Agent Summary Sheet

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Agent: Vesicular Stomatitis Virus (VSV)

VSV is a rhabdovirus related to rabies, but of a different genus. It causes blisters in the mouth and on the feet of horses, pigs, cattle and sheep and flu-like disease in humans. Mice, rabbits and guinea pigs can also be affected. The virus may cause encephalitis in rodents. Transmission is via contact with saliva from infected animals.

Potential Hazard: Humans exposed to VSV from livestock are at risk of influenza-like disease. As of 1993, there were 46 cases of VSV in laboratory workers, however, the use of less virulent laboratory strains are rarely associated with seroconversion or illness. Although the agent may be present in tissues, blood or fluids of infected animals, experimentally infected mice have not been a documented source of human infection.

Recommended Precautions: The animal biosafety level II practices (DAR SOP 400-3) will protect husbandry personnel against exposure or infection. Vaccines are not available for use in humans.

References:  Biosafety in Microbiological and Biomedical Laboratories, 3rd edition, CDC-NIH, 1993, pp. 122-3.
Christian AY. Barna M. Bi Z. Reiss CS. Host immune response to vesicular stomatitis virus infection of the central nervous system in C57BL/6 mice. Viral Immunology. 9(3):195-205, 1996