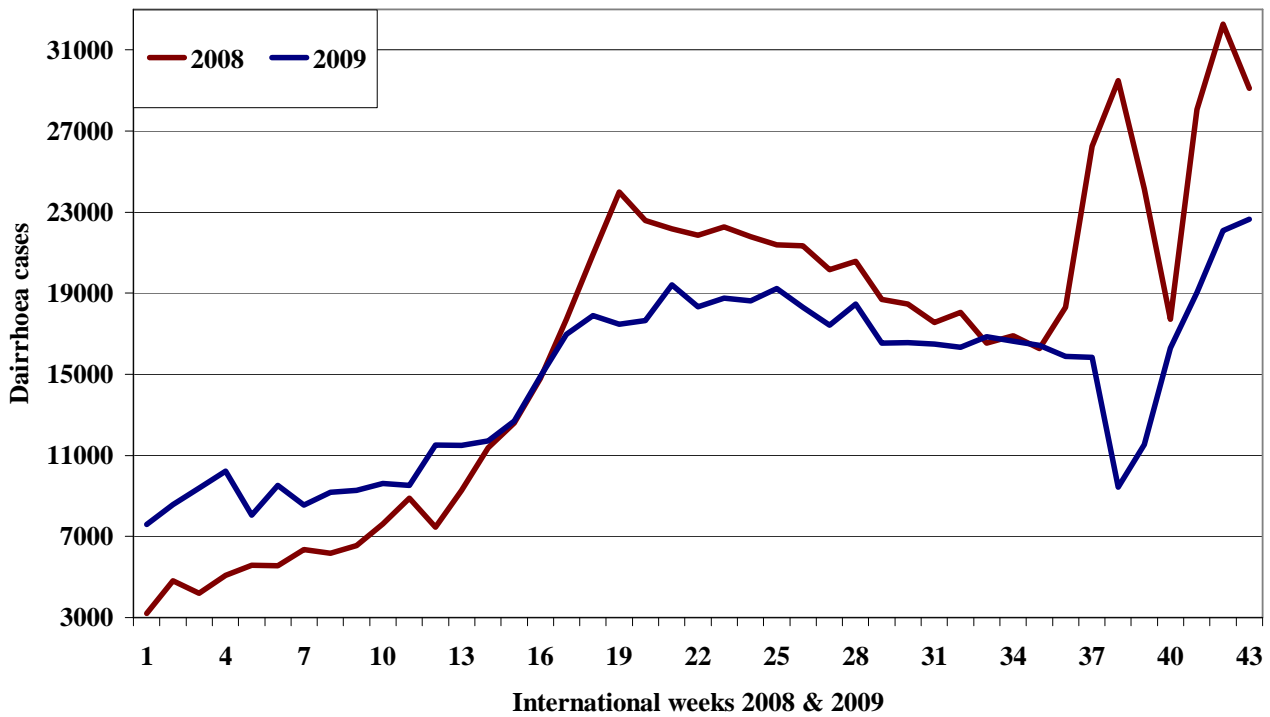


Fig 4 indicates clearly better reporting of diarrhoea during 2009 compared to 2008, however as of week 14 diarrhoea cases for 2008, started to rise sharply and crossed over 2009 line; this steep increase reflects the increase in diarrhoea due to cholera cases that were miss reported. Weeks 36-39 show a sudden sharp increase in diarrhoea cases for 2008 and a sudden and sharp decrease in diarrhoea cases for the same period in 2009. The sharp increase in 2008 coincides with the first peak of cholera shown in fig (1). But the sudden sharp drop in diarrhoea cases in weeks 36-39 need more careful look but may reflect reporting fatigue or diarrhoea surveillance relaxation following what seems to be the end of the cholera season. In the last 3 weeks reported diarrhoea cases approached the average for the season.