DIVISION OF ANIMAL RESOURCES

Agent Summary Sheet

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Agent: Coxsackievirus B

This agent is a member of the enterovirus group and can be used experimentally to cause diabetes mellitus and cardiomyopathy in mice. In nature, coxsackieviruses are distributed worldwide and can be found in sewage and surface water. They generally cause non-specific, self-limiting illness in humans.

Potential Hazard: Humans acquire infection by ingesting the virus as a consequence of poor hygiene. Most infections in humans are asymptomatic or characterized only by fever or flu-like disease lasting only a few days. In rare cases, infection may affect the skin, brain or heart. Coxsackie B virus infection has been hypothesized to play a role in the pathogenesis of diabetes mellitus in humans, but this is unproven.

Recommended Precautions: The animal biosafety level II practices (DAR SOP 400-3) will protect husbandry personnel or those handling animals against exposure or infection. Vaccines are not available for use in humans. Persons with contact with infected rodents that develop an unresolving or severe flu-like disease should report such to their physician.

References:

Feigin RD. Middelkamp JN, Reed CA. Murine myocarditis due to coxsackie B 3 virus: blood amino acid, virologic, and histopathologic correlates. Journal of Infectious Diseases. 126(6):574-84, 1972
Lerner AM. Coxsackievirus myocardiopathy. [Review] [27 refs] Journal of Infectious Diseases. 120(4):496-9, 1969