# Early Warning and Reporting System (EWARS)

# Weekly Bulletin

(4th 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**

- Two deaths from SARI were reported this week from Lumbini Zonal Hospital, Rupandehi and the cases were from Parbat and Rupandehi districts.
- One death from AGE was reported from Koshi Zonal Hospital and the case was from Morang District.
- Three cases of Kala-azar were reported from BPKIHS, Dharan and Lumbini Zonal Hospital Rupandehi. The cases were from Jhapa, Morang and Syangja districts.
- No cases of Malaria and Dengue were 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.

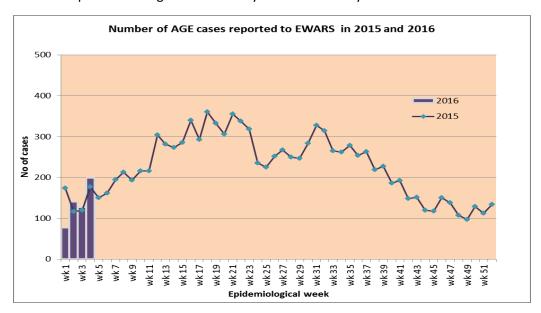


#### 1.1 Acute Gastro-Enteritis and Cholera

199 cases of AGE were reported in 4<sup>th</sup> epidemiological week of 2016. Among 199 cases, the majority of cases were from Parsa (27 cases), Morang (21 cases), Kanchanpur (14 cases), Lamjung (13 cases), Bardiya (11 cases) and Dhading (10 cases) districts. The number of AGE cases reported in fourth week this year slightly exceeds the number of AGE cases reported in the same week last year (177 cases)

One death from AGE was reported this week, from Koshi Zonal Hospital and the case was from Morang District.

No cholera cases were reported through the EWARS system so far this year.

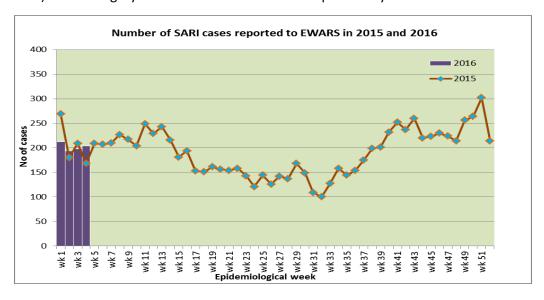


# 1.2 Severe Acute Respiratory Infection (SARI)

204 cases of SARI were reported in 4<sup>th</sup> epidemiological week of 2016. The cases of SARI reported this week exceed the number reported in the same week last year (168 cases). Among 204 cases, 26 were from Rupandehi, 18 each from Morang and Kailali, 15 from Sunsari and 13 each from Jhapa and Siraha.

Two deaths from SARI were reported this week, from Lumbini Zonal Hospital, Rupandehi and the cases were from Parbat and Rupandehi districts. Five deaths from SARI were reported so far this year.

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 fourth of 2016, 16 cases of enteric fever were reported including 3 from Lamjung and 2 each from Nawalparasi, Parsa and Sindhupalchok. 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. Only one case of malaria was reported so far this year. Ninety cases of Malaria were reported through EWARS in 2015.

# 1.5 Dengue

No case of Dengue was reported this week. One case of dengue was reported so far this year. Fifty-eight cases of Dengue were reported through EWARS in 2015.

#### 1.6 Kala-azar

Three cases of Kala-azar were reported this week, two from BPKIHS, Dharan and one from Lumbini Zonal Hospital, Rupandehi. The cases were from Jhapa, Morang and Syangja districts. Twelve cases were reported so far this year. 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 9 districts reported in last two 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.

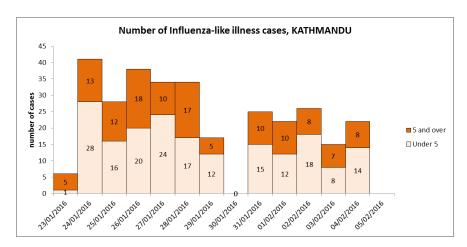
The surveillance includes 8 syndromes: Influenza like illness (ILI), severe acute respiratory infection (SARI), acute watery diarrhoea, acute bloody diarrhoea, suspected cholera, fever with rash, fever with jaundice and fever without rash and jaundice. In this report, the data analysis was done for last 14 days.

# **Highlights**

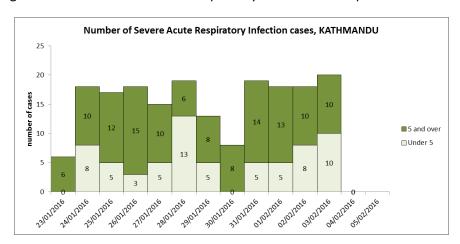
- The number of **Acute watery diarrhoea** peaked on 26<sup>th</sup> January with 21 cases.
- Only five cases of **Acute bloody diarrhoea** was seen in last two weeks.
- The number of Influenza like Illness (ILI) peaked on 24<sup>th</sup> January with 70 cases.
- The number of **Severe Acute Respiratory Infection** (SARI) peaked on 28<sup>th</sup> January with 23 cases.
- Only three cases of Fever with jaundice were seen in last three weeks.
- The number **Fever with rash** peaked on 26<sup>th</sup> January with 14 cases.
- The number of **Fever without rash and jaundice** peaked on 24<sup>th</sup> January with 45 cases.

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

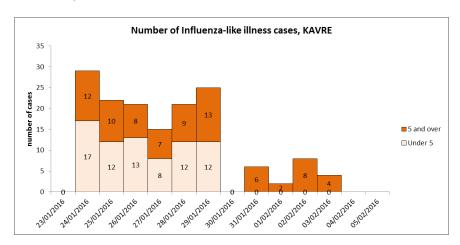
**In Kathmandu,** the number of influenza like illness has peaked on 24<sup>th</sup> January with 41 cases. The daily cases reported last week seems to be higher than this week.



In Kathmandu, the highest number of severe acute respiratory infection was reported on 3<sup>rd</sup> February with 20 cases.



**In Kavre**, the number of influenza like illness peaked on 24<sup>th</sup> January with 29 cases. The daily cases reported this week seems to be lower as compared to last week.



# 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 and NHSSP for preparation of this bulletin.

#### Timeliness & completeness of reporting from sentinel sites:

Site Code	Sentinel Sites	Timeliness (%)	Completeness (%)	Site code	Sentinel Sites	Timeliness (%)	Completen ess (%)	
101	Mechi ZH, Jhapa	96	50	125	MZH, Kanchanpur	100	100	
102	Koshi ZH, Morang	100	100	126	DH, Doti	96	100	
103	DH, Sunsari	100	100	127	DH, Bardiya	100	100	
104	BPKIHS, Dharan	96	100	128	DH, Mahottari	94	100	
105	DH, Dhankuta	100	100	129	DH, Dadeldhura	0	0	
106	SZH, Saptari	98	100	130	DH, Rasuwa	98	100	
107	RKUP, Lahan, Siraha	98	100	131	DH, Sankhuwasabha	0	0	
108	DH, Siraha	100	100	132	AMDA Hosp., Jhapa	100	100	
109	JZH, Dhanusha	0	0	133	DH, Chautara	100	100	
110	DH, Rautahat	94	100	134	DH, Sarlahi	94	100	
111	DH, Bara	0	0	135	DH, Sindhuli	96	100	
112	NSRH, Parsa	94	100	136	DH, Illam	98	100	
113	DH, Makawanpur	98	100	137	Dhulikhel H., Kavre	98	100	
114	NZH, Chitwan	0	0	138	DH, Solukhumbu	0	0	
115	Kanti CH, Kathmandu	0	0	139	DH, Dolpa	0	0	
116	STH, Kathmandu	98	100	140	DH, Humla	0	0	
117	UMH, Palpa	98	100	201	Lamjung Comm DH, Lamjung	98	100	
118	PCH, Nawalparasi	94	100	202	DH, Dhading	100	100	
119	PBH, Kapilvastu	100	100	203	DH, Ramechhap	98	100	
120	LZH, Rupandehi	100	100	211	DH, Tanahun	98	50	
121	RSRH Dang	0	0		Excellent (>80)			
122	MWRH, Surkhet	100	100		<del></del>			
123	BZH, Banke	0	0		Satisfactory	(50-79)		
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.