Update on Outbreak Investigation of Human *Salmonella* Muenster Infections Linked to Pet Bearded Dragons

November 24, 2020 – The Centers for Disease Control and Prevention (CDC) and public health officials in several states investigated a multistate outbreak of human *Salmonella* Muenster infections linked to pet bearded dragons. The investigation is now over. CDC will continue to work with state public health partners to monitor for *Salmonella* infections linked to contact with pet bearded dragons.

As of November 20, 2020, a total of 18 people infected with the outbreak strain of *Salmonella* Muenster were reported from 11 states. Eleven ill people were hospitalized, and no deaths were reported. Illnesses started on dates ranging from January 29, 2020, to October 17, 2020. Ill people ranged in age from less than 1 year to 76 years, with a median age of 26 years. Six ill people are children under 5 years of age. Fifty-six percent of ill people were female.

Epidemiologic and laboratory evidence showed that contact with pet bearded dragons was the likely source of this outbreak. In interviews, 11 (69%) of 16 ill people reported contact with a bearded dragon before getting sick. Ill people reported purchasing bearded dragons from pet stores in multiple states. A common supplier was not identified. The outbreak strain making people sick was identified in samples collected from a bearded dragon and its environment from the home of an ill person in Virginia.

Most people infected with *Salmonella* develop diarrhea, fever and abdominal cramps between six hours and six days after infection. The illness usually lasts four to seven days, and most individuals recover without treatment. Children under the age of five, senior citizens and individuals with weakened immune systems have a greater risk of infection and complications.

Animals become infected with *Salmonella* through their environment, by eating contaminated food, or from their mothers before they are born or hatched. Regardless of where they are purchased, many animals can carry *Salmonella* and still appear healthy and clean. Animals with *Salmonella* shed the bacteria in their stool which can contaminate their body parts or items in their habitat, such as bedding, food, or water. People can be infected if they do not wash their hands after contact with animals carrying *Salmonella* or their environment.

The CDC and expert sources recommend these precautions to protect yourself and others from contact with *Salmonella* bacteria that reptiles, including bearded dragons, may carry:

- Supervise children’s interactions with the animal, including post-encounter hand-washing.
- Wash your hands for at least 20 seconds with water and soap right after touching, feeding, or caring for a bearded dragon or cleaning its habitat.
- Do not let the animal into areas where food or drink is prepared, served, or stored.
- Do not snuggle or kiss the animal, or touch your mouth, eat or drink around them.
- To prevent cross-contamination, clean items you use to care for your bearded dragon outside the house, if possible. Items you use to care for it may include tanks, food and water containers,
and toys. If you clean these items indoors, do not clean them in the kitchen or other areas where food is eaten or prepared. Use a laundry sink or bathtub, and thoroughly clean and disinfect the area immediately.

- Pick the right pet for your family. Bearded dragons and other reptiles are not recommended for children under the age of five, adults aged 65 and older, and people with weakened immune systems because they are more likely to get serious illness from germs that reptiles can carry.

The Pet Industry Joint Advisory Council reminds consumers that they should check their state, local, and property laws before buying any reptile, to make sure it is legal to own one in their community. Consumers should only purchase pets from reputable pet stores or breeders. Pet retailers are encouraged to provide information on disease risk and prevention measures to consumers purchasing pets, and to employees handling these companion animals.

Resources:

- CDC Investigation Notice: https://www.cdc.gov/salmonella/muenster-10-20/index.html
- CDC information on diseases and prevention for reptile owners: https://www.cdc.gov/healthypets/pets/reptiles.html
- CDC information on safe handling of reptiles and amphibians: https://www.cdc.gov/healthypets/pets/reptiles/safe-handling.html
- CDC information on Salmonella: https://www.cdc.gov/salmonella/
- PIJAC flyer containing information on Salmonella for retailers: https://pijac.org/sites/default/files/pdfs/FLYERSalmonellosis071117.pdf
- PIJAC Healthy Herp Handling poster: https://pijac.org/HealthyHerpHandling
- PIJAC website updates on this outbreak and other zoonotic issues: http://www.pijac.org
- CDC information on outbreaks of zoonotic diseases spread between animals and humans in the United States: https://www.cdc.gov/healthypets/outbreaks.html

Media Contact:
Gwyn Donohue, Director of Communications and Public Affairs
202-452-1525 x1080 | gwyn@pijac.org