



Publisher's Remark

We are pleased to present the first issue of FMD Newsletter to you. This bulletin is the result of the joint effort of Veterinary Epidemiology centre (VEC), Foot and Mouth Disease and TADs laboratory under Department of Livestock Services and FAO/EUFMD. Updates on the activities in relation to the FMD control programs will be the main contents of this publication. In addition, information on the disease outbreaks and messages useful to all the stakeholders will also be published regularly.

FMD Situation in Nepal

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 million 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.

Time and again, outbreaks of FMD have been reported in the country irrespective of altitude and the season. However, peak level of occurrence is noticed during monsoon (April-May) and post monsoon (Oct-Nov.) periods. The high occurrence of FMD outbreaks during these periods could be due to excessive movement of food animals for agricultural activities and unrestricted importation of large number of animals across the borders during religious festival in October and November. Regular movements of livestock across national frontiers provide the mechanism for entry of different types of viruses into the country.

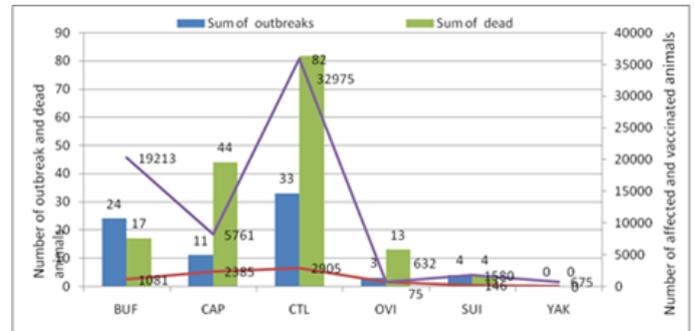


Fig 2: Species wise outbreaks of FMD

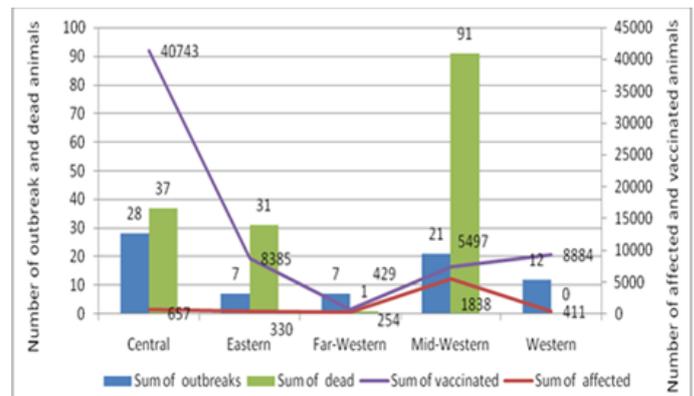


Fig 3: Region wise outbreaks of FMD

FMD Outbreak Report

During September - December 2015, a total of 75 outbreaks were recorded with 7149 animals affected with the mortality of 160 animals (Fig. 1-4)

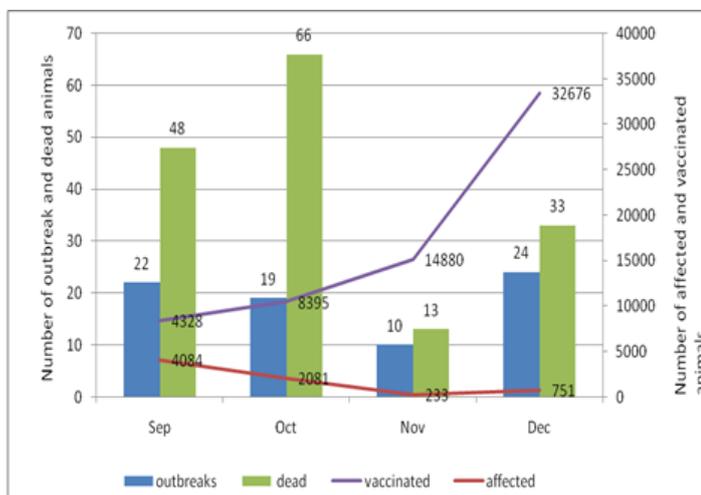


Fig 1: Monthly distribution of FMD outbreak during September-December, 2015

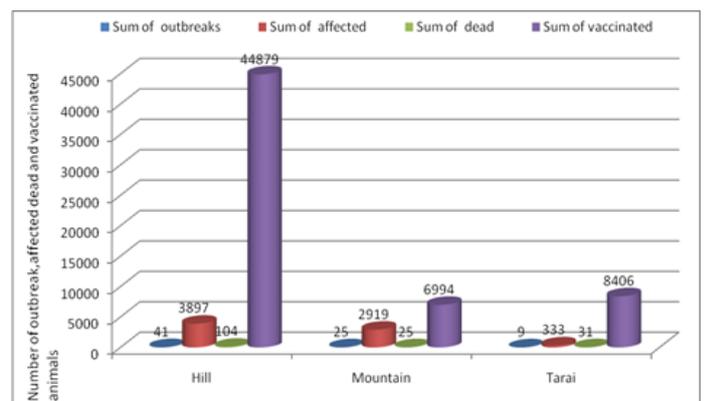


Fig 4: Eco-zone wise outbreaks of FMD



Information updates from FMD and TADs Laboratory

- Diagnosis of FMD is based on ELISA (Antigen & Antibody) and PCR (Conventional & Real Time). From 2001 to 2012, the following serotypes were present in Nepal.
- O type – 82 %, A type - 3% and Asia 1- 15 %
- Since 1996 no C serotypes have been found and from 2012 only 'O' sero type have been detected. As far as strains of serotype O are concerned, Pan Asia (2003), Pan Asia 2 strain and IND 2001 (2009) and PanAsia-2KAT-15 and Ind-2001d (2014-15) were identified by Pirbright.
- During the period of July 2016 to April 2016, a total of 115 samples were collected from FMD outbreak areas of 23 districts of Nepal. Out of 115 samples, Serotype 'O' FMDV was found in 61 samples.

Other News

Ambassador of France visits the FMD vaccination site

French ambassador to Nepal Martine Bassereau visited Tathali of Nagarkot in Bhaktapur district on 29 January 2016 and inspected the on-going Foot and Mouth Disease vaccination programme. The vaccines being used is the part of 100,000 doses of FMD vaccine which the government of Nepal received as a donation from the government of France.

The donation of vaccine was organised through the European Commission for the Control of Foot and Mouth

The visit was facilitated by the Directorate of Animal Health (DAH), District Livestock Service Office Bhaktapur and FAO/RSU Nepal.

Upcoming Events

- Foot and Mouth Disease (FMD) Real Time Training courses are being held on 2-6 and 9-13 May 2016 in Kathmandu. This will be jointly organized by FAO/EuFMD and Department of Livestock Services (DLS) Nepal. Veterinarians and animal industry personnel representing Australia and the New Zealand and veterinarians from Nepal will participate in the the training courses. The participants will be trained on FMD epidemiology, risk factors, outbreak investigation and laboratory diagnosis.

TEST YOUR KNOWLEDGE ON FMD

1. What is an average incubation period of FMD virus?
2. The primary route of transmission in ruminant is-
3. Infection with any one serotype gives immunity to other serotypes (cross immunity). Is it correct?
4. Guess the age of the lesion in cattle (focus to the lesion on the tongue below)



1. 2 to 5 days, 2. Respiratory route (inhalation), 3. No, wrong, 4. One day old (intact vesicles)



Ambassador of France (centre) visiting the FMD vaccination site in Bhaktapur

Disease (EuFMD), Food and Agriculture Organisation of the United Nations-FAO) of which France is a Member State.

FMD Newsletter - Nepal

Dear readers, this newsletter is the first of its kind purely dedicated to an animal disease published electronically in Nepal.

Please provide your valuable comments and suggestions to:

Veterinary Epidemiology Centre (VEC)

Tripureshwor, Kathmandu, Nepal

Phone: 977-1-4250717

Email: veteipi@ntc.net.np