



AFRICAN HORSE SICKNESS OUTBREAK IN THAILAND: INDIAN PERSPECTIVE

Disease

1. African Horse Sickness (AHS) is an infectious but non-contagious viral disease affecting all species of equidae, characterised by alterations in the respiratory and circulatory functions. AHS is transmitted by at least two species of *Culicoides* midges. Mosquitoes, ticks and biting flies may also mechanically spread the disease. Nine different serotypes have been described. All serotypes of AHS occur in eastern and southern Africa. Few AHS serotypes have been found in North and West Africa, from where they occasionally spread into countries surrounding the Mediterranean.
2. Mortality due to AHS varies from 50–95%. Horses are most susceptible followed by mules. Donkeys are moderately susceptible. Zebras are comparatively resistant with no clinical signs, except fever, and may have extended viraemia (up to 40 days). Both donkeys and zebras are considered as reservoir hosts for AHS.
3. There is no evidence that humans can become infected with any field strain of AHSV, either through contact with naturally or experimentally infected animals or by virus manipulation in laboratories.

Out Break in Thailand

4. Thailand was struck by an outbreak of AHS in March 2020. First casualty was reported on 24 Feb 2020. The disease subsequently progressed in few farms which were linearly located and were apparently serviced by the same water body and a common road. AHS has since killed more than 200 horses out of total population of around 12000. Type 1 AHS virus has been implicated and it is suspected that it came in zebras imported from Africa by zoos in Thailand.
5. The control measures being implemented in Thailand include vaccination using live attenuated vaccine, confining of equines in fly proof stables, quarantine, ban on movement of equines within the country including imports and exports, use of anti-vector measures like nets, insecticides etc.



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Indian Scenario

6. India has country freedom from the disease. The disease is otherwise notifiable in country, hence in case of any suspected outbreak; further policies on the subject will be issued by the Ministry of Fisheries, Animal Husbandry and Dairying, Govt of India, which will be binding on all equine holding entities. The vaccination against the disease is currently not recommended in India, since vaccine antibodies will potentially interfere with serological detection tests and surveillance. Further there is likelihood of attenuated vaccine strain re-assorting in the natural host and causing disease. The facilities for serological detection of AHS already exist at NRCE, Hisar. In case of contingency, the same can be introduced at Central Mil Veterinary Laboratory, Meerut for Army equines.

Recommendations

7. Following is recommended in the present circumstances:-

- (a) All imports and exports of equines to be closely monitored and be carried out strictly according to the policies of the Govt of India.
- (b) Any occurrence of respiratory disease be immediately reported to treating veterinarian.
- (c) Proper management of equine excreta be ensured.
- (d) Spray of insecticides / repellents like DEET and cypermethrin be carried out in areas where equine excreta is discarded and around paddocks with due precautions to prevent accidental toxicity to animals.