Safe Rat Handling by Animal Control Facilities and Animal Rescue Organizations: Interim Guidance

In January, 2017, the Illinois Department of Public Health (IDPH) was notified of Seoul virus infection in eight people who handled or owned rats purchased from rat breeding facilities in Wisconsin (one location) and Illinois (two locations). At this time, it is not known how widespread Seoul virus is in pet rats. States are conducting tracing activities and testing suspect rat breeding facilities. Information on ratteries known to have Seoul virus will be updated as it becomes available.

Animal handlers, including municipal animal control facilities, rescue groups, and other animal surrender groups or facilities, may have pet rats surrendered by owners. At this time, no Seoul virus illnesses have been reported in animal control or rescue group employees or volunteers.

Owner Surrenders
For pet rat owners wishing to surrender their pet rat(s), animal control and rescue organizations should consider the following:
- Always attempt to determine from the owner where the rat was purchased or obtained. The owner will have been contacted if a pet rat was associated with one of the rat breeding facilities with known Seoul virus infection.
- If a rat with unknown purchase history is accepted by your facility, isolate the rat. Utilize safe rat handling practices at all times and with all rats.
  - CDC: Fact Sheet on Healthy Pets
  - CDC: Key Messages About Pet Rodents
- If a rat owner says they were notified by public health that the rat came from a confirmed facility, place the rat in isolation and immediately call your local health department.
- As needed, consult with the local health department and with your veterinary staff regarding disposition of pet rats.

Current Pet Rat Population
For your current rat population, there is no recommendation to test, remove, or euthanize the rats unless you have been notified that the rat was purchased from one of the affected rat breeding facilities.
Safe handling of pet rats, along with thorough and regular cleaning and disinfection of rat cage areas are important and should be done at all times and with all pet rats.
Transmission of Seoul virus

The Seoul virus is not transmitted person to person. As with other diseases carried by rodents, Seoul virus is transmitted to people from direct contact with rat urine or feces, contaminated materials like bedding, and possibly by aerosolized feces, urine, or saliva. It can also be transmitted through a bite from an infected rat.

Symptoms of Seoul virus in rats

Infected rats will not show any symptoms of illness. However, you should routinely Monitor the health and behavior of pet rats in your facility and contact a veterinarian if a rat seems ill.

Symptoms of Seoul Virus in Humans

In people, symptoms may include fever, severe headache, back and abdominal pain, chills, blurred vision, redness of the eyes, or rash. In severe cases, infection can also lead to acute renal disease. However, not all people infected with the virus experience symptoms.

People who work with rats and have symptoms should contact their health care provider; it is important to inform your health care provider that you have had contact with pet rats.

Safe handling of pet rats

Rats can carry and transmit many different diseases if not safely handled and maintained. Safe handling of pet rats is urged at all times.

The Centers for Disease Control and Prevention (CDC) guidance on how to avoid becoming ill with diseases carried by rats includes the following:

- Wash hands thoroughly with soap and water after handling rats or areas where rats have been.
- Keep rats and their cages out of kitchens or other areas where food is served.
- Do not eat, drink or smoke while tending to rodents.
- Clean pet cages, bedding, toys, feed or water containers away from areas where food is served or people may bathe.
- Use gloves and a face mask for cleaning.
- Avoid creating dust from fecal materials by wetting down bedding and disinfecting it.
- Do not sweep or vacuum rodent urine, droppings, or nests as this sends particles into the air.
- Cover cuts and scratches before handling the rat.
- Don’t snuggle or kiss rats or touch your mouth after handling rats.
Avoid bites from rats.

- Provide training to all staff and volunteers who interact with rats on how to avoid bites.
- Customers/visitors who handle rats in your facility should be monitored while holding the rat. Provide instructions on how to avoid bites prior to handling rats, as well as other safe rat handling practices.

Ensure all new owners who adopt or purchase a rat from your facility or group are aware of safe handling practices for rat owners.

Please note that the Centers for Disease Control and Prevention (CDC) does not recommend pet rodents for families with children five years old or younger, pregnant women, or people with weakened immune systems because these groups are at greater risk for serious illness.

The CDC provides excellent guidance, available at the following links:

- [CDC: Fact Sheet on Healthy Pets](#)
- [CDC: Key Messages About Pet Rodents](#)
- [CDC: Small Mammals](#)

### Cleaning and Disinfection of rat cages and areas near rat cages

- Keep cages and surrounding areas clean. After cleaning rat cages, disinfect the cage and items in the cage.
  - A bleach solution can be used for disinfecting the cage. The recommended concentration of bleach solution is one part bleach to 10 parts water.
  - If using a commercial disinfectant, following the manufacturer's instructions on the label for dilution and disinfection time.

- Dispose of rat bedding without stirring up dust created by sweeping or vacuuming droppings, urine, or nesting materials; soak bedding with disinfectant for five minutes before removing to help decrease dust particles.

- Wear rubber, latex, or vinyl gloves when cleaning up urine and droppings. Always thoroughly wash your hands with soap and water after removing your gloves.

- **Remember to clean and disinfect the cage and area around the rat cage.**
  - Mop floors and clean countertops with disinfectant or bleach solution.
  - Routinely steam clean or shampoo upholstered furniture, carpeted areas, or rugs if the rat is allowed to be on them, and consider discontinuing this practice.
- Wash clothing exposed to rat urine or droppings with laundry detergent in hot water.
  - Ensure all staff and volunteers who interact with rats and/or are responsible for cleaning and disinfection of cages have received appropriate training on how to clean the cages and areas around the cage, which cleaning and disinfecting products to use, and how to prepare and use cleaning and disinfecting products.