

**Early Warning and Reporting System (EWARS)**

# **Weekly Bulletin**

**(50<sup>th</sup> Epidemiological Week)**

**27 December 2015**



**Government of Nepal**  
**Ministry of Health and Population**  
**Department of Health Services**  
**Epidemiology and Disease Control Division**  
**Kathmandu, Nepal**  
[ewarsedcd@gmail.com](mailto:ewarsedcd@gmail.com)

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"> <li>• One case of Malaria (<i>plasmodium vivex</i>) was reported from United Mission Hospital, Palpa this week and the case was from Rupandehi district, Betniya VDC ward no 9.</li> <li>• One case of Dengue was reported this week and the case was from Kapilvastu District, Materia VDC ward no 5.</li> <li>• Last year, the number of Dengue cases peaked on week 47 (14 cases) so it is important to remain alert for new outbreak this year.</li> <li>• No death due to SARI was reported this week.</li> </ul>

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.

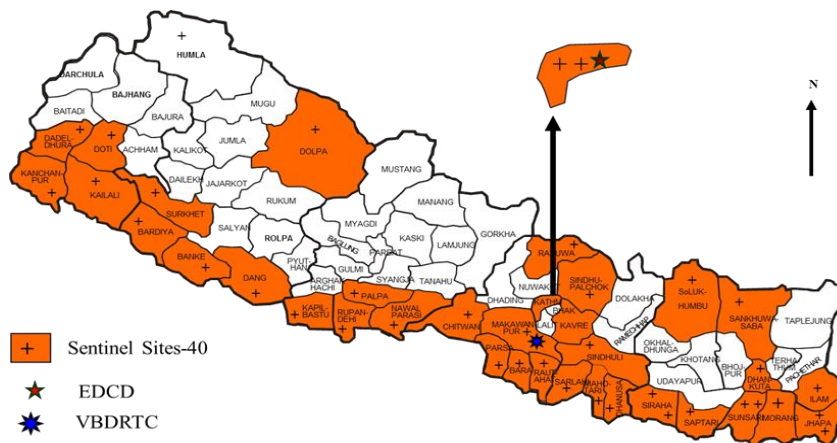


Figure 1: Sentinel sites of the Early Warning and Reporting System in Nepal set up in 2009

## 1.1 Acute Gastro-Enteritis and Cholera

89 cases of AGE were reported in week 50. The cases have decreased over the past few weeks. Among 89 cases, the majority of cases were from Kapilvastu (11 cases), Bardiya (9 cases), Morang (8 cases), Sunsari (8 cases) and Rupandehi (7 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 has peaked in week 11 (249 cases) and week 43 (281 cases) this year and has been decreasing afterwards. The number of SARI cases reported in week 50 (160 cases) this year did not exceed the number of SARI cases reported in the same week last year (245 cases). Among 160 cases, 25 cases were from Morang, 19 cases from Rupandehi, 13 cases from Jhapa, 11 cases from Palpa, 8 cases from Gulmi and 7 cases from Sunsari.

No death due to SARI was reported this week.

## 1.3 Enteric Fever

The number of cases of enteric fever has peaked in week 37 this year (71 cases). In week 50, only 3 cases of enteric fever were reported, one each from Kavre, Siraha, and Jhapa.

## 1.4 Malaria

One case of Malaria (*plasmodium vivax*) was reported from United Mission Hospital, Palpa this week and the case was from Rupandehi district, Betniya VDC ward no 9. Eighty nine cases were reported through EWARS so far this year. The total number of Malaria cases reported in 2014 was 120.

## 1.5 Dengue

One case of Dengue was reported this week and the case was from Kapilvastu District, Materia VDC ward no 5. Fifty nine cases of Dengue were reported 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

No case of Kala-azar was reported in week 50. 131 cases of Kala-azar were reported through EWARS till date this year. The number of Kala-azar cases reported through the EWARS was 200 in 2014.

## Section 2: 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 centers in 14 earthquake affected districts; however 7 districts reported in last three weeks.

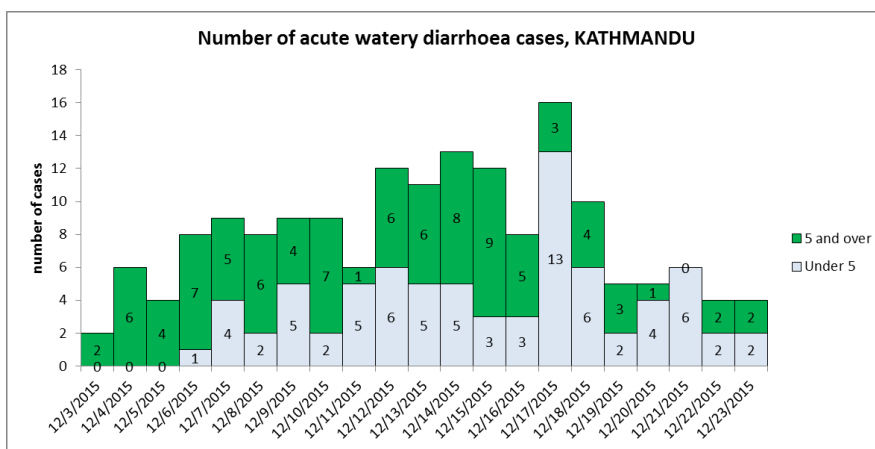
The objective of hospital based syndromic surveillance is to rapidly identify any increase in a number of outbreak prone syndromes. It helps us to ensure that outbreaks are not missed. The number of syndromes crossing the threshold level (doubling of the average of the previous 7 days, with a minimum 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.

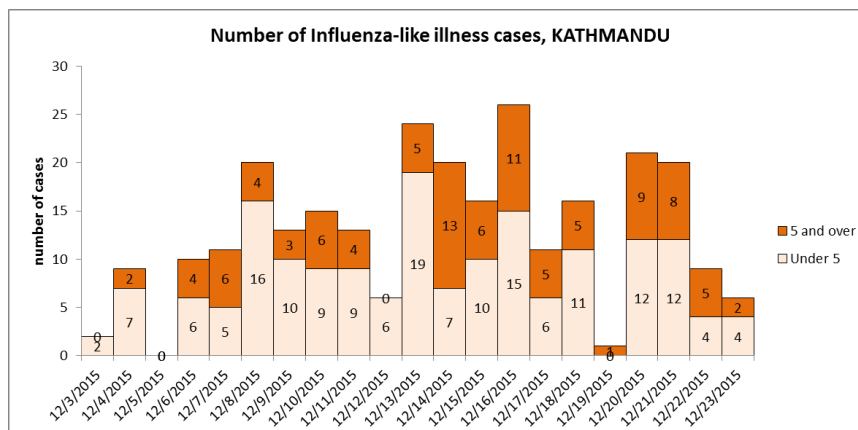
Highlights	
▪	The number of <b>Acute watery diarrhoea</b> peaked on 17 <sup>th</sup> December with 21 cases and seems to be fluctuating afterwards.
▪	Few cases of <b>Acute bloody diarrhoea</b> were seen in last three weeks.
▪	The number of <b>Influenza like Illness (ILI)</b> peaked on 16 <sup>th</sup> December with 45 cases and seems to be in fluctuating afterwards.
▪	The number of <b>Severe Acute Respiratory Infection (SARI)</b> peaked on 11 <sup>th</sup> December with 26 cases and seems to be fluctuating afterwards.
▪	Few cases of <b>Fever with jaundice</b> were seen in last three weeks.
▪	Few cases of <b>Fever with rash</b> were seen in last three weeks.
▪	The number of <b>Fever without rash and jaundice</b> peaked on 12 <sup>th</sup> December with 62 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, Makwanpur, Okhaldhunga, Rasuwa, and Ramechhap districts, while Bhaktapur, Dhading, Dolakha, Gorkha, Nuwakot, Sindhuli and Sindhu palchowk districts did not report in last week.

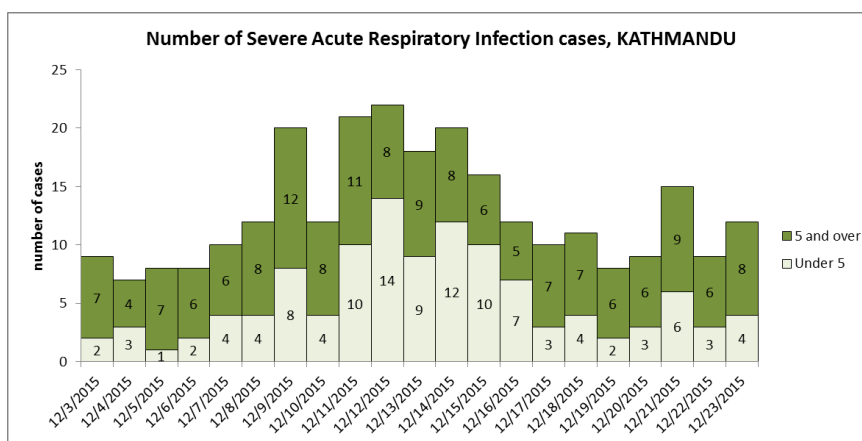
**In Kathmandu**, the number of acute watery diarrhoea has been fluctuating and a peak was observed on 17<sup>th</sup> December with 16 cases.



The number of influenza like illness has peaked on 16<sup>th</sup> December with 26 cases in Kathmandu Valley.



The number of severe acute respiratory infection has peaked on 12<sup>th</sup> December with 22 cases in Kathmandu Valley.



## Launch of EDCD's official website

EDCD has launched official website featuring the complete organogram, its sections, activities, and future plans of the division. The web address is [www.edcd.gov.np](http://www.edcd.gov.np). It is launched with the aim to help Public health professionals, clinicians and all related stakeholders by making information easily accessible to them. Through this website EDCD will continuously update about any events and outbreak if and when occurs. Furthermore it will be a platform for everyone to share public health and clinical knowledge, research findings and experiences.

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 EDCD
- Resources – Any resource of public health interest (under construction)
- Notice board – Notices published by EDCD
- Outbreak and Emergencies – Current situation of any outbreaks or emergencies
- Latest Bulletin – List latest EWARS bulletins
- Statistics Map (under construction)
- Feedback – Feedback to EDCD




To make this site more informative and interactive, the valuable feedback from the visitors is highly expected. Feedback and suggestions about the website can send at [ewarsedcd@gmail.com](mailto:ewarsedcd@gmail.com).

## 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	98	125	MZH, Kanchanpur	94	96
102	Koshi ZH, Morang	98	100	126	DH, Doti	70	96
103	DH, Sunsari	86	100	127	DH, Bardiya	98	100
104	BPKIHS, Dharan	98	100	128	DH, Mahottari	14	94
105	DH, Dhankuta	98	100	129	DH, Dadeldhura	84	16
106	SZH, Saptari	18	100	130	DH, Rasuwa	16	22
107	RKUP, Lahan, Siraha	98	100	131	DH, Sankhuwasabha	0	0
108	DH, Siraha	58	100	132	AMDA Hosp. Jhapa	98	100
109	JZH, Dhanusha	18	36	133	DH, Chautara	70	100
110	DH, Rautahat	78	100	134	DH, Sarlahi	6	92
111	DH, Bara	0	0	135	DH, Sindhuli	8	84
112	NSRH, Parsa	80	90	136	DH, Illam	98	98
113	DH, Makawanpur	30	96	137	Dhulikhel H., Kavre	32	96
114	NZH, Chitwan	24	98	138	DH, Solukhumbu	36	96
115	Kanti CH, Kathmandu	82	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	98	40				
120	LZH, Rupandehi	98	100				
121	RSRH Dang	8	12				
122	MWRH, Surkhet	98	100				
123	BZH, Banke	52	82				
124	SZH, Kailali	96	98				



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