

Vaccination against haemorrhagic septicaemia of bovines: a review

ABSTRACT

Hemorrhagic septicemia is an important disease of cattle and buffaloes in Asia, particularly the South and Southeast Asia. Since outbreaks lead to numerous deaths and severe economic loss, control by vaccination is extremely important. However, the current use of broth vaccine for quick coverage in outbreak area followed by the oil adjuvant vaccine in the surrounding areas has failed to control the disease. The recommended annual vaccination using oil adjuvant vaccine prior to the monsoon season has not been effectively implemented leading to vaccination failure. Furthermore, the required vaccination coverage of 70% animal population has not been fulfilled, exposing the unvaccinated animals to disease outbreaks. Thus, a modified vaccination regime to improve vaccination coverage is suggested. This involves two major aspects; the use of OIE disease zoning concept to reduce area size and population number for vaccination, and the use of live attenuated vaccine to enhance vaccination coverage. The zoning concept that identifies the hotspots to be vaccinated with the oil adjuvant vaccine is most suitable to be adopted in the South Asia where animals are kept intensively with close human contact. On the other hand, the use of live attenuated vaccine might be suitable in Southeast Asia where animals are kept under extensive system with minimal human contact. Nevertheless, the respective veterinary authority should guaranty vaccination coverage of at least 70% of the susceptible animal population to effectively control disease outbreaks. (c) 2016 PVJ. All rights reserved.