

Name: Sindbis Virus Vector

BSL: 2

1. Mode of Transmission to Humans (e.g. inhalation, inoculation, mucous membrane exposure, etc.):

BioSafety Approved Version

 Accidental parenteral inoculation and droplet exposure of the mucous membranes

2. Description of the Human Disease associated with this agent or vector (including instances of laboratory acquired infections):

Self-limiting febrile viral disease. Sudden onset of fever, rash, arthralgia or arthritis, lassitude, headache and myalgia; rash may precede or follow joint manifestations by 1-2 days ; exanthem on trunk progressing to face, legs, palm, soles and lasts on average 10 days; signs of jaundice and myocardial damage are reported but rare; often no recognized clinical disease manifestations. No laboratory acquired infections reported to date.

The low level of pathogenicity of Sindbis virus in humans has allowed it to be classified as a Biosafety Level-2 (BL-2) agent by the NIH Recombinant DNA Advisory Committee. All personnel working with the Sindbis Expression System should be properly trained to work with BL-2 level organisms.

3. Personnel Protection Required (minimum requirement):

| | Laboratory | Vivarium | | Laboratory | Vivarium |
|-------------------|---|-------------------------------------|----------------|--------------------------|-------------------------------------|
| Safety Glasses | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Shoe Covers | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Lab Coat | <input checked="" type="checkbox"/> | <input type="checkbox"/> | Face Shield | <input type="checkbox"/> | <input type="checkbox"/> |
| Gloves | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | Cap/Head Cover | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Goggles | <input type="checkbox"/> | <input type="checkbox"/> | Mask | <input type="checkbox"/> | <input type="checkbox"/> |
| Disposal Gowns | <input type="checkbox"/> | <input checked="" type="checkbox"/> | Other | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Other - Describe: | N-95 respirator is required for work with BSL-2 agents in animals outside a BSC | | | | |

4. Engineering Controls (minimum requirement):

| | Laboratory | Vivarium | | Laboratory | Vivarium |
|--------------------------|--|-------------------------------------|------------------------------|-------------------------------------|-------------------------------------|
| Autoclave | <input type="checkbox"/> | <input type="checkbox"/> | Engineered Sharps Protection | <input type="checkbox"/> | <input type="checkbox"/> |
| BioSafety Cabinets | <input type="checkbox"/> | <input type="checkbox"/> | Sharps Containers | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Closed Centrifuge Rotors | <input type="checkbox"/> | <input type="checkbox"/> | Closed Centrifuge Tubes | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Other | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | | |
| Other - Describe: | A Biosafety Cabinet must be used for all aerosolizing procedures | | | | |

5. Disposal Procedures:

Liquids: add bleach to a final concentration of 10% bleach solution (Clorox or other bleach with Cal EPA registration number), let sit for 30 minutes, dispose of in sink (best while running water). Aspirator flasks: bleach is added to aspirator flasks initially so that the final concentration will be 10%. These must be emptied at least weekly.

Solids: disposed of in labeled, double red biohazard bags held in labeled, rigid, covered containers. Transport to biohazard collection area in a closed rigid container for final disposal by EH&S. These must be emptied at least weekly.

6. Disinfection Procedures:

Sindbis virus can be inactivated by organic solvents, bleach, or autoclaving.

Surface: 10% household bleach solution made up fresh daily (Clorox or other bleach with Cal EPA registration number) allowing 5-minutes contact time.

OR

Surface: 75 ppm of CA EPA approved iodophor (e.g. Wescodyne) allowing 5-minutes contact time.

7. Recommended/Required Vaccinations or other Medical Surveillance:

None

8. Employee Exposures- first aid procedures:

- a. Eye exposure from splash or aerosols - rinse a minimum of 15 minutes in eye wash or flush area with water.
- b. Skin exposure - wash area with soap and water for 15 minutes
- c. Needle stick and/or sharps exposure - wash wound area with soap and water for 15 minutes
- d. Contamination of clothing - remove the contaminated clothing and place in biohazard bag, shower with the emergency douse shower, and put on clean clothes.
- e. Spill or release - Monday through Friday, 8a - 4:30p call EH&S; after hours call Campus Police

9. Employee Exposure - seek medical follow-up from the following medical providers: (TAKE THIS ECP WITH YOU)

24-hour walk-in service:

Hospital Emergency Room Or nearest Medical Center Emergency Room

Call your campus Occupational Health contact to determine if a follow up visit is required. Most exposures will require a visit to Occupational Health.

Monday - Friday, 8a - 4:30p

10. Report All Injuries, Illnesses, and Exposures to EH&S:

Report the injury incident to their immediate supervisor and complete your campus injury report form

11. Required Biosafety Training:

Laboratory specific training on hazards, exposure evaluations, and the required precautions for experimental procedures used with this agent - provided by Principal Investigator

12. Lab specific instructions:

null