



Weekly Epidemiological Bulletin

Disease early warning system and response in Pakistan

Volume 5, Issue 40, Wednesday 08 October 2014

Highlights

Epidemiological week no. 40
(28 September - 4 October 2014)

- In this week, **68** out of 87 districts and 1,995 out of 3,590 health facilities have reported to Disease Early Warning System (DEWS), compared to 85 districts with 2,668 health facilities shared weekly data in week 39, 2014.
- A total of **711,473** patients consultations reported in this week 40, 2014; This decrease in number of consultations is due to Eid-ul-Azha holidays.
- In this week, a total of 36 alerts generated and timely responded. Altogether 11 alerts were for Measles; 7 for CCHF; 6 for Dengue fever; 5 for Leishmaniasis; 2 for NNT; while 1 each for Acute diarrhoea, AWD, Bloody diarrhoea, H1N1 and Scabies.
- 1 outbreak of Dengue fever was also identified and timely responded.

Figure-1: 83 out of 68 districts reported to DEWS in week 40, 2014



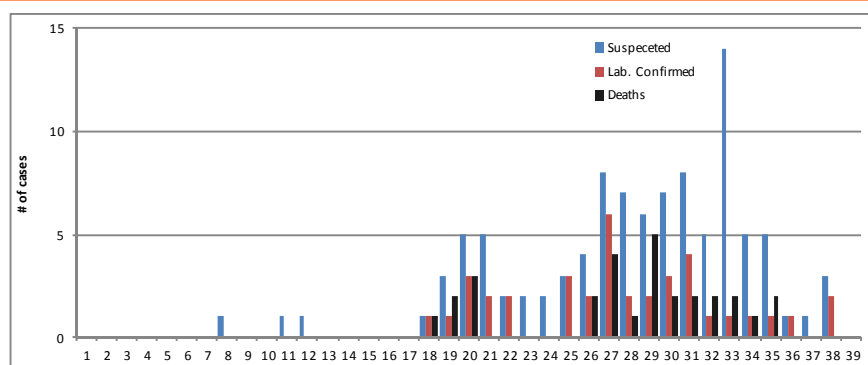
Priority diseases under surveillance in DEWS

- 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 40, 2014 (29 Dec 2013 to 4 October 2014)

Disease	# of Cases	Percentage
ARI	7,425,963	18.30%
Bloody diarrhoea	40,068	<1.00%
Acute diarrhoea	2,355,080	5.80%
S. Malaria	1,028,655	2.54%
Skin Diseases	1,292,445	3.19%
Unexplained fever	1,035,042	2.55%
All other consultations	27,399,130	67.52%
Total (All consultations)	40,576,383	100%

Figure-2: Weekly number of CCHF cases and deaths in Pakistan, week 1 to 40 2014



Major health events reported during the Epi-week - 40 (27 September - 4 October 2014)

Disease	# of Cases	Percentage
ARI	120,581	16.95%
Bloody diarrhoea	522	<1.00%
Acute diarrhoea	37,860	5.32%
S. Malaria	17,641	2.48%
Skin Diseases	19,378	2.72%
Unexplained fever	15,785	2.22%
All other consultations	499,706	70.24%
Total (All consultations)	711,473	100%

Crimean Congo Haemorrhagic Fever (CCHF) cases are reported continuously from epidemiological week 8, 2014. So far total 100 suspected cases, 38 laboratory confirmed, and 28 deaths (of these 14 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 46 suspected (13 cases belongs to Afghanistan), 10 Laboratory confirmed and 9 deaths. 30 suspected, 17 Laboratory confirmed (12 from Afghanistan) and 10 deaths (7 Lab confirmed) were reported from Khyber Pakhtunkhwa province. 4 suspected cases (2 from Afghanistan), 3 Laboratory confirmed and 2 deaths were reported from Islamabad. 15 suspected CCHF cases (7 Laboratory confirmed), 6 deaths were reported from Punjab province. 2 laboratory confirmed cases (1 death) were reported from Sindh province; While 1 suspected case was from district Sudhnuti (AJK) and found negative for CCHF.

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-40/2014):

Date	Disease	Province	District	Area	<5M	>5M	<5F	>5F	Action Taken
4-Oct	Leishmaniasis	Khyber Pakhtunkhwa	Mardan	Village & UC Kohi Bermol, Tehsil Katlang, Mardan	3	1	4	7	Continuous alert for 15 clinical cases of Cutaneous Leishmaniasis were reported from BHU Kohi Bermol, Tehsil Katlang. WHO supplied required doses of Inj-Glucantime to KPH, Mardan for all registered cases. RBM, KPH were requested for vector control interventions in the area and surrounding. On the job training of health staff was conducted for Intralesional administration of Inj-Glucantime. Information shared with EDO Health.
1-Oct	Dengue fever	Punjab	Lahore	UC 126 Gulberg Town	0	8	0	3	9 suspected, 1 probable and 1 confirmed Dengue fever cases notified from Teaching Units in Lahore. 1 blood sample was taken and sent to lab for detection of dengue specific antibodies, result for IgM was found positive. The confirmed case was admitted and kept in isolation ward (HDU) of Teaching hospital. There is no travel History of patient. Health education session was conducted in the community for proper solid waste disposal and improved water storage practices. Follow up planned. Information shared with AD (VBD) and EDO Health Lahore.
30-Sep	Dengue fever	Punjab	Rawalpindi	Potohar town; Rawal Town Rawalpindi	1	68	0	25	Continuous outbreak of Dengue fever having 51 Suspected, 18 Probable and 25 confirmed Dengue Fever cases were notified from Holy Family Hospital and BB Hospital, Rawalpindi. A total of 44 blood samples were taken and sent to lab for detection of dengue specific antibodies. 25 patients were found positive for Dengue fever. The cases were admitted and kept in isolation wards in the hospital. Health education sessions were conducted in the community for proper solid waste disposal and improved water storage practices and use of protective clothing and repellents. Information shared with EDO(H) Rawalpindi.

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

Disease	2013		Current week 39, 2014		2014	
	A	O	A	O	A	O
Acute watery diarrhoea	142	40	0	0	59	15
Acute jaundice syndrome	49	6	0	0	15	3
Bloody diarrhoea	45	3	0	0	26	0
CCHF	90	47	2	0	93	49
Dengue fever	300	66	7	4	35	9
Diphtheria	84	19	1	0	46	4
Measles	3357	281	7	0	1020	32
Pertussis	46	10	0	0	27	2
NNT + tetanus	349	0	8	0	221	0
Malaria	25	6	0	0	0	0
Cutaneous Leishmaniasis	621	51	3	1	340	19
Others	520	5	4	0	268	6
Total	5628	534	32	5	2150	139

Figure-3: Number of alerts received and responded, week 37 to 40 2014

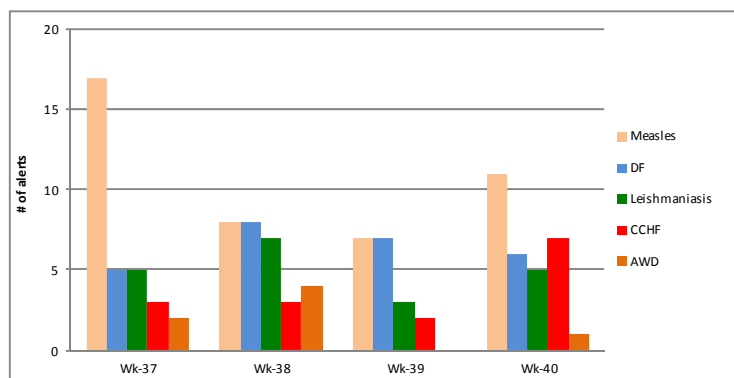
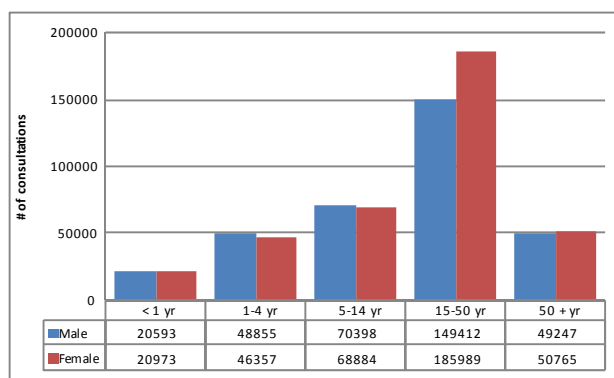
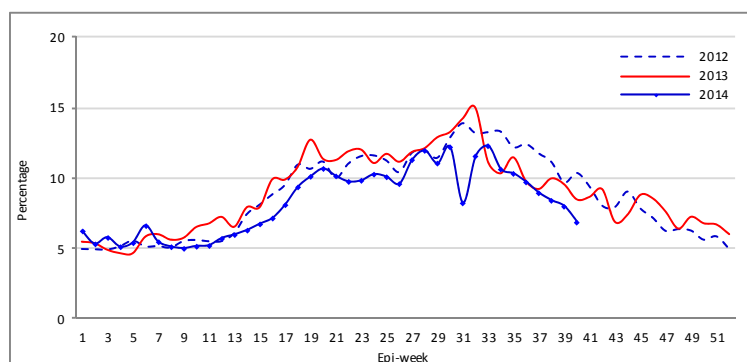


Figure-4: Number of consultations by age and gender, week 40, 2014



Province Khyber Pakhtunkhwa:

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



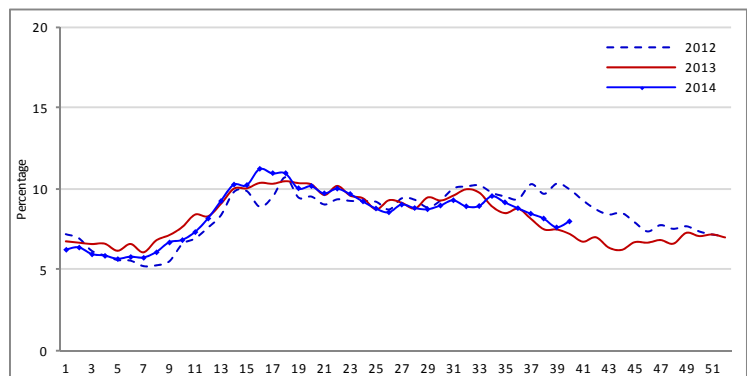
63 health facilities from 6 districts of Khyber Pakhtunkhwa sent reports to DEWS with a total of 15,120 patients consultations reported in week 40, 2014.

No alert for any Disease was received from Any area in Khyber Pakhtunkhwa during week 40 2014.

Figure-5 shows the weekly trend of Acute diarrhoea showing decrease from last couple of weeks but vigilant monitoring of the situation is required.

Province Sindh:

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



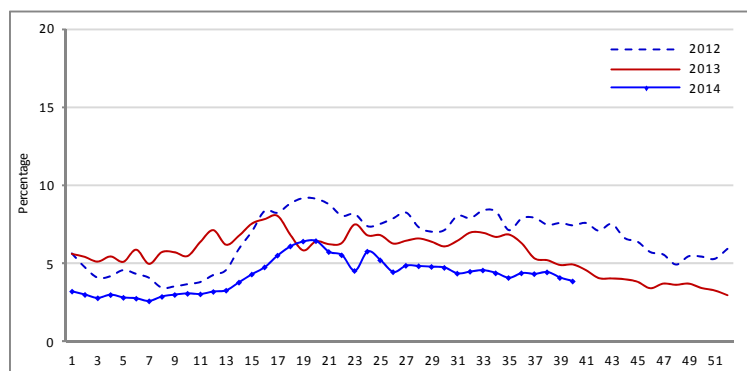
606 health facilities from 20 districts in Sindh province reported to DEWS with a total of 181,674 patient consultations in week 40, 2014.

A total of 10 alerts were received and appropriate measures were taken. Altogether 4 alerts each were for Leishmaniasis and Measles; while 1 each for AWD and NNT.

The proportion of AD for the province is showing increase as compared with last week and 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



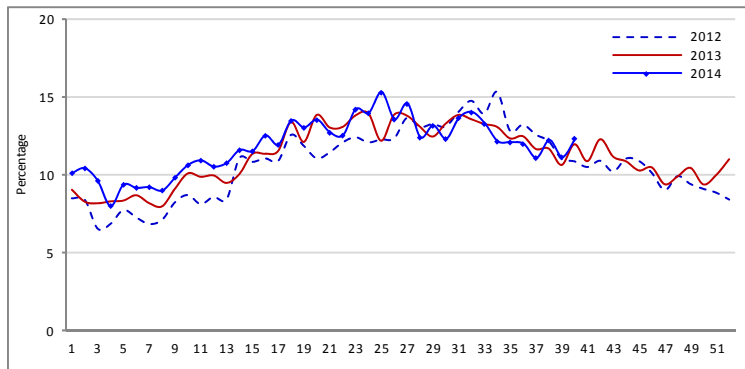
1,120 health facilities from 29 districts in Punjab province reported to DEWS with a total of 479,936 patients consultations in week 40, 2014.

Total 14 alerts were received and appropriate measures were taken. Altogether 6 alerts were for Dengue fever; 3 for Measles; while 1 each for Acute diarrhoea, CCHF, H1N1, NNT and Scabies were responded in province Punjab.

The weekly trend of Acute diarrhoea in Punjab showing decrease as compared with last week and low as compared with same time period last year.

Province Balochistan:

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



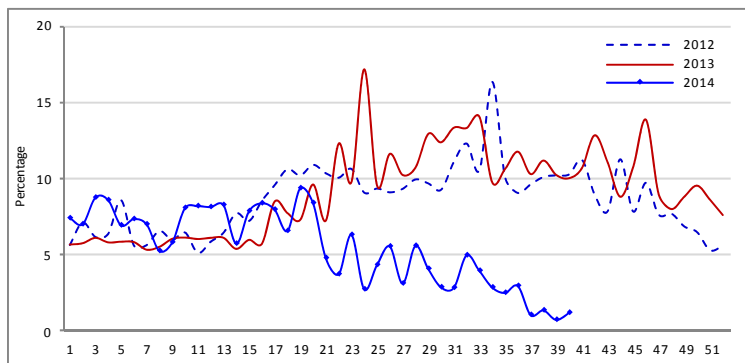
168 health facilities from 8 districts in Balochistan province reported to DEWS with a total of 28,134 patients consultations in week 40, 2014.

A total of 10 alerts were reported and appropriate measures were taken. Altogether 6 alerts were for CCHF; 3 for Measles; while 1 for Leishmaniasis.

In this week the weekly proportion of AD showing increase as compared with last week and vigilant monitoring of the situation is required as the proportion of AD is higher as compared with same time period last year.

FATA:

Figure-9: Weekly trend of Acute diarrhoea, FATA



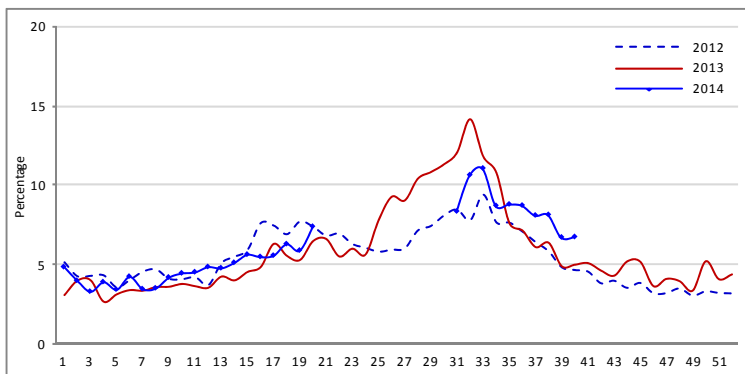
1 health facilities from 1 agency in FATA reported to DEWS with a total of 970 patients consultations in week 40, 2014.

No alert for any disease was received from any area in FATA in week 40 2014.

The proportion of AD showing some 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



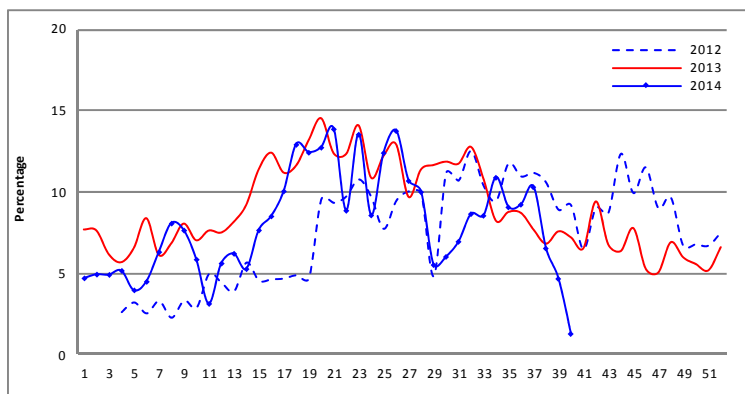
36 health facilities from 3 districts in AJK reported to DEWS with a total of 5,559 patients consultations in week 40, 2013.

A total of 2 alerts were reported in this week and appropriate measures were taken. Altogether 1 alert each for Measles and Bloody diarrhoea.

Weekly trend of AD showing minor increase this week as compared with last week and 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 80 patients consultations in week 40, 2014.

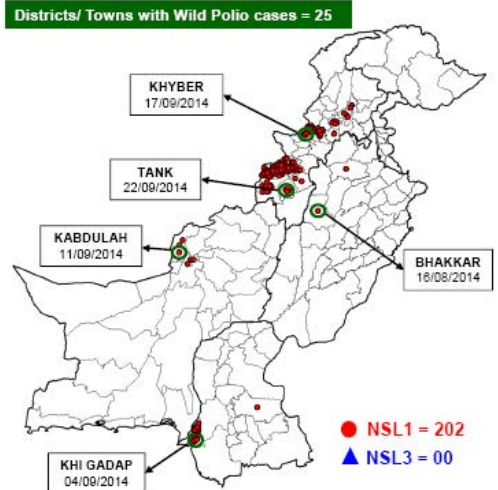
No alert for any disease was reported in week 39 from Islamabad in this week.

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 40 (27 Sept - 4 Oct 2014) twenty eight new wild polio virus (WPV) cases were reported, fourteen from FATA (ten from Khyber, one each from North and South Waziristan agencies and two from FR Bannu); nine from Khyber Pakhtunkhwa (three each from Peshawar and Mardan and one each from Noshera, Tank and Buner districts); four from Sindh (three from Gadap and one from Bin Qasim Town of Karachi) and one from Balochistan (Quetta district). This brings the total number of polio cases in 2014 to 202 (compared to 53 in 2013 till this time) from 25 districts/towns/tribal agencies/FR areas (compared to 16 in 2013 till this time).

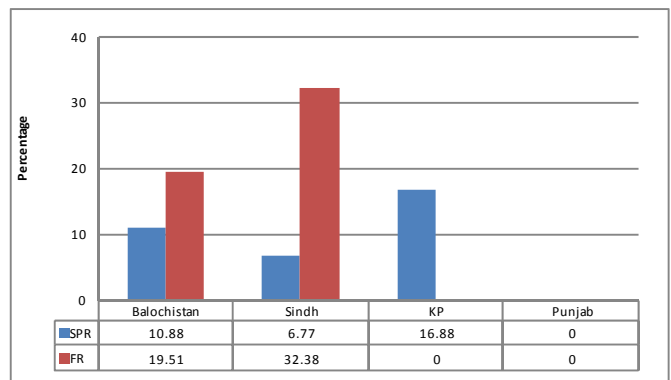
Province	2013			2014		
	P1	P3	P1+P3	P1	P3	P1+P3
FATA	65	-	-	135	-	-
Khyber Pakhtunkhwa	11	-	-	40	-	-
Sindh	10	-	-	19	-	-
Balochistan	-	-	-	6	-	-
Punjab	7	-	-	2	-	-
Gilgit-Baltistan	-	-	-	-	-	-
AJ&K	-	-	-	-	-	-
Islamabad	-	-	-	-	-	-
Total	93	-	-	202	-	-



Malaria:

The Table and chart given below shows the Malaria Slide Positivity and Falciparum Ratio in week 40, 2014. Total number of Malaria cases tested in this week is 2,912 out of which 267 were found positive; 209 for P. Vivax; 27 for P. Falciparum; while 31 for Mixed (SPR = 9.17%; F.R = 21.72%).

Malaria tests \ Province	Balochistan	Sindh	Khyber Pakhtunkhwa	Punjab
P. Vivax	99	71	39	0
P. Falciparum	20	7	0	0
Mixed	4	27	0	0
# tested	1130	1551	231	0
SPR	10.88	6.77	16.88	0
FR	19.51	32.38	0	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 total 100 suspected cases, 36 laboratory confirmed, and 28 deaths (of these 14 laboratory confirmed) have been reported. Most of the cases are from Balochistan province 46 suspected (13 cases belongs to Afghanistan), 10 Laboratory confirmed and 9 deaths. 30 suspected, 17 Laboratory confirmed (12 from Afghanistan) and 10 deaths (7 Lab confirmed) were reported from Khyber Pakhtunkhwa province. 4 suspected cases (2 from Afghanistan), 3 Laboratory confirmed and 2 deaths were reported from Islamabad. 15 suspected CCHF cases (7 Laboratory confirmed), 6 deaths were reported from Punjab province. 2 laboratory confirmed cases (1 death) were reported from Sindh province; While 1 suspected case was from district Sudhnuti (AJK) and found negative for CCHF. 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.

Alerts and outbreaks week 40 2014

