Early Warning and Reporting System (EWARS)

Weekly Bulletin

(2nd 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 2015 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

- Six cases of Kala-azar were reported this week, 5 from Seti Zonal Hospital, Kailali and one from District Hospital, Makwanpur. The cases were from Baitadi, Doti, Kailali, Kanchanpur and Makwanpur district.
- 46 cases of Chickenpox have been reported from Baidauly VDC of Nawalparasi district on 9th January. A team led by DHO Nawalparasi with the support from WHO had already responded for necessary action. Now the situation is under control.
- 19 cases of measles like syndrome including one death were reported from Dewangunj VDC of Sunsari district on 19th January. Accordingly the treatment and control measures had been already started by DHO, Sunsari.
- No case of Malaria and Dengue were reported this week.
- No death from SARI was reported this week.

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.

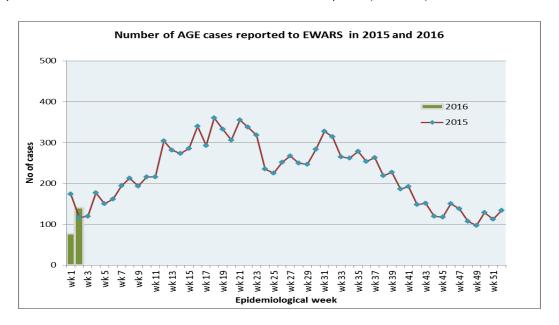
This information system is hospital-based and is currently operational in 48 hospitals (out of 81 sites) throughout Nepal (Figure 1). So far, the EWARS mainly focuses on the **weekly reporting** of number of cases and deaths (including "zero" reports) of six priority diseases/syndromes—Malaria, Kala-azar, Dengue, Acute Gastroenteritis (AGE), Cholera and Severe Acute Respiratory Infection (SARI), and other epidemic potential diseases/syndromes (like enteric fever). 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.



1.1 Acute Gastro-Enteritis and Cholera

141 cases of AGE were reported in 2nd epidemiological week of 2016. Among 141 cases, the majority of cases were from Kanchanpur (27 cases), Morang (14 cases), Jhapa (11 cases), Lamjung (11 cases) and Kathmandu (10 cases) districts.

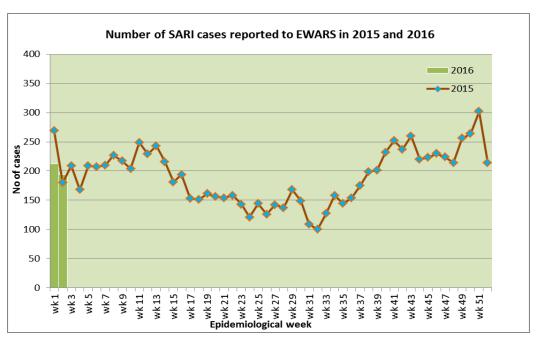
The number of AGE cases reported in week second this year slightly exceeds the number of AGE cases reported in the same week last year (117 cases). In 2015, the number of acute gastro-enteritis continuously increased from January to April and was above 300 cases at the time of the earthquake (week 16).



1.2 Severe Acute Respiratory Infection (SARI)

294 cases of SARI were reported in 2nd epidemiological week of 2016. The cases of SARI reported this week slightly exceeds the number reported in the same week last year (180 cases). Among 194 cases, 28 were from Morang, 26 from Jhapa, 24 from Sunsari, 23 from Rupandehi, and 21 were from Kailali. No death due to SARI was reported this week.

The number of SARI cases reported through EWARS has peaked in week 11 (256 cases), week 43 (260 cases) and week 51 (302 cases) in 2015. Eighty-one deaths from SARI were reported in year 2015.



1.3 Enteric Fever

In week second of 2016, 12 cases of enteric fever were reported, including 2 cases each from Kavre, Illam, Surkhet and Makwanpur and one case each from Dhangadi, Lamjung, Rupandehi and Siraha. The number of cases of enteric fever has peaked in week 37 in 2015 (71 cases).

1.4 Malaria

No case of Malaria was reported this week. Ninety cases of Malaria were reported through EWARS in 2015.

1.5 Dengue

No case of Dengue was reported this week. Fifty-eight cases of Dengue were reported in 2015.

1.6 Kala-azar

Six cases of Kala-azar were reported this week, 5 from Seti Zonal Hospital, Kailali and one from District Hospital, Makwanpur. The cases were from Baitadi, Doti, Kailali, Kanchanpur and Makwanpur district.

135 cases of Kala-azar were reported through EWARS in 2015.

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.

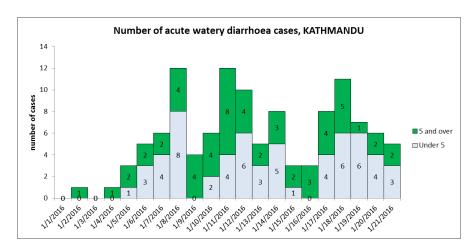
The surveillance includes 8 syndromes: Influenza like illness (ILI), severe acute respiratory infection (SARI), acute watery diarrhoea, acute bloody diarrhoea, suspected cholera, fever with rash, fever with jaundice and fever without rash and jaundice. In this report, the data analysis was done for last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

Highlights

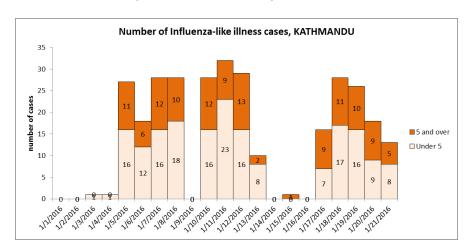
- The number of Acute watery diarrhoea peaked on 8th January with 26 cases and seems to be fluctuating afterwards.
- Only one case of Acute bloody diarrhoea was seen in last three weeks.
- The number of **Influenza like Illness (ILI)** peaked on 8th January with 45 cases and seems to be in fluctuating afterwards.
- The number of Severe Acute Respiratory Infection (SARI) peaked on 8th January with 29 cases and seems to be fluctuating afterwards.
- Eighteen cases of **Fever with jaundice** were seen in last three weeks.
- Twenty eight cases of **Fever with rash** were seen in last three weeks.
- The number of **Fever without rash and jaundice** peaked on 10th January with 48 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, Ramechhap, and Sindhupalchowk districts, while Bhaktapur, Dhading, Dolakha, Gorkha, Nuwakot, Okhaldhunga, Rasuwa and Sindhuli districts did not report in last week

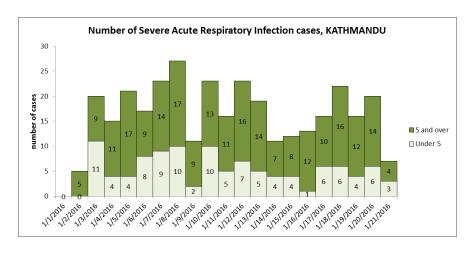
In Kathmandu, the number of acute watery diarrhoea has been fluctuating and a peak was observed on 8^{th} and 11^{th} January with 12 cases.



The number of influenza like illness has peaked on 11th January with 32 cases in Kathmandu Valley.



The number of severe acute respiratory infection has peaked on 8th January with 27 cases in Kathmandu Valley.



Acknowledgement

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Timeliness & completeness of reporting from sentinel sites:

Site Code	Sentinel Sites	Timeliness (%)	Completeness (%)	Site code	Sentinel Sites	Timeliness (%)	Completen ess (%)
101	Mechi ZH, Jhapa	100	100	125	MZH, Kanchanpur	100	100
102	Koshi ZH, Morang	100	100	126	DH, Doti	0	0
103	DH, Sunsari	100	100	127	DH, Bardiya	100	100
104	BPKIHS, Dharan	0	0	128	DH, Mahottari	0	0
105	DH, Dhankuta	100	100	129	DH, Dadeldhura	0	0
106	SZH, Saptari	98	50	130	DH, Rasuwa	0	0
107	RKUP, Lahan, Siraha	98	50	131	DH, Sankhuwasabha	0	0
108	DH, Siraha	100	100	132	AMDA Hosp., Jhapa	100	100
109	JZH, Dhanusha	0	0	133	DH, Chautara	98	50
110	DH, Rautahat	0	0	134	DH, Sarlahi	0	0
111	DH, Bara	0	0	135	DH, Sindhuli	0	0
112	NSRH, Parsa	98	50	136	DH, Illam	98	50
113	DH, Makawanpur	98	50	137	Dhulikhel H., Kavre	98	50
114	NZH, Chitwan	0	0	138	DH, Solukhumbu	0	0
115	Kanti CH, Kathmandu	0	0	139	DH, Dolpa	0	0
116	STH, Kathmandu	100	100	140	DH, Humla	0	0
117	UMH, Palpa	98	50	201	Lamjung Comm DH, Lamjung	100	100
118	PCH, Nawalparasi	0	0	202	DH, Dhading	100	100
119	PBH, Kapilvastu	100	100	203	DH, Ramechhap	98	50
120	LZH, Rupandehi	100	100		Excellent (>8	30)	
121	RSRH Dang	0	0				
122	MWRH, Surkhet	100	100		Satisfactory	(50-79)	
123	BZH, Banke	0	0				
124	SZH, Kailali	100	100		Bad (<50)		

Note: EWARS reporting form (in MS Excel format) is available at EDCD's official website <u>www.edcd.org.np</u>. This bulletin is also available at the website.