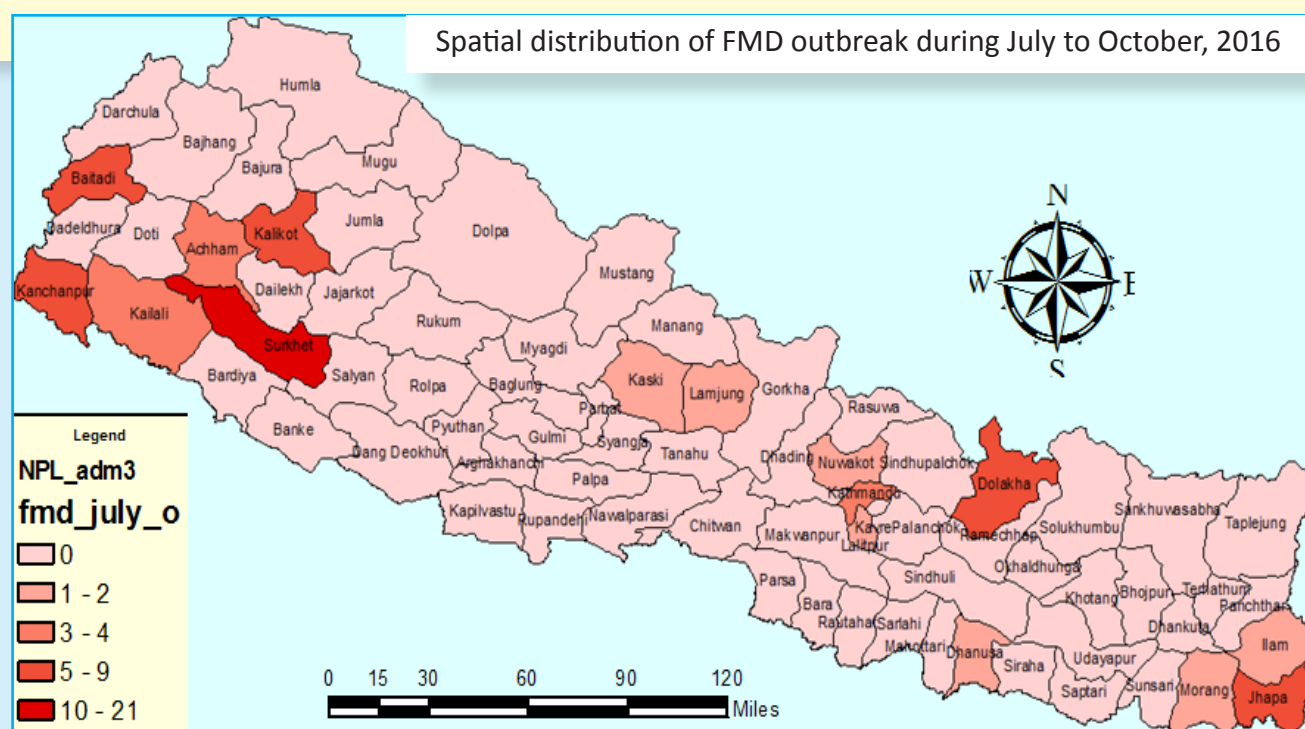




Quarterly Animal Health E- bulletin (July- October, 2016)

This Quarterly Animal Health E-Information bulletin aims to share the information related to FMD and other news pertinent to FMD prevention and control with relevant stakeholders that might trigger a positive spark on program planning and decision making for the prevention and control of FMD. We have included other information besides FMD in this publication as per the request of our stakeholders. This bulletin is still in the process of rejuvenation and we assure you to provide the quality bulletin in the days to come and expect your valuable suggestions and support for the sustainability of this bulletin.



Foot and Mouth Disease (FMD) is an extremely contagious disease affecting all cloven-footed animals and elephant. It is endemic in Nepal since the time immemorial and causing substantial economic loss to the livestock industry of the country. Considering that 20% reduction in milk production and 10% in meat, Gongal (2002) has estimated an economic loss of FMD to be 66 millions US \$ per year. However, an actual economic loss could be much higher if the reductions in breeding efficiency and draught power of animals are to be added. FMD is a major barrier in international trade of livestock and its products. During 2001/03, China did not allow entering Nepalese dairy products in to Tibet due

to presence of FMD in Nepal.

In this e bulletin, we have incorporated information for other issues as well on the basis of the feedback received from the stakeholders. We have included those events that have been carried out during this Quarter in the sector of Animal health and allied field.

The frequency of reporting of major animal diseases from the districts in this quarter was found to be good, however, we are not in a position to say that this is sufficient. We encourage all the epidemiological unit of the district to report in real time basis. The figure 1 shows the major disease outbreaks in the district during this quarter.

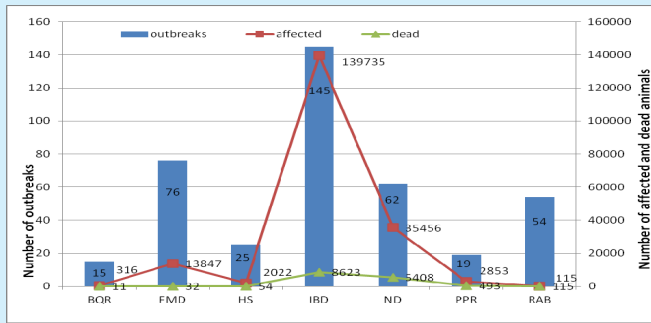


Figure 1: Major Animal Diseases Reported during July to October, 2016.

A total of 76 Outbreaks of FMD have been reported with 13847 of affected animals from more than 16 districts in the country, however, the mortality was quite low and mostly importantly this mortality recorded in calves under the age of 3 months. The temporal distribution of FMD shows that the higher numbers of outbreaks were reported during the month of September (Figure 3). Out of 76 outbreaks, only 46.05% (35/76) were properly investigated with samples collection and laboratory confirmation. The detection rates of FMD virus in the tested samples with ELISA and PCR were 27% and 63% respectively during this quarter. During this period a total of 141,495 doses of FMD vaccine were used to control outbreaks and a total of 600,000 doses of vaccine were used as regular vaccine as a part of National FMD control program.

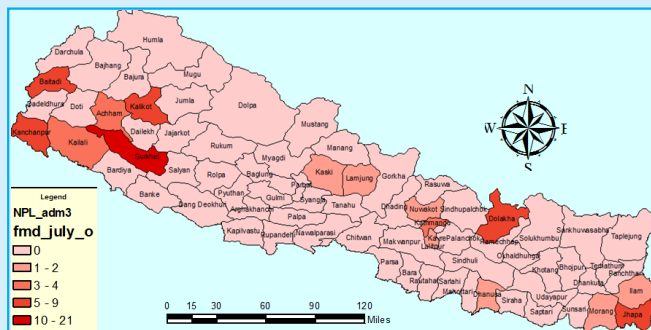


Figure 2: Distribution of FMD outbreak in different 16 districts during July to October, 2016

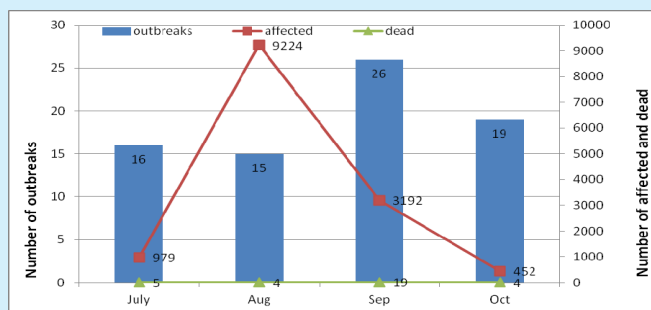


Fig 3: Temporal distribution of FMD outbreak during July -October, 2016

The Spatial distribution of FMD indicated higher number of outbreaks (25) in mid western region affecting 1231 animals. (Figure 4).

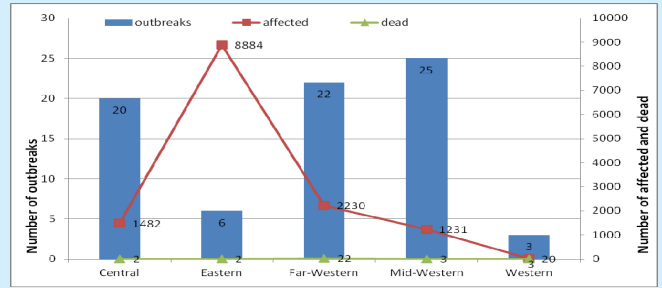


Figure 4: Region wise distribution of FMD outbreaks during July to October 2017.

Peste des Petit Ruminants (PPR), a highly contagious and infectious viral disease of small ruminants (including sheep and goats) can cause high morbidity and mortality in affected population. Peste des petits ruminant (PPR), also known as goat plague, is caused by a paramyxovirus of the Morbillivirus genus. It was first described in 1942 in Cote d'Ivoire, West Africa and is closely related to PPR virus, canine distemper virus, and human measles virus. The virus may survive at 600C for 60 minutes, stable at pH 4.0 to 10.0, easily killed by alcohol, ether, and detergents as well as by most disinfectants (e.g., phenol, sodium hydroxide) but survive long time in chilled and frozen tissues.

As per the Animal Health and Livestock Service Act, 2055, PPR is one of the notifiable diseases in Nepal. PPR was first diagnosed in Nepal in 1995 A. D. Since its appearance in the goat of central terai in 1994, small ruminant population in Nepal has suffered severely from this disease, causing huge economic loss. With the National control program through vaccination (vaccine produced within the country) carried out by the government, the incidence of the disease has been reduced significantly. Nevertheless, there is a constant threat of disease because of the frequent incidences in the region.

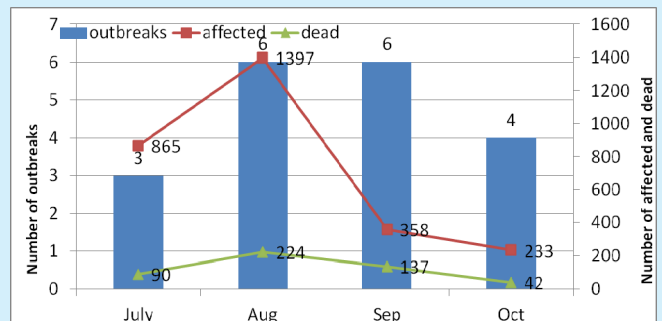


Figure 5: Temporal distribution of PPR during July to October, 2016

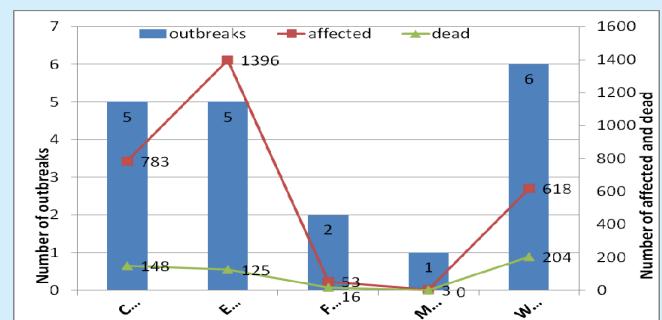


Figure 6: Region wise distribution of PPR during July to October, 2016.

Out of 19 outbreaks, only 70% were properly investigated with 225 number of samples tested in for the laboratory confirmation.

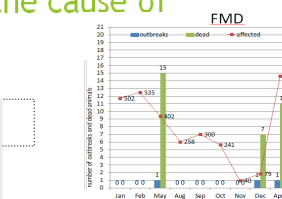
During this period a total of 64,242 doses of PPR vaccine were used to control outbreaks and a total of 20,90000 doses of vaccine were used as regular vaccination as a part of National PPR control program.

Other events

Unknown Disease Outbreak Scenario

Lets think about the cause of outbreaks???

परिमार्जित मासिक ईपिडेमियोलोजीकल रिपोर्टिङ्ग सम्बन्धी अन्तरक्रिया, काभ्रे २०७३/०६/१३



What could be the possible cause of disease outbreak



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Unknown disease outbreak table top exercise with different scenario was plotted and exercised in Kavre district during the quarter in an Epidemiological reporting workshop organized by Veterinary

Epidemiological Center. The Technicians were found to be 100% sure in recognizing clinical FMD. However, difficulties were observed with PPR and CCPP.



Welcome स्वागतम

ESTABLISHMENT AND OPERATIONALIZATION OF NATIONAL LEVEL EPINET FORUM

राष्ट्रियस्तर इपिनेट फोरम गठन तथा संचालन

Veterinary Epidemiology Center, Directorate of Animal Health,
Department of Livestock Services, Hariharbhawan, Lalitpur
12 December, 2016

During the same quarter, an interaction workshop for establishment of national level epiNet forum had been conducted with participation from public and private sectors involving with Disease surveillance, reporting, investigation, diagnosis, research, Veterinary and medical education institutes including other stakeholders from Regional support unit/SAARC, REC/ SAARC, EUFMD, FAO national project.

Epidemiologists are the key persons in investigating the diseases and suggesting the key strategies for prevention and control. Strong and sustainable cooperation among in country epidemiologist network and sub-regional Member States is a prerequisite for the success of preventing or controlling TADs. FMD, PPR, Highly pathogenic avian influenza (HPAI) are endemic in the SAARC countries (High socioeconomic burden). This network forum will help to build national and regional capacities in epidemiology and harmonize and coordinate approaches/protocols to prevent, control and or eradicate TADs in the region. There was sharing of information from Tsering Pasang on Regional epiNet forum genesis and EUFMD network experience from Chris Bartels to ease in the process of consolidating the discussion. A series of discussion and interaction was made and agreed to establish a network

forum with participation of different institutions and focal persons. In connection to the interaction meeting a small working group from of focal institutions meet in Kathmandu and some questionnaire were developed and circulated for a wider group of veterinarians to include in the network. This national level network will be helpful to activate the National level animal disease information system by providing the real time disease information formally and informally wherby National level information database can be connected to the SAARC animal disease information system(SAADIS).

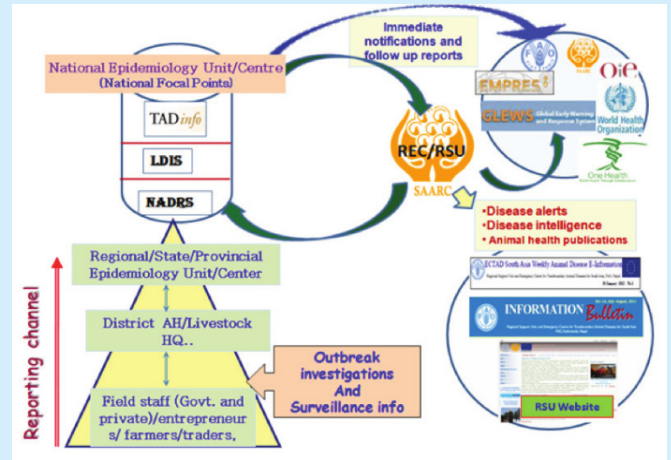


Figure 7: Flow of reporting into SAARC animal disease information system (SAADIS)

Animal Health (FMD special) Newsletter-Nepal

Dear readers, this newsletter is the first of its kind purely dedicated to an animal disease published electronically in Nepal. We also urge the recipients of this newsletter to participate in sharing any related information with Veterinary Epidemiology Center (VEC) for further improving the content.

Your kind cooperation is highly appreciated.
Many thanks and best regards,

Dr. Mukul Upadhyaya
Chief, VEC

WORD PUZZLE:

There are name of diseases and related terms
Laboratory test and birds.
Try for all 16 in 5 minute.

P	P	R	I	S	K	N
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D	O	G	B	I	T	E
R	T	P	C	R	O	W

Please provide your valuable comment and suggestions to

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