Early Warning and Reporting System (EWARS) Weekly Bulletin (1st Epidemiological Week)

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- 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								
•	No case of Malaria and Dengue and Kala-azar was reported this week.							
•	No death from SARI was reported this week.							
	Nine additional previously identified sites were oriented and rendered functional in 2015, totaling to 48 oriented sites.							

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

77 cases of AGE were reported in 1st epidemiological week of 2016. Among 77 cases, the majority of cases were from Morang (14 cases), Kanchanpur (11 cases), Kailali (10 cases), Jhapa (10 cases) and Sunsari (9 cases) districts.

The number of AGE cases reported in week first this year did not exceed the number of AGE cases reported in the same week last year (174 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)

212 cases of SARI were reported in 1st epidemiological week of 2016. The cases of SARI reported this week did not exceed the number reported in the same week last year (269 cases). Among 212 cases, 34 were from Jhapa, 33 from Kailali, 31 from Morang, 23 from Rupandehi, and 14 were from Kanchanpur. 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 was reported in year 2015.



1.3 Enteric Fever

In week first of 2016, 6 cases of enteric fever were reported, including 3 from Surkhet, 2 from Siraha and one from Jhapa. 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 were reported through EWARS so far this year. The total number of Malaria cases reported in 2014 was 120.

1.5 Dengue

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

1.6 Kala-azar

No case of Kala-azar was reported this week. 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 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 Acute watery diarrhoea peaked on 8 th January with 25 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 8 th January with 45 cases and seems to be in							
	fluctuating afterwards.							
•	The number of Severe Acute Respiratory Infection (SARI) peaked on 8 th January with 29 cases and							
	seems to be fluctuating afterwards.							
•	Thirteen cases of Fever with jaundice were seen in last three weeks.							
•	Thirty four cases of Fever with rash were seen in last three weeks.							
•	The number of Fever without rash and jaundice peaked on 10 th January with 38 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, Ramechhap, and Sindhupalchowk districts, while Bhaktapur, Dhading, Dolakha, Gorkha, Nuwakot, Okhaldh unga, 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 8th and 11th 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.



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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	100	100	130	DH, Rasuwa	0	0
107	RKUP, Lahan, Siraha	0	0	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	0	0	134	DH, Sarlahi	0	0
111	DH, Bara	0	0	135	DH, Sindhuli	0	0
112	NSRH, Parsa	0	0	136	DH, Illam	0	0
113	DH, Makawanpur	0	0	137	Dhulikhel H., Kavre	0	0
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	0	0	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	100	100
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	1		-	
124	SZH, Kailali	100	100		Bad (<50)		

Timeliness & completeness of reporting from sentinel sites:

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.