

Sendai Virus

RNA virus, enveloped.

Prevalence

- Rare in modern animal facilities. Common in pet and wild rats and mice

Diagnosis

- Serology or PCR

Disease

- In mice can cause pneumonia, dyspnoea and chattering teeth. Can cause death in young mice. In rats, Sendai virus is generally asymptomatic, but infected rats can have problems with reproduction and respiratory infection. Sendai virus is extremely contagious and first time infections are usually epizootic within rooms, but can become epizootic within entire facilities

Strains

- Include MN, Z, KN, Mol, Hm

Screening

- Quarterly serology testing or as required by the individual institution

Transmission

- The primary route of infection is by aerosol or direct contact with infected animals during the first two weeks of infection when the virus is shed

Duration

- Does not persist in immunocompetent animals

Durability

- Labile in the environment. Routine disinfection procedures should be sufficient

Significance

- Animals infected with Sendai virus are unsuitable for research purposes

Control

- Hysterectomy rederivation and embryo transfer have proven successful in the eradication of Sendai virus. Transmission can be limited by the use of filter-top cages and reduction of staff movements

Reading

- Infectious Diseases of Mice and Rats. National Research Council 1991
- Charles River Laboratories website, www.criver.com
- University of Missouri, Research Animal Diagnostic Laboratory website, www.radil.missouri.edu