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

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

Sitrep no. 118 for international week 52 ending 27 December 2009

1. SUMMARY:

- **Influenza like Illness (ILI)** surveillance has been added to the list of the weekly notifiable illness as of week (42). During week (52) all 19 DoHs were able to report on time.
  - ILI cases reported during weeks 42 - 52; were equally distributed between the 2 sexes (50% males and 50 % females).
  - Fig (1) below showed that ILI reporting increased from 2356 episodes in week 42 to peak in week 47 with 41938 episodes; this was followed by almost 50% drop in cases in weeks 48 and 49, however week 50 &51 showed another up trend with 33964 & 32769 cases respectively. The down trend of weeks 48 & 49 seems to be an apparent change due to the holiday season. It is too early to say that the outbreak is over, since we are still in the beginning of the winter season and a second wave may occur any time.

2. Reported ILI by International week, Iraq, week 42-52

Fig. (1) Reported ILI by International weeks, Iraq 2009

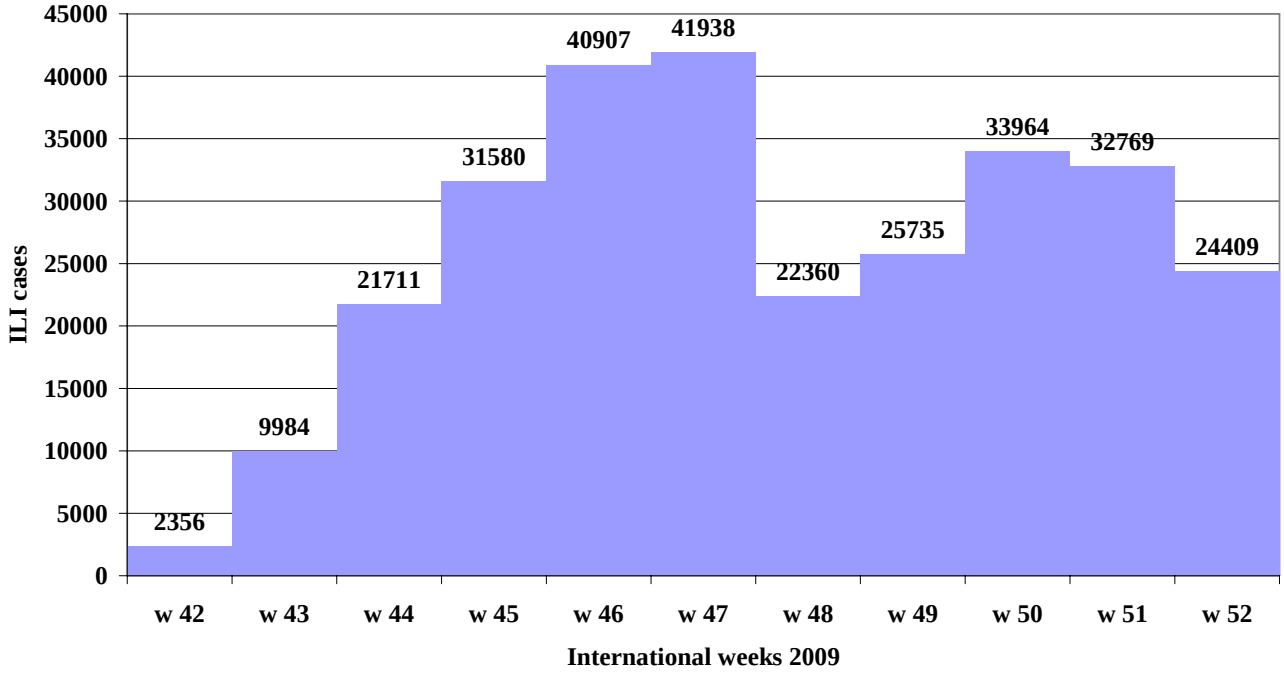
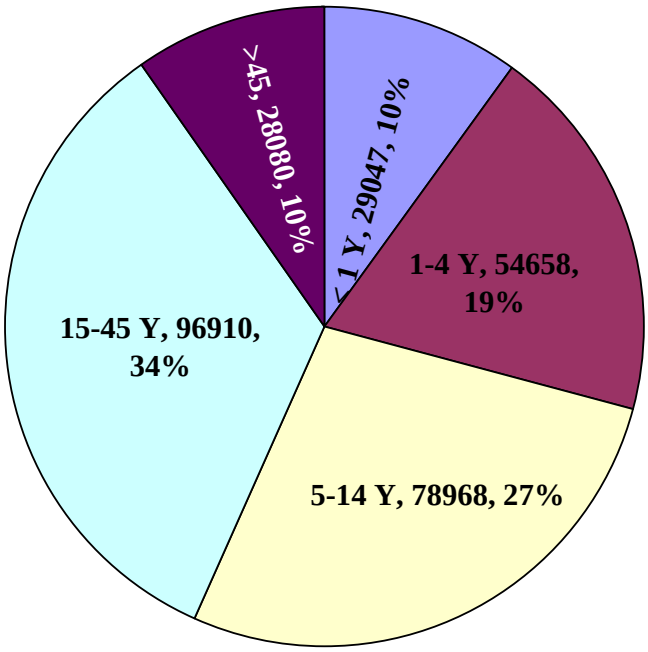


Table (1) Influenza like Illness by Directorate of health and international week, Iraq, 2009

Weeks	42	43	44	45	46	47	48	49	50	51	52	Total
ANBAR		10	11	432	131	672	236	559	1690	935	991	**5667**
BABYLON			87	741	1329	452	189	123	309	464	432	**4126**
BAG-KARKH	116	983	2108	1874	2467	2190	1079	1079	1705	1592	1301	**16494**
BAG-RESAFA		963	2859	2149	1184	1030	486	1068	2292	1287	1387	**14705**
BASRAH	213	752	2535	3143	2401	3243	487	1666	2490	4726	837	**22493**
DAHUK	175	599	2387	4421	9340	7696	4483	3691	5029	4673	4508	**47002**
DIWANIYA		455	881	962	2005	1960	829	452	261	320	300	**8425**
DIYALA		258	1310	1717	2436	1498	1014	1150	2373	1664	1237	**14657**
ERBIL		1782	2119	4575	5370	5828	2358	3375	5549	4094	3352	**38402**
KERBALA		5	236	416	371	295	144	107	86	119	120	**1899**
KIRKUK		189	639	1838	1792	1581	1368	1044	1262	1057	1330	**12100**
MISSAN	17	227	501	1453	471	529	186	841	266	278	126	**4895**
MUTHANNA	102	284	291	419	666	950	794	303	753	735	395	**5692**
NAJAF	979	1591	1941	1760	1386	1287	1171	886	970	1200	468	**13639**
NINEWA	34	350	1175	1160	1507	1525	334	1410	1061	763	1036	**10355**
SALAH AL-DIN	7	26		23	54	61	33	13	26	12	31	**286**
SULAYMANIA	477	1171	2263	3548	5920	7814	6157	5540	5819	6347	4618	**49674**
THI-QAR		26	21	10	893	2429	522	1731	1299	1587	1239	**9757**
WASSIT	236	313	347	939	1184	898	490	697	674	916	701	**7395**
Total	**2356**	**9984**	**21711**	**31580**	**40907**	**41938**	**22360**	**25735**	**33964**	**32769**	**24409**	**287663**

3. **Fig (2) Reported ILI by age groups**, 56 % of the cases are among <15-year-old children, mostly school children while 34% are among young adults 15-45 years. Only a small fraction 10% of cases was reported among those above 45 years of age.

Fig (2) Reported ILI cases, by age group, Iraq, Week 42-52



4. **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 52 all 19 DOHs reported timely 1109 surveillance sites out of 1133 sent the weekly DIARRHOEA disease report on time i.e. 98% completeness and timeliness.
   - Total Diarrhea cases reported this week were 10522; out of them 5784 (55%) stool samples were cultured for cholera organism, but none was found positive.
   - Out of 5784 stool specimens cultured, none was positive for cholera organism.

5. **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%

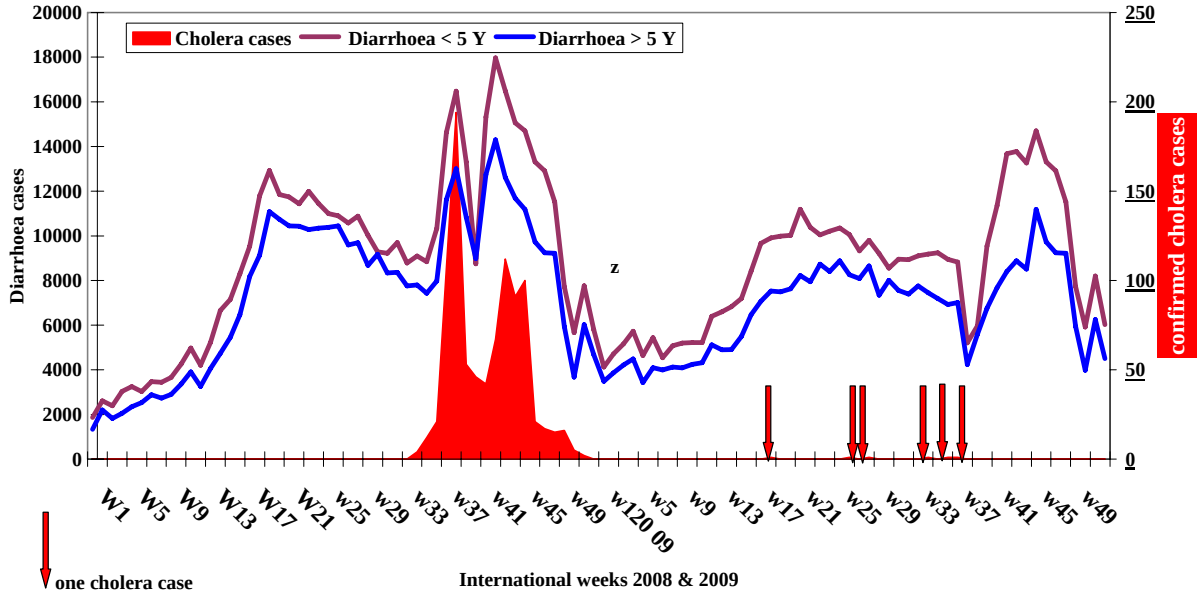
Week 42 ending 19/10/09	22083	11495	52%
Week 43 ending 26/10/09	22662	12402	55%
Week 44 ending 02/11/09	21762	10914	50%
Week 45 ending 09/11/09	19441	10708	55%
Week 46 ending 16/11/09	20653	10823	52%
Week 47 ending 23/11/09	18175	8934	49%
Week 48ending 30/11/09	11178	5709	51%
Week 49 ending 07/12/09	11881	4742	40%
Week 50 ending 07/12/09	13224	6839	52%
Week 51 ending 20/12/09	12877	6889	53%
Week 52 ending 27/12/09	10522	5784	55%
Total 2009	768662	425480	55%

6. DIARRHOEA BY WEEKS AND CONFIRMED CHOLERA:

Fig (3) Shows Diarrhoea 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 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 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 diarrhoea 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 Diarrheal cases is noted, where no plausible explanation can be found. This drop may be reporting fatigue or reporting relaxation, since the cholera season seems to be over. During weeks 40 to 47 the weekly reported diarrhea approached the usual average for the season. However, during weeks 48 & 49 a sudden unexplained drop in the number of diarrhea cases is noted. No plausible explanation can be found for this drop, most probably most of the effort of surveillance staff has been directed to ILI and diarrhea surveillance is slightly neglected.

Fig (3) Diarrhoea and laboratory confirmed cholera by international week, 2008, and up to week 52, 2009, Iraq



7. CUMULATIVE SITUATION FOR THE YEAR 2009:

768,662 cases of Diarrhoea were reported during the first 52 weeks of this year. Only 6 cholera cases were isolated from **425,480** stool samples tested.

chart 4 Reported Diarrhoea cases, first 52 weeks, Iraq, 2008 & 2009

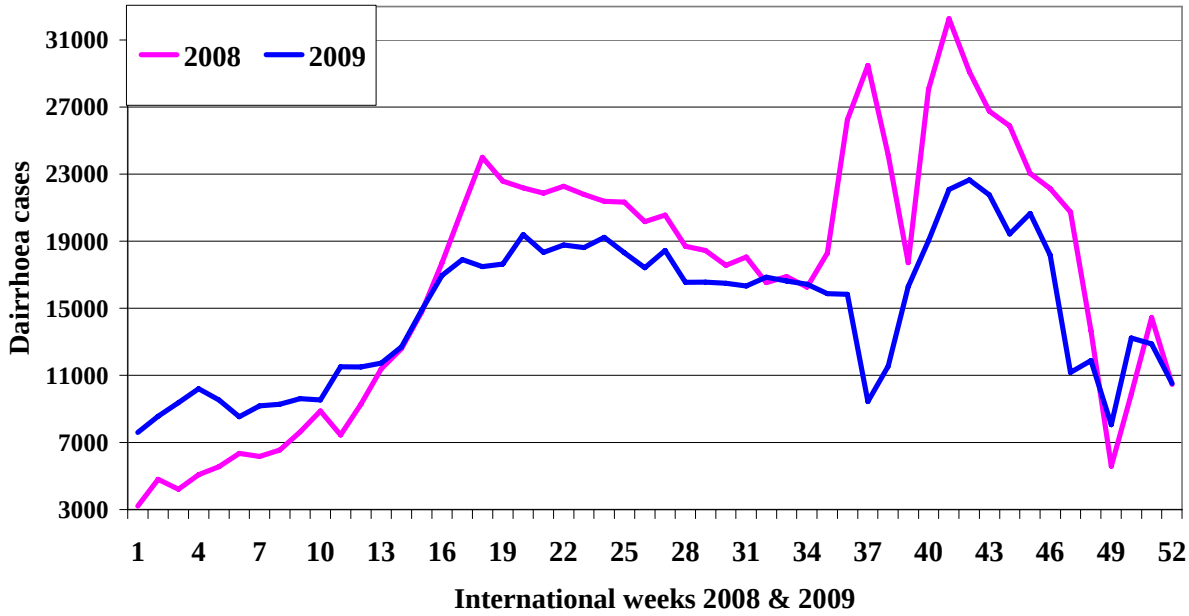


Fig (4) shows clearly better reporting of diarrhea during 2009 compared to 2008. However, as of week 14, diarrhea cases for 2008, started to rise sharply and crossed over 2009 line; this steep increase may reflect an increase in diarrhea due

to cholera cases that were missed. Weeks 36-39 show a sudden sharp increase in diarrhea cases for 2008 and a sudden and sharp decrease in diarrhea 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 diarrhea cases in weeks 36-39 of 2009 needs a more careful look but may reflect reporting fatigue or diarrhea surveillance relaxation following what seems to be the end of the cholera season. Week 42-49 shows difficult to explain sudden rise and drop in the reporting of diarrhea, most probably attention was directed to ILI and Diarrhea data was relatively neglected.