

CHARACTERISTICS

Synonym or Cross Reference	Herpes Simplex Virus 1 (HSV-1), Herpes Simplex Virus 2 (HSV-2), Human Herpes Virus 1 (HHV-1), Human Herpes Virus 2 (HHV-2), cold sores, fever blisters
Disease	HSV-1: Primarily cold sores, eye infections, CNS infections. HSV-2: primarily genital sores.
Morphology	Linear, double-stranded, enveloped, DNA virus. HSV-1 and HSV-2 are members of the Herpesviridea family.
Zoonosis	None available.

RISK GROUP & CONTAINMENT REQUIREMENTS

ABSL-2	For all procedures utilizing infected animals.
BSL-2/BSL-2+	For all procedures involving suspected or known infectious specimen or cultures, work in a BSC unless otherwise approved and stated in lab-specific manual.
Risk Group 2	Agents that are associated with human disease which is rarely serious and for which preventive or therapeutic interventions are often available.

LABORATORY HAZARDS

Primary Hazards	HSV 1 and 2: Direct contact with clinical material or viral isolates, inhalation of concentrated aerosolized materials, droplet exposure of mucous membranes - eyes, nose, or mouth, ingestion, and accidental parenteral inoculation.
Sources	Saliva, cervix, and urethra. Cultures, frozen stocks, other samples described in IBC protocol.
Lab Acquired Infections (LAIs)	No cases reported.

PERSONAL PROTECTIVE EQUIPMENT

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

SPILL PROCEDURES

Large	Immediately notify all lab personnel and clear the area. Remove any contaminated PPE/clothing before exiting the lab. Lock all entry doors, post warning signage, and deny entry. Call DPS (213-740-4321) and ask to notify EH&S. Inform the PI and/or Lab Manager/Supervisor as soon as possible.
Small	Notify all lab personnel lab. Remove contaminated PPE and don new PPE. Cover spill area with absorbent material and add fresh 1:10 bleach:water. Allow 20 minutes (or as directed) contact time. After 20 minutes, clean up and dispose of materials.

VIABILITY

Disinfection	Use 10 % dilution of household bleach (minimum 0.3% sodium hypochlorite) for 20 to 30 minutes, or an acceptable time approved by IBC and EH&S.
Survival Outside Host	Survives outside host on dry inanimate surfaces (hours to weeks).

HEALTH HAZARDS

Host Range	Humans, captive non-human primates, experimental rabbits and rodents.
Incubation Period	1 to 26 days.
Infectious Dose	Unknown
Modes of Transmission	Contact with broken skin, accidental puncture of skin, contact with mucous membranes, respiratory droplets, sexual transmission.
Signs and Symptoms	Fever, sores or ulcers in infected area, pain, redness, sore throat, mucosal edema.

EXPOSURE PROCEDURES

Medical Follow-up	Visit USC’s designated healthcare provider. Bring a copy of this PSDS.
Mucous Membrane	Flush eyes for 5-10 minutes at eyewash station.
Other Exposures	Immediately wash affected area with soap and water for 15 minutes.
Reporting	Immediately report incident to supervisor, notify EH&S, and complete Manager’s Report.

MEDICAL PRECAUTIONS/TREATMENT

Prophylaxis	Acyclovir (prophylactic drug) to prevent reactivation of herpes labialis after exposure to ultraviolet radiation, facial surgery, or exposure to sun and wind during skiing. Oral acyclovir is recommended to suppress genital HSV recurrences near the end of pregnancy.
Surveillance	Monitor for symptoms of infection
Treatment	Antiviral drugs like acyclovir, foscarnet valacyclovir, famciclovir, and penciclovir.
USC Requirements	Immediately report any exposures to Environmental Health & Safety.
Vaccines	None Available

REFERENCES

BMBL <a href="http://tiny.cc/cdc-bmb1">http://tiny.cc/cdc-bmb1</a>	Canadian PSDS <a href="http://tiny.cc/canada-gov-psds">http://tiny.cc/canada-gov-psds</a>
CDC <a href="https://www.cdc.gov/">https://www.cdc.gov/</a>	NIH Guidelines <a href="http://tiny.cc/nih-bio-secure">http://tiny.cc/nih-bio-secure</a>
Virginia Tech <a href="http://tiny.cc/vt-psds">http://tiny.cc/vt-psds</a>	Montana State University <a href="http://tiny.cc/msu-psds">http://tiny.cc/msu-psds</a>

