

PATHOGEN SAFETY DATA SHEET

Vesicular Stomatitis Virus

Non exotic strains: VSV-Indiana 1 serotype strains (e.g. Glasgow, MuddSummers, Orsay, San Juan) and VSV-New Jersey serotype strains (e.g. Ogden, Hazelhurst)

CHARACTERISTICS	
Morphology	Bullet-shaped that is an enveloped single stranded negative sense RNA virus.
Disease	Flu-like respiratory infection. Primarily affects horses, cattle, and other animals; but can infect humans.
Zoonosis	Yes, through direct contact with infected animals or through the bite of an infected sand fly.

HEALTH HAZARDS	
Host Range	Humans, animals, and sand flies.
Modes of Transmission	Transmitted by sand fly bite.
Signs and Symptoms	High fever, with subsequent flu-like symptoms including malaise, headaches, nausea, arthralgia, fatigue, and muscle pain.
Infectious Dose	Unknown
Incubation Period	30 hours to 6 days.

MEDICAL PRECAUTIONS/TREATMENT	
Prophylaxis	None available.
Vaccines	None available.
Treatment	No specific treatment.
Surveillance	Monitor for symptoms
MSU Requirements	Report any exposures

LABORATORY HAZARDS	
Laboratory Acquired Infections (LAIs)	13 cases prior to 1980.
Sources	Blood, throat secretions, saliva, exudates, or epithelial cells from open vesicles. Cultures, frozen stocks, other samples described in IBC protocol.

SUPPLEMENTAL REFERENCES	
Canadian MSDS:	http://www.phac-aspc.gc.ca/lab-bio/res/psds-ftss/index-eng.php
BMBL	https://www.cdc.gov/labs/BMBL.html
CDC	
NIH Guidelines	https://osp.od.nih.gov/wp-content/uploads/NIH_Guidelines.pdf

RISK GROUP & CONTAINMENT REQUIREMENTS	
Risk Group 2	Agents that are associated with human disease which is rarely serious and for which preventive or therapeutic interventions are often available.
BSL2	For all procedures involving suspected or known infectious specimen or cultures.
ABSL2	For all procedures utilizing infected animals.

SPILL PROCEDURES	
Small	Notify others working in the lab. Remove PPE and don new PPE. Cover area of the spill with absorbent material and add fresh 1:10 bleach:water. Allow 20 minutes (or as directed) of contact time. After 20 minutes, cleanup and dispose of materials.
Large	<ul style="list-style-type: none"> Immediately notify all personnel in the lab and clear all personnel from the area. Remove any contaminated PPE/clothing and leave the lab. Secure the area by locking doors, posting signage and guarding the area to keep people out of the space. For assistance, contact MSU's Biosafety Officer (406-994-6733) or Safety and Risk Management (406-994-2711).

EXPOSURE PROCEDURES	
Mucous membrane	Flush eyes, mouth, or nose for 5 minutes at eyewash station.
Other Exposures	Wash area with soap and water for 5 minutes.
Reporting	Immediately report incident to supervisor, complete a First Report of Injury form, and submit to Safety and Risk Management.
Medical Follow-up	<p>During business hours: Bridger Occupational Health 3406 Laramie Drive Weekdays 8am -6pm. Weekends 9am-5pm</p> <p>After business hours: Bozeman Deaconess Hospital Emergency Room 915 Highland Blvd</p>

VIABILITY	
Disinfection	Susceptible to 1:10 bleach:water, 70 % ethanol
Inactivation	Inactivated by moist heat (15 minutes at 121° C) and dry heat (1 hour at 160-170° C)
Survival Outside Host	Can survive for 3 to 4 days in saliva on milking pails, barns and hay.

PERSONAL PROTECTIVE EQUIPMENT (PPE)	
Minimum PPE Requirements	Lab coat, disposable gloves, safety glasses, closed toed shoes, long pants
Additional Precautions	Additional PPE may be required depending on lab specific SOPs and IBC Protocol.