



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

Volume 5, Issue 46, Wednesday 19 November 2014

Highlights

Figure-1: 75 out of 87 districts reported to DEWS in week 46, 2014

Epidemiological week no. 46
(9 - 15 Nov 2014)

- 7 suspected CCHF cases were reported this week; 5 suspected CCHF cases were from Balochistan; while 2 cases including 1 death reported from Sindh province.
- In this week, **75** out of 87 districts and 2,685 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 78 districts with 2,679 health facilities shared weekly data in week 45, 2014.
- A total of **1,050,429** patients consultations reported in this week 46, 2014.
- In this week, a total of 31 alerts generated and timely responded. Altogether 6 alerts were for Measles; 5 each for CCHF, Dengue fever and Diphtheria; 4 for Leishmaniasis; 3 for NNT; while 1 each for AWD; Acute diarrhoea and Typhoid fever.
- 3 outbreaks were also identified and timely responded.



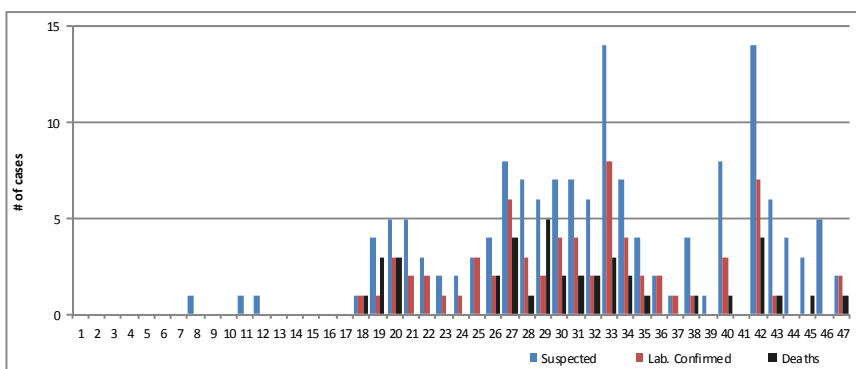
Priority diseases under surveillance in DEWS

- Acute Respiratory Infection
- Pneumonia
- Acute Watery Diarrhoea
- Bloody diarrhoea
- Acute Diarrhoea
- Suspected Enteric/Typhoid Fever
- Suspected Malaria
- Suspected Meningitis
- Suspected Dengue fever
- Suspected Viral Hemorrhagic Fever
- Suspected Measles
- Suspected Diphtheria
- Suspected Pertussis
- Suspected Acute Viral Hepatitis
- Neonatal Tetanus
- Acute Flaccid Paralysis
- Cutaneous Leishmaniasis

Cumulative number of selected health events reported in Epi-week 1 to 46, 2014 (29 Dec 2013 to 15 November 2014)

Disease	# of Cases	Percentage
ARI	8,731,073	18.70%
Bloody diarrhoea	47,808	<1.00%
Acute diarrhoea	2,653,218	5.68%
S. Malaria	1,171,236	2.16%
Skin Diseases	1,467,948	2.75%
Unexplained fever	1,193,256	2.45%
All other consultations	31,423,433	67.31%
Total (All consultations)	46,687,972	100%

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 47 2014



Major health events reported during the Epi-week - 46 (9 - 15 Nov 2014)

Disease	# of Cases	Percentage
ARI	244,127	23.24%
Bloody diarrhoea	825	<1.00%
Acute diarrhoea	50,577	4.81%
S. Malaria	22,738	2.16%
Skin Diseases	28,835	2.75%
Unexplained fever	25,759	2.45%
All other consultations	677,568	64.50%
Total (All consultations)	1,050,429	100%

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 148 suspected cases (68 laboratory confirmed) and 40 deaths (of these 21 laboratory confirmed) have been reported. Out of total CCHF cases reported in Pakistan, 41 cases (15 laboratory confirmed) and 8 deaths belong to Afghanistan.

The CCHF cases from Afghanistan are detected and reported from Quetta and Peshawar. The patients are referred for treatment (mostly self referrals) to the Tertiary Care hospitals in both these cities. The list of CCHF cases with addresses shared with concerned person at the Ministry of Public Health Afghanistan for preventive measures at community level.

Number of Outbreaks (Wk-46/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
11-Nov	Acute Diarrhoea	Balochistan	Las bela	Ghulam Qadir Goth, UC Lohi, Tehsil Dureji	4	22	5	10	An alert for high number of Acute diarrhoea cases were reported from area of Lohi, Tehsil Dureji, district Lasbela. A total of 41 Acute diarrhoea cases were investigated and provided treatment according to plan A,B and C. 2 stool samples were collected and sent to NIH and found negative for AWD, 3 water samples were also collected. Health and hygiene session conducted in the community, and packs of ORS were distributed after a session for proper preparation and usage. All information shared with DHO.
13-Nov	Leishmaniasis	Balochistan	Las bela	FC camp, UC Bela, Tehsil Bela	0	7	0	0	7 cases of Cutaneous Leishmaniasis were reported from tehsil Bela, district Lasbela. Cases were presenting with lesions mostly on hands and feet. None of the cases had any travelling history. All the cases were provide treatment in Leishmaniasis treatment center. Information shared with DHO.
12-Nov	Diphtheria	Punjab	Lahore	Kamhan Road Nishter Town	0	0	0	1	A Probable Diphtheria case was reported from Children Hospital Lahore. Case management was ensured. Patient was admitted in ICU under supervision of Medical unit 3. The Patient Belongs to Nishter Town Lahore. Sample of Throat Swab was collected and send to NIH which was found positive for Corynebacterium Diphtheria. Active surveillance was done and no more case was found. During field investigation a total of 145 children under 5 year of age were given additional dose of Penta and Measles 1 to 7 children. Health education session was done with the help of LHS and community leaders.
15-Nov	Leishmaniasis	Punjab	Multan	Timber Market, Doulat Gate Multan	0	2	0	0	Alert for three clinically diagnosed cases of Cutaneous Leishmaniasis were reported from Civil Hospital Multan. Vector surveillance activity has been conducted in the affected areas and Permethrin Fogging and IRS was conducted in affected households. 2 health education sessions were conducted in the community with the help of Public Health Workers. Injection Glucantime were also provided to MS Civil Hospital for treatment of the cases. Information shared with EDOH.

Table-1: Number of alerts and outbreaks reported and investigated with appropriate response

Disease	2013		Current week 46, 2014		2014 (Up till 15 Nov)	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	1	1	63	16
Acute jaundice syndrome	49	6	0	0	15	3
Bloody diarrhoea	45	3	0	0	27	0
CCHF	90	47	4	0	130	59
Dengue fever	300	66	7	0	76	12
Diphtheria	84	19	5	0	80	5
Measles	3357	281	6	0	1103	32
Pertussis	46	10	0	0	27	2
NNT + tetanus	349	0	3	0	245	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	4	1	380	21
Others	520	5	3	0	292	6
Total	5628	534	33	2	2438	156

Figure-3: Number of alerts received and responded, week 43 to 46 2014

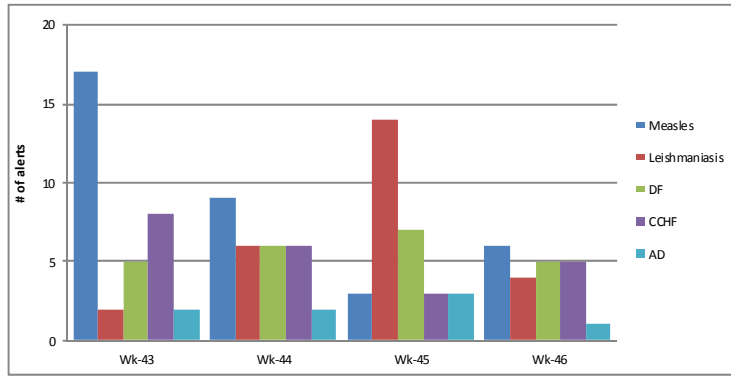
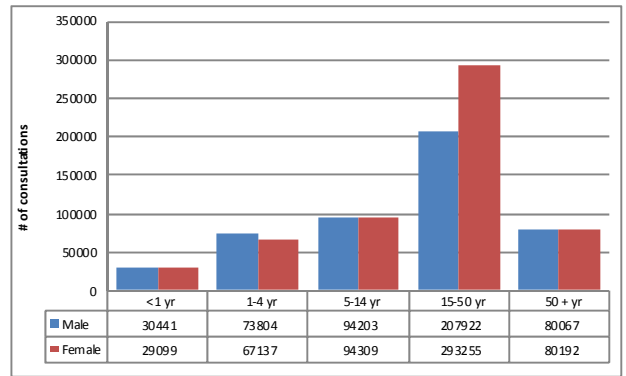
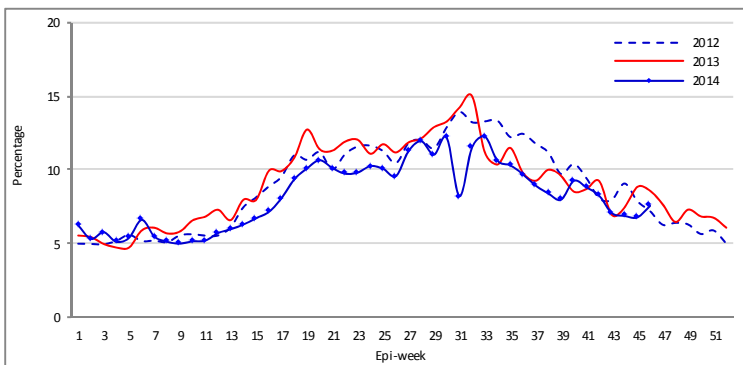


Figure-4: Number of consultations by age and gender, week 46, 2014



Province Khyber Pakhtunkhwa:

Figure-5: Weekly trend of Acute diarrhoea, province Khyber Pakhtunkhwa



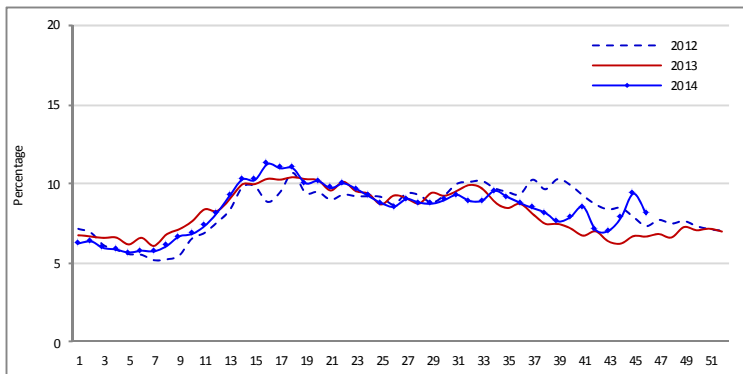
117 health facilities from 8 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 35,061 patients consultations reported in week 46, 2014.

A total of 9 alerts for Leishmaniasis were received and appropriate measures were taken during this week. Altogether 4 alerts were for Measles; 3 for Diphtheria; while 1 each for CCHF and Leishmaniasis.

Figure-5 shows the weekly trend of Acute diarrhoea showing increase as compared with last week and vigilant monitoring of the situation is required.

Province Sindh:

Figure-6: Weekly trend of Acute diarrhoea, province Sindh



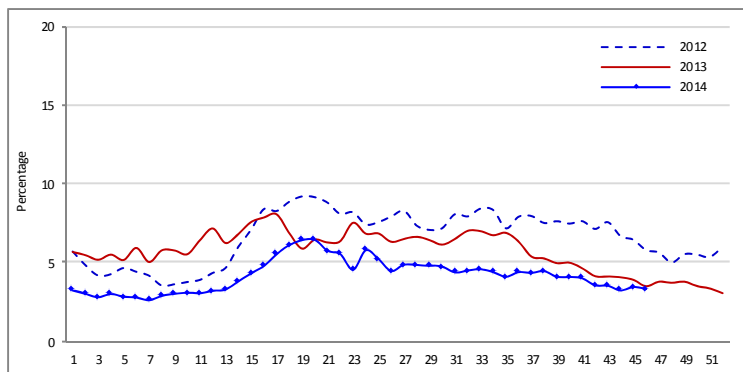
712 health facilities from 23 districts in Sindh province reported to DEWS with a total of 258,641 patient consultations in week 46, 2014.

A total of 5 alerts were received and appropriate measures were taken. Altogether 3 alerts were for NNT; while 1 each for CCHF and Leishmaniasis.

The proportion of AD for the province is showing decrease as compared with last week but vigilant monitoring of the situation is required as proportion of AD is high in the province as compared with same time period last year.

Province Punjab:

Figure-7: Trend of Acute diarrhoea, province Punjab



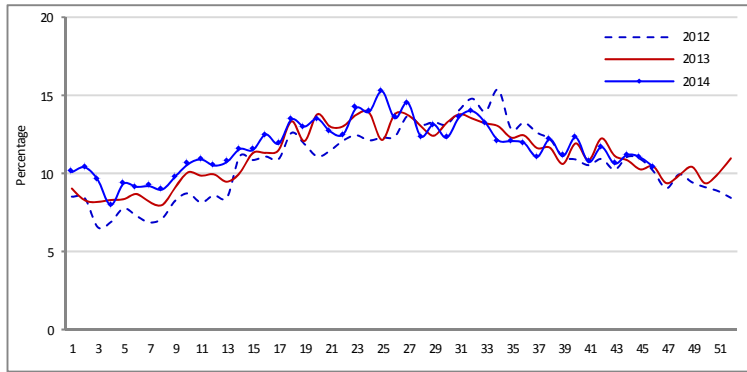
1,665 health facilities from 34 districts in Punjab province reported to DEWS with a total of 726,096 patients consultations in week 46, 2014.

Total 11 alerts were received and appropriate measures were taken. Altogether 5 alerts were for Dengue fever; 2 for Diphtheria; while 1 each for Acute diarrhoea, CCHF, Measles and Typhoid fever were responded in province Punjab.

The weekly trend of Acute diarrhoea in Punjab showing minor decrease as compared with last week but vigilant monitoring of the situation is required.

Province Balochistan:

Figure-8: Weekly trend of Acute diarrhoea, province Balochistan



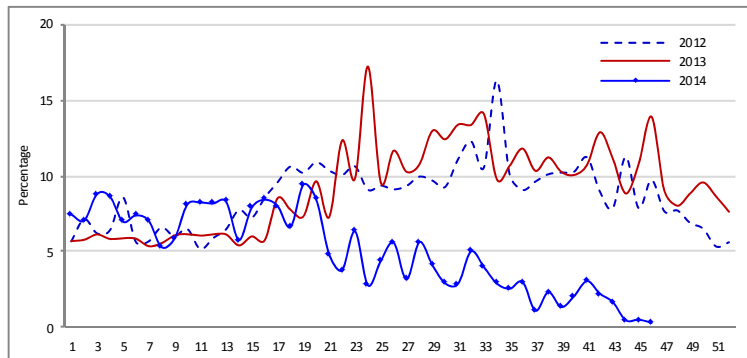
189 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 29,748 patients consultations in week 46, 2014.

A total of 6 alerts were reported and appropriate measures were taken. Altogether 2 alerts each were for Leishmaniasis and CCHF; while 1 each for AWD and Measles.

In this week the weekly proportion of AD showing decrease as compared with last week but vigilant monitoring of the situation is required, as the proportion of AD is high as compared with same time period last year.

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



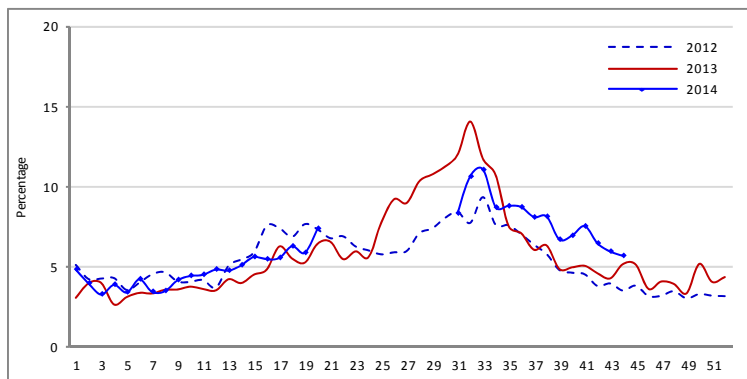
1 health facilities from 1 agency in FATA reported to DEWS with a total of 669 patients consultations in week 46, 2014.

No alert for any disease was received from any area in FATA in week 46 2014.

The proportion of AD showing spikes as the number of consultations is low, but vigilant monitoring of the situation is required.

State of Azad Jammu and Kashmir:

Figure-10: Weekly trend of Acute diarrhoea, AJ&K



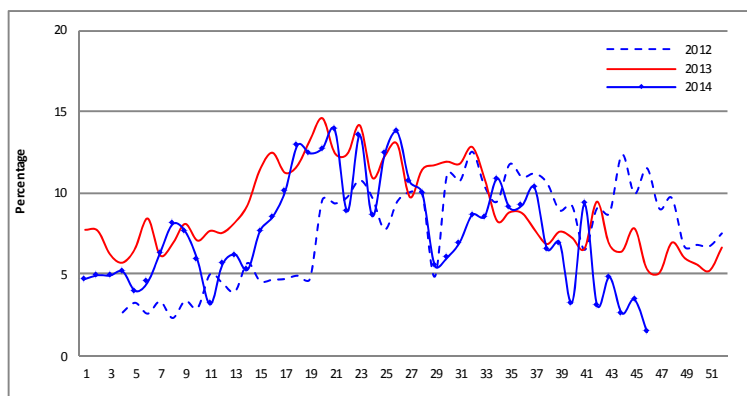
65 health facilities from 8 districts in AJK reported to DEWS with a total of 9,679 patients consultations in week 44, 2013.

A total of 4 alerts were reported and appropriate measures were taken. Altogether 3 alerts each were for Measles; while 1 for Leishmaniasis.

Weekly trend of AD showing decrease this week as compared with last week but vigilant monitoring of the situation is required as the proportion of AD is higher as compared with the same time period last year.

Islamabad:

Figure-11: Weekly trend of Acute diarrhoea, Islamabad



1 health facility reported to DEWS on time with a total of 214 patients consultations in week 46, 2014.

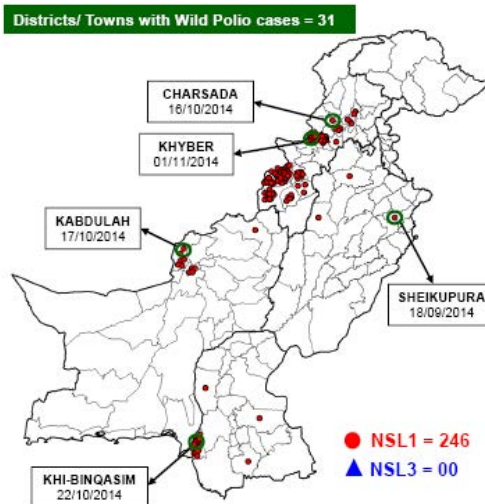
No alert for any disease was reported in week 46 from Islamabad in this week.

Weekly trend of AD showing spikes as the number of reporting health facilities is low from last couple of weeks, but vigilant monitoring of the situation is required.

Distribution of Wild Polio Virus cases in Pakistan 2013 and 2014

In week 46 (9 - 15 Nov 2014), ten new wild polio virus (WPV) cases were reported, six from Federally Administered Tribal Areas (five from Khyber and one from South Waziristan Agencies), two from Sindh (One each from Bin Qasim Town and Badin district), one from Balochistan (Killa Abdullah district) and one from Khyber Pakhtunkhwa (Mardan district). This brings the total number of polio cases in 2014 to 246 (compared to 74 in 2013 till this time) from 31 districts/towns/tribal agencies/FR areas (compared to 20 in 2013 till this time).

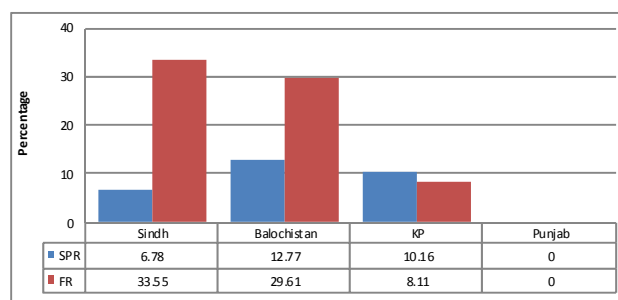
Province	Year 2013			Year 2014 (till 15 Nov)		
	P1	P3	P1+P3	P1	P3	P1+P3
FATA	65	-	-	158	-	-
Khyber Pakhtunkhwa	11	-	-	49	-	-
Sindh	10	-	-	25	-	-
Balochistan	-	-	-	11	-	-
Punjab	7	-	-	3	-	-
Gilgit-Baltistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	246	-	-



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 46, 2014. Total number of Malaria cases tested in this week is 3,796 out of which 341 were found positive; 242 for P. Vivax; 54 for P. Falciparum; while 45 for Mixed (SPR = 8.98%; F.R = 29.03%).

Malaria tests \ Province	Sindh	Balochistan	Khyber Pakhtunkhwa	Punjab
P. Vivax	101	107	34	0
P. Falciparum	18	34	2	0
Mixed	33	11	1	0
# tested	2242	1190	364	0
SPR	6.78	12.77	10.16	0
FR	33.55	29.61	8.11	0



Follow up on: CCHF

CCHF is a serious viral hemorrhagic fever with up to 50% case fatality rate, caused by an RNA virus of family Bunyaviridae, genus Nairovirus, carried by Hyalomma species of ticks. Human beings become infected by tick bites or crushing the ticks, which are usually found on sheep, cattle, goats or camels, and their slaughtered skins. They may also be exposed to the virus in blood or tissues of a viremic animal during its slaughter and butchering; or by contact with infected blood or secretions of acute human cases in home or hospital setting. Any contact of a CCHF patient should monitor his/her temperature for 14 days and see a doctor if fever develops. The anti viral medicine Ribavirin has been effective in saving lives of patients who report early to the health facility.

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far 148 suspected cases (68 laboratory confirmed) and 40 deaths (of these 21 laboratory confirmed) have been reported. Most of the cases are reported from Balochistan province, total 78 suspected cases of CCHF and 17 deaths have been reported; 30 of the cases were laboratory confirmed, out of these 16 cases (8 confirmed) cases and 2 deaths belong to Afghanistan. From Khyber Pakhtunkhwa province total of 43 cases and 12 deaths have been reported; 21 laboratory confirmed cases, out of these 23 cases (6 confirmed) cases and 2 deaths belong to Afghanistan.

Approximately all the cases had contact history with animal trading/handling, tick bite, contact with patient, tannery worker, butcher/animal slaughtering. There is ongoing trade of animals and animal skins with movement intra Pakistan and between neighboring countries (Afghanistan and IRAN). WHO team is supporting the provincial health departments in handling the situation. The WHO-DEWS team conducts epidemiological investigation and contacts tracing (active surveillance in the community and hospitals), sharing information with the stake holders (DoH, Livestock Dept., hospitals and other partners), give health education to family members and close contacts of the cases on preventive measures and seeking immediate health care in case of fever/symptoms, collect and transport blood samples to NIH for laboratory testing and confirmation. Although joint efforts are being taken, however, more vigorous actions are required on the eradication of infected ticks in the high risks areas and awareness raising in the population.

Number of CCHF cases and deaths reported in year 2013 and 2014 (up till 28 Nov).

Province	2013			2014		
	Suspected	Lab confirmed	Deaths	Suspected	Lab confirmed	Deaths
AJ&K	1	1	0	1	0	0
Balochistan	66	39	9	78	30	17
ICT	4	4	1	4	3	2
KPK	9	9	4	43	21	12
Punjab	18	9	5	17	9	6
Sindh	2	2	1	5	5	3
Total	100	64	20	148	68	40

Alerts and outbreaks week 46 2014

