

Early Warning and Reporting System (EWARS)

Weekly Bulletin

(47th Epidemiological Week)

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This bulletin includes the updates from two surveillance systems:

1. The Early Warning Reporting System (EWARS) includes data since January 2014 till date, including comparison of same period during last year.
2. Post-earthquake hospital based syndromic surveillance system covering public and private hospitals in the 14 districts highly affected by the April 2015 Earthquake.

Section 1: The Early Warning and Reporting System (EWARS)

Highlights
<ul style="list-style-type: none"> • One death from SARI was reported this week from Kapilvastu district. • Three cases of Dengue were reported this week, one each from Chitwan, Parsa, and Rupandehi districts. Last year, the number of Dengue cases peaked on week 47 (14 cases) so it important to remain alert for new outbreak this year. • Two cases of Kala-azar were reported this week, one each from Siraha, and Sunsari districts. • Two cases of Malaria were reported from Jhapa district this week. • Hetauda hospital from Makwanpur district was sensitized with EWARS orientation program this week. It is one of the existing EWARS sentinel sites.

The EWARS has been established since 1997 in Nepal to strengthen the flow of information on vector-borne and other outbreak prone infectious diseases from the district to Epidemiology and Disease Control Division (EDCD) and Vector-Borne Disease Research and Training Center (VBDRTC), Hetauda. Rapid Response Teams (RRTs) can be mobilized at short notice to facilitate prompt outbreak response at Central, Regional and District level; they can also support the local level health institutions for investigation and outbreak control activities.

This information system is hospital-based and is currently operational in 40 hospitals (out of 81 sites) throughout Nepal (Figure 1). So far, the EWARS mainly focuses on the **weekly reporting** of number of cases and deaths (including "zero" reports) of six priority diseases/syndromes—Malaria, Kala-azar, Dengue, Acute Gastroenteritis (AGE), Cholera and Severe Acute Respiratory Infection (SARI), and other epidemic potential diseases/syndromes (like enteric fever, fever of unknown origin). It equally focuses on **immediate reporting** (to be reported within 24 hours of diagnosis) of one confirmed case of Cholera, Kala-azar severe and complicated Malaria and one suspect/clinical case of Dengue as well as 5 or more cases of AGE and SARI from the same geographical locality in one week period.

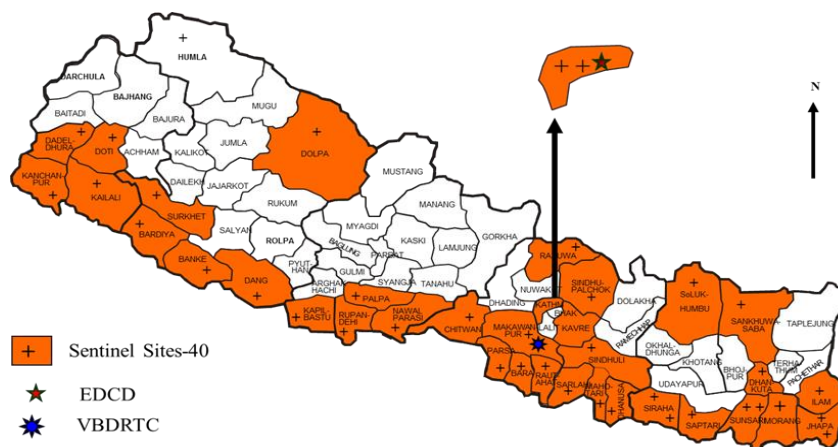


Figure 1: Sentinel sites of the Early Warning and Reporting System in Nepal set up in 2009

1.1 Acute Gastro-Enteritis and Cholera

120 cases of AGE were reported in week 47. The cases have decreased over the past few weeks. Among 120 cases, the majority of cases were from Morang (23 cases), Parsa (17 cases), Sunsari (11 cases), Kapilvastu (10 cases), and Jhapa (9 cases).

Surveillance for Cholera is ongoing at 35 different public and private hospitals of the Kathmandu Valley.

1.2 Severe Acute Respiratory Infection (SARI)

The number of SARI cases reported through EWARS had peaked in week 11 (249 cases) and week 43 (281 cases) this year and has been decreasing afterwards. Last year, the cases of SARI started to increase from week 35 and peaked on week 42 with 377 cases so it is important to remain alert for new outbreak. However, the number of SARI cases reported in week 47 (197 cases) this year did not exceed the number of SARI cases reported in the same week last year (247 cases). Among 197 cases 23 cases were from Jhapa, 22 cases from Kailali, 17 cases from Morang, 14 cases from Palpa, and 13 cases from Rupandehi districts.

One death from SARI was reported this week from Kapilvastu district.

1.3 Enteric Fever

The number of cases of enteric fever has peaked in week 37 this year (71 cases). In week 47, 18 cases of enteric fever were reported, including 4 from Morang, and 3 each from Bara and Parsa districts.

1.4 Malaria

Two cases of Malaria were reported from Jhapa district this week. Eighty-six cases have been reported through EWARS so far this year. The total number of Malaria cases reported in 2014 was 120.

1.5 Dengue

Three cases of Dengue were reported this week, one each from Chitwan, Parsa, and Rupandehi districts. Fifty-four cases have been reported through EWARS so far this year. Last year, the number of Dengue cases peaked on week 47 (14 cases) so it is important to remain alert for new outbreak.

1.6 Kala-azar

Two cases of Kala-azar were reported this week, one each from Siraha, and Sunsari districts. 134 cases of Kala-azar are reported through EWARS till date this year. The number of Kala-azar cases reported through the EWARS was 200 in 2014.

Post-Earthquake Hospital Based Syndromic Disease Surveillance

Epidemiology and Disease Control Division (EDCD) has been continuing post-earthquake hospital based syndromic surveillance system. The system covers 38 hospitals and primary health care centres in 14 earthquake affected districts; however 6 districts reported in last three weeks.

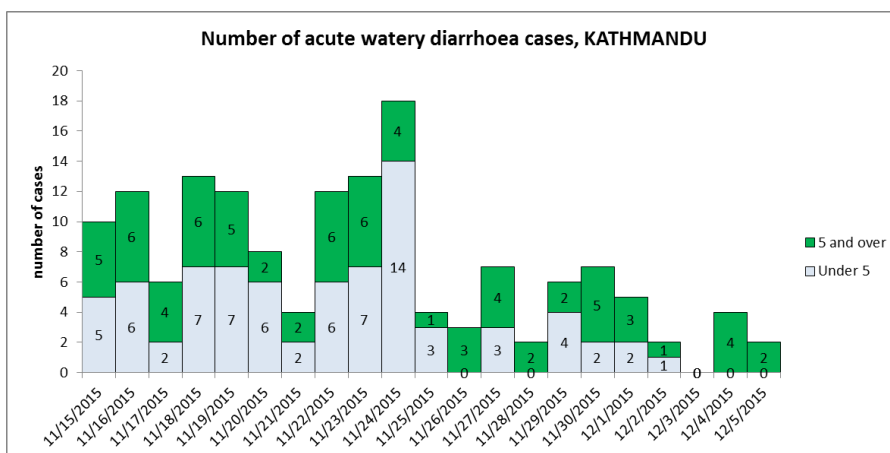
The objective of hospital based syndromic surveillance is to rapidly identify any increase in a number of outbreak prone syndromes. It helps us to ensure that outbreaks are not missed. The number of syndromes crossing the threshold level (doubling of the average of the previous 7 days, with a minimum of 5 cases) triggers an alert. But only one case triggers the alert for suspected cholera and fever with rash. Similarly, more than 5 cases in a 7 days' period trigger an alert for fever with jaundice.

The surveillance includes 8 syndromes: **Influenza like illness (ILI)**, **severe acute respiratory infection (SARI)**, **acute watery diarrhoea**, **acute bloody diarrhoea**, **suspected cholera**, **fever with rash**, **fever with jaundice** and **fever without rash and jaundice**. In this report, the data analysis was done for last three weeks.

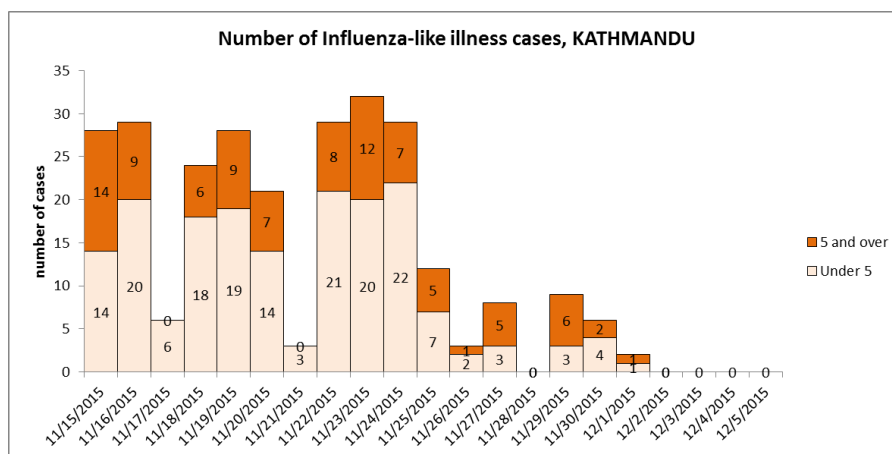
Highlights
<ul style="list-style-type: none"> ▪ The number of Acute watery diarrhoea peaked on 24th November with 21 cases and seems to be fluctuating afterwards. ▪ No cases of Acute bloody diarrhoea were seen in last three weeks. ▪ The number of Influenza like Illness (ILI) peaked on 24th November with 44 cases and seems to be in fluctuating afterwards. ▪ The number of Severe Acute Respiratory Infection (SARI) peaked on 15th November with 25 cases and seems to be fluctuating afterwards. ▪ No cases of Fever with jaundice were seen in last three weeks. ▪ The number of Fever with rash peaked on 22nd November with 4 cases. ▪ The number of Fever without rash and jaundice peaked on 18th November with 82 cases.

Analysis of information on 8 syndromes collected from hospitals in the earthquake affected 14 districts within 21 days shows that except in Kathmandu district, no remarkable observations (increase or decrease) of outbreak prone syndromes were noticed. Reports were received from Kavre, Lalitpur, Nuwakot, Rasuwa, and Ramechhap districts, while Bhaktapur, Dhading, Dolakha, Gorkha, Makwanpur, Okhaldhunga, Sindhuli and Sindhupalchowk districts did not report in last week.

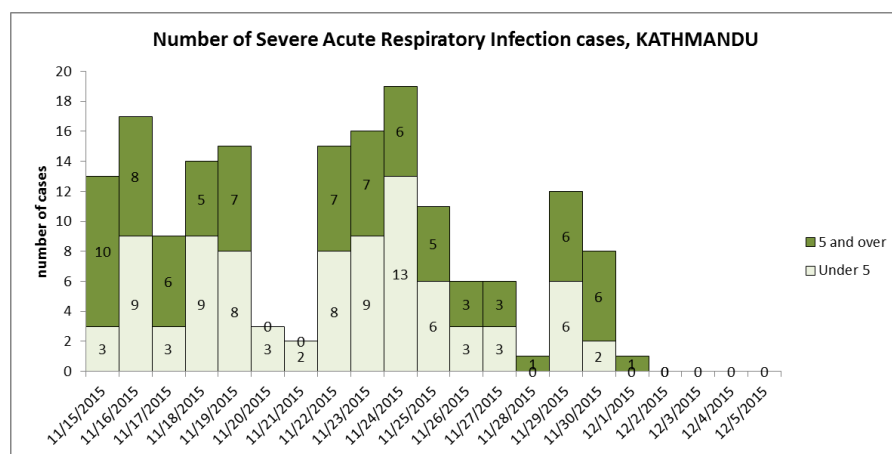
In Kathmandu, the number of acute watery diarrhoea has been fluctuating and a peak was observed on 24th November with 18 cases.



The number of influenza like illness has peaked on 23rd November with 32 cases in Kathmandu Valley.



The number of severe acute respiratory infection has peaked on 24th November with 19 cases in Kathmandu Valley.



Launch of EDCD's official website

On behalf of Dr. Babu Ram Marasini, Director of Epidemiology and Disease Control Division (EDCD), it gives us immense pleasure to announce the launching the official website of EDCD. The web address is www.edcd.gov.np. The website features the complete organogram, its sections, activities, and future plans of the division. We plan to continuously update about any events and outbreaks if and when occurs.

The main sections of the website include:

- Introduction – Background of division
- Organization Structure
- EDPs – Short intro of each External Development Partners (EDPs) and areas of support
- People – List of officials of the division



- Sections of the division – Intro, vision, objectives and programs of each section
- Media Center – Press Releases, News, IEC Materials and Multimedia
- Publication – Publications of EDCCD
- Resources – Any resource of public health interest (under construction)
- Notice board – Notices published by EDCCD
- Outbreak and Emergencies – Current situation of any outbreaks or emergencies
- Latest Bulletin – List latest EWARS bulletins
- Statistics Map (under construction)
- Feedback – Feedback to EDCCD

We believe that our website will help public health professionals, clinicians and all related stakeholders, while also being equally informative for the general public. Further, we expect this website be a platform for everyone to share public health and clinical knowledge, research findings and experiences which will encourage us to provide quality service to the public.

To make this site more informative and interactive, your valuable feedback is highly expected. Kindly send us your feedback / suggestions about the website at ewarsedcd@gmail.com.

Thank you.

Acknowledgement

The Epidemiology and Disease Control Division highly acknowledges the contribution from all the medical recorders, EWARS focal persons, rapid response team members and support from WHO, NHSSP and GiZ for preparation of this bulletin.

Timeliness & completeness of reporting from sentinel sites

Site Code	Sentinel Sites	Timeliness (%)	Completeness (%)	Site code	Sentinel Sites	Timeliness (%)	Completeness (%)
101	Mechi ZH, Jhapa	98	100	125	MZH, Kanchanpur	96	98
102	Koshi ZH, Morang	98	100	126	DH, Doti	70	100
103	DH, Sunsari	84	100	127	DH, Bardiya	98	100
104	BPKIHS, Dharan	98	100	128	DH, Mahottari	16	100
105	DH, Dhankuta	98	100	129	DH, Dadeldhura	88	20
106	SZH,Saptari	16	96	130	DH, Rasuwa	20	26
107	RKUP, Lahan, Siraha	98	100	131	DH, Sankhuwasabha	0	0
108	DH, Siraha	54	100	132	AMDA Hosp. Jhapa	98	100
109	JZH, Dhanusha	20	38	133	DH, Chautara	70	100
110	DH, Rautahat	74	98	134	DH, Sarlahi	6	100
111	DH, Bara	0	0	135	DH, Sindhuli	10	88
112	NSRH, Parsa	88	100	136	DH, Illam	96	100
113	DH, Makawanpur	30	98	137	Dhulikhel H., Kavre	32	96
114	NZH, Chitwan	28	100	138	DH, Solukhumbu	40	100
115	Kanti CH, Kathmandu	80	100	139	DH, Dolpa	0	0
116	STH, Kathmandu	98	100	140	DH, Humla	0	0
117	UMH, Palpa	98	100				
118	PCH, Nawalparasi	98	100				
119	PBH, Kapilvastu	100	36				
120	LZH, Rupandehi	98	100				
121	RSRH Dang	12	16				
122	MWRH, Surkhet	98	100				
123	BZH, Banke	56	86				
124	SZH, Kailali	98	100				

	Excellent (>80)
	Satisfactory (50-79)
	Bad (<50)