

Early Warning and Reporting System (EWARS)

Weekly Bulletin

(51th 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"> • 260 cases of SARI were reported this week including six deaths. Four deaths were reported from BPKIHS, Dharan and one each from Kanti Children Hospital and Lumbini Zonal Hospital. The cases were from Sunsari, Saptari, Siraha, Khotang and Kapilvastu districts. • One case of Malaria (<i>Plasmodium falciparum</i>) was reported from Mechi Zonal Hospital, Jhapa this week. The patient was from Jhapa district, Surunga VDC ward no 8. • One case of Dengue was reported from United Mission Hospital, Palpa this week. The patient was from Palpa District, Tansen Municipality, ward no 11.

The EWARS was established in 1997 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 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). Nine new sentinel sites were established and trained on EWARS in 2015 and will be functional soon. 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). 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.

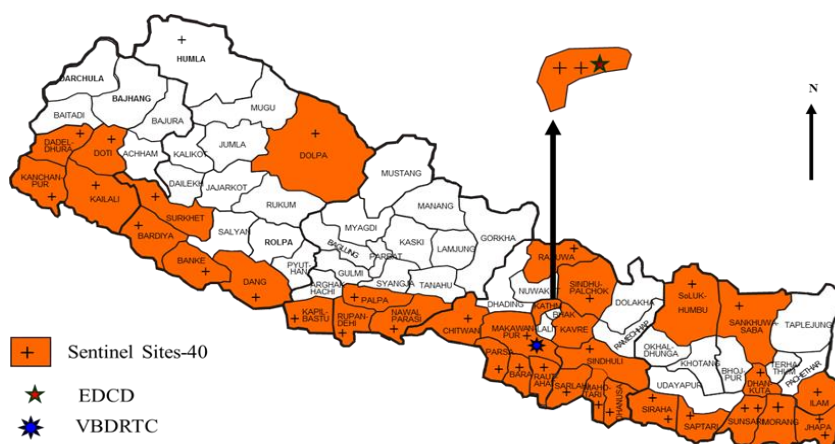


Figure 1: Sentinel sites of the Early Warning and Reporting System in Nepal set up in 2009

1.1 Acute Gastro-Enteritis and Cholera

87 cases of AGE were reported in week 51. The cases have decreased over the past few weeks. Among 87 cases, the majority of cases were from Kapilvastu (11 cases), Sunsari (10 cases), Jhapa (8 cases), Doti (8 cases) and Kanchanpur (8 cases).

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

1.2 Severe Acute Respiratory Infection (SARI)

260 cases of SARI were reported in week 51 and the cases of SARI reported this week exceed the number of SARI cases reported in the same week last year (218 cases). Among 260 cases, 37 cases were from Kailali, 35 cases from Morang, 32 cases from Jhapa, 29 cases from Rupendehi, 23 cases from Sunsari.

Six deaths from SARI were reported this week, four from BPKIHS, Dharan and one each from Kanti Children Hospital and Lumbini Zonal Hospital. The cases were from Sunsari, Saptari, Siraha, Khotang and Kapilvastu districts.

1.3 Enteric Fever

The number of cases of enteric fever has peaked in week 37 this year (71 cases). In week 51, 8 cases of enteric fever were reported, including 3 from Bhaktapur and 2 each from Kavre and Sindhupalchok.

1.4 Malaria

One case of Malaria (*plasmodium falciparum*) was reported from Mechi Zonal Hospital, Jhapa this week and the case was from Jhapa district, Surunga VDC ward no 8. Ninety 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 Palpa District, Tansen Municipality, ward no 11. Sixty cases of Dengue were reported so far this year.

1.6 Kala-azar

No case of Kala-azar was reported in week 51. 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 centres in 14 earthquake affected districts; however 6 districts reported in last three weeks.

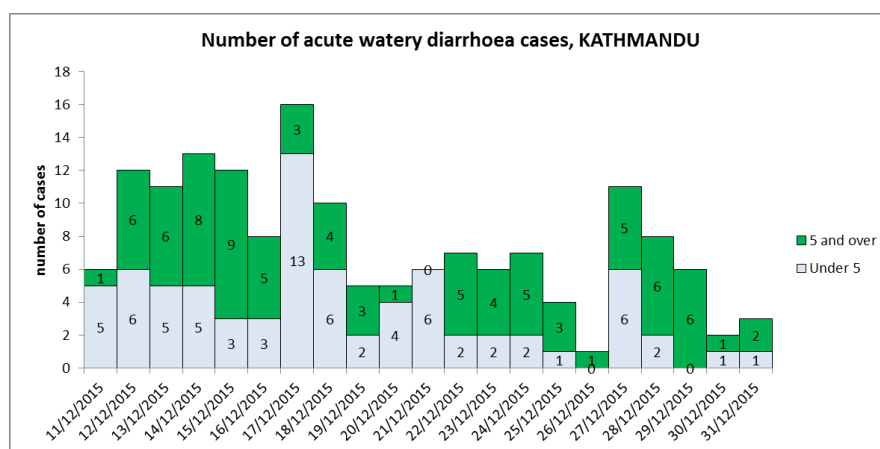
The objective of hospital based syndromic surveillance is to rapidly identify any increase in a number of outbreak prone syndromes. It helps us to ensure that outbreaks are not missed. The number of syndromes crossing the threshold level (doubling of the average of the previous 7 days, with a minimum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

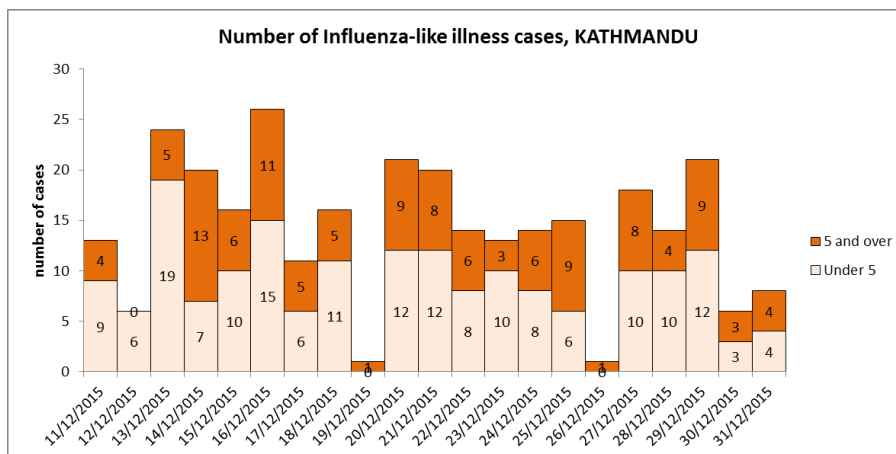
Highlights	
▪	The number of Acute watery diarrhoea peaked on 17 th December with 21 cases and seems to be fluctuating afterwards.
▪	Few cases of Acute bloody diarrhoea were seen in last three weeks.
▪	The number of Influenza like Illness (ILI) peaked on 16 th December with 45 cases and seems to be in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

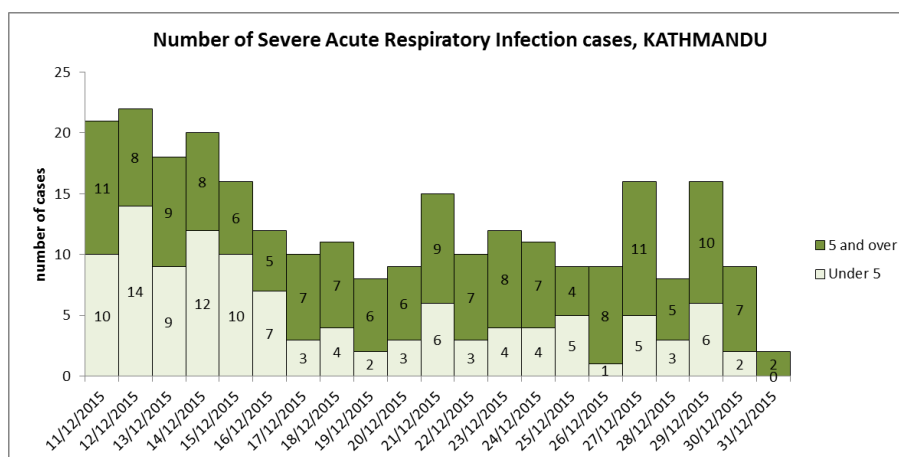
In Kathmandu, the number of acute watery diarrhoea has been fluctuating and a peak was observed on 17th December with 16 cases.



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



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



Launch of EDCCD's official website

EDCCD has launched its official website in 2015 featuring the complete organogram, its sections, activities, and future plans of the division. The web address is www.edcc.gov.np. It has been launched with the aim to help public health professionals, clinicians and all related stakeholders by making information easily accessible to them. Through this website EDCCD 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 introduction of each External Development Partners (EDPs) and areas of support
- People – List of officials of the division
- Sections of the division – Introduction, 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 – latest notices published by EDCCD



- Outbreak and Emergencies – Current situation of any outbreaks or emergencies within Nepal
- Latest Bulletin – List of EWARS bulletins published so far
- Statistics Map (under construction)
- Feedback – Feedback to EDCD

To make this site more informative and interactive, valuable feedback from the visitors is highly expected. Feedback and suggestions about the website can be sent at 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	100	125	MZH, Kanchanpur	96	100
102	Koshi ZH, Morang	98	100	126	DH, Doti	72	98
103	DH, Sunsari	88	100	127	DH, Bardiya	96	98
104	BPKIHS, Dharan	98	100	128	DH, Mahottari	16	98
105	DH, Dhankuta	98	100	129	DH, Dadeldhura	82	14
106	SZH, Saptari	20	100	130	DH, Rasuwa	14	20
107	RKUP, Lahan, Siraha	98	100	131	DH, Sankhuwasabha	0	0
108	DH, Siraha	60	100	132	AMDA Hosp. Jhapa	98	100
109	JZH, Dhanusha	16	34	133	DH, Chautara	72	100
110	DH, Rautahat	80	100	134	DH, Sarlahi	4	90
111	DH, Bara	0	0	135	DH, Sindhuli	8	94
112	NSRH, Parsa	78	88	136	DH, Illam	98	100
113	DH, Makawanpur	32	100	137	Dhulikhel H., Kavre	32	98
114	NZH, Chitwan	22	96	138	DH, Solukhumbu	34	94
115	Kanti CH, Kathmandu	84	100	139	DH, Dolpa	0	0
116	STH, Kathmandu	96	98	140	DH, Humla	0	0
117	UMH, Palpa	98	100				
118	PCH, Nawalparasi	98	100				
119	PBH, Kapilvastu	98	42				
120	LZH, Rupandehi	98	100				
121	RSRH Dang	6	10				
122	MWRH, Surkhet	98	100				
123	BZH, Banke	50	80				
124	SZH, Kailali	98	100				

Excellent (>80)

Satisfactory (50-79)

Bad (<50)