

उपमन्यु बसु
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मत्स्यपालन, पशुपालन एवं डेयरी मंत्रालय
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कृषि भवन, नई दिल्ली-110001
Joint Secretary
Government of India
Ministry of Fisheries, Animal Husbandry & Dairying
Department of Animal Husbandry and Dairying
Krishi Bhawan, New Delhi-110001

DO. No. K-11053/41/2020-LH

Dated 29th April, 2020

Dear Sir/Madam,

As you are aware, Haemorrhagic septicaemia (HS) is a highly fatal disease affecting cattle and buffaloes in Asia. It is a contagious bacterial disease caused by *Pasturella multocida* (B:2 Asian serotype) that often cause outbreaks in buffalo and cattle in India, and thus is a major cause of production losses. Cattle and water buffaloes (*Bubalus bubalis*) are the principal hosts of haemorrhagic septicaemia and buffaloes are generally more susceptible to HS than cattle and show severe forms of the disease with profound clinical signs. The disease occurs mostly as outbreaks during periods of environmental stress, often during climatic conditions typical of monsoon (high humidity and high temperatures). The worst epidemics occur during the rainy season, in animals in poor physical condition. Stresses such as poor food supply often increase susceptibility to infection, and close herding and wet conditions contribute to the spread of the disease.

HS is characterized by an acute, highly fatal septicaemia with high morbidity and mortality. It commences with fever, dullness and reluctance to move. Salivation, serious nasal discharge, oedematous swellings in the pharyngeal region, congested mucous membranes and respiratory distress occur and the animal usually collapses and dies 6-24 hours after first signs are seen. Mortality is nearly 100% unless the animal is treated very early in the disease; few animals survive once they develop clinical signs. In the recent past, HS has been identified as a secondary complication in cattle and buffaloes following outbreaks of foot and mouth disease (FMD).

The causal agent, *P. multocida*, is transmitted by direct contact with the infected animals and on fomites. Cattle and buffalo become infected when they ingest or inhale the causative organism, which probably originates in the nasopharynx of infected animals. In endemic areas, up to 5% of cattle and water buffalo may normally be carriers.

While treatment with antibiotics is effective, only if started very early (during pyrexia stage), vaccines can provide protection for 6-12 months. Inactivated bacterin vaccines, either alum precipitated or oil adjuvant, are generally used; the oil adjuvant

PTO

bacterin is thought to provide protection up to one year and the alum bacterin for 4-6 months (*OIE Terrestrial Code*). Vaccination is to be routinely practiced in endemic areas (especially in areas with high rainfall). Avoiding crowding, especially during wet conditions, will also reduce the incidence of the disease.

Accordingly, states are urged to vaccinate all susceptible cattle and buffaloes against HS, especially before the onset of monsoon. Further, wherever the animals are also required to be vaccinated against FMD or any other animal disease, a gap of about 15 days may be given between two vaccinations. Finally, emphasis may be laid on strict bio-security measures including good animal husbandry practices and hygienically safe carcass disposal in extension programmes done by the state.

Best regards,

Yours sincerely,
Upamanyu Basu
(Upamanyu Basu)

To,
ACS / Principal Secretary
Animal Husbandry Department
All States / UTs

Copy for information and necessary action to –
Director / Commissioner Animal Husbandry Department
All States / UTs