

Management Procedures

- Provide signs that remind people to wash hands after contact with animals or animal facilities.
- Provide an easily accessible area with hand washing facilities that are the appropriate height for children and adult visitors. Hand washing stations should have ample warm water, soap (anti-bacterial or waterless hand cleaning solutions are not necessary and may be counterproductive), and disposable towels or hot air dryers.
- Provide directions or signage that notifies and reminds visitors of location and importance of using the hand washing station.
- Provide supervision when people are in the animal contact areas.
- **Remind teachers, parents, and other child care givers that children must wash their hands after leaving animal areas, and that the children should wash their hands after leaving the farm and removing their shoes. Shoes, toys, blankets, or other items that might have been contaminated with manure on the farm should be washed at home as soon as possible.**
- Only allow access to animals that you feel are appropriate and are in good health. Restrict and prevent access to high risk areas and use gates or fences to divert visitors away from inappropriate areas.
- Keep animals and animal environments as clean as possible. Fences and animal dividers should be clean as well.
- Children will want to come in contact with animals. It may be impossible to eliminate children from petting animals. Provide eating and drinking facilities prior to animal contact areas. Try to minimize eating and drinking after visiting animal areas.
- Do not allow visitors to have access to manure storage areas or manure handling equipment.
- Instruct visitors to seek medical attention as early as appropriate for all unusual or severe illnesses.

Reducing the Risk of E. coli Infections

**Avoiding illness when handling animals
or visiting exhibitions or farms**

Advice for farmers and animal handlers



For more information, call:

**PA Department of Health (877) PA Health
PA Department of Agriculture (717) 772-2852
Penn State Veterinary Science (814) 863-2160**

www.health.state.pa.us/hpa/cdi/ecoli.htm
www.cdc.gov/ncidoc/dbmd/diseaseinfo/escherichiacoli_g.htm
www.vetsci.psu.edu/ecoli.cfm

Developed in cooperation with:

**PA Department of Health
PA Department of Agriculture
Penn State University, Cooperative Extension Service
University of Pennsylvania, School of Veterinary Medicine
Penn Ag Industries Association
Pennsylvania Farm Bureau**

Introduction

The information in this sheet is intended to provide advice for animal owners and animal caretakers whose animals may be accessible to the public.

It has been well recognized and documented that interactions between the public and the animal agriculture are important and enjoyable educational opportunities. Just as certain risks are associated with all outdoor activities (example-Lyme disease and walking in the woods), there are some risks associated with human-animal interactions. While it is impossible to eliminate all risk, the information in this document is intended to reduce the risk of illness due to oral infections (especially *E coli* O157) for people who interact with your animals.

Background

All animals and people carry a variety of microorganisms on their body and in their intestinal tract. Some of these organisms can be transferred between people and animals. On most occasions, humans acquire infections by transferring microorganisms from their hands to their mouths. In the majority of cases, this is due to eating improperly prepared or cooked food. Hand to mouth transfer is the method by which organisms, such as *Escherichia coli* O157:H7 (*E coli* O157), cause infection in people. This, and a few related strains of *E coli* can produce toxins that can potentially cause severe disease. A very small number of these particular bacteria can infect people, especially children and the elderly. *E coli* O157 can be found in a variety of animal species, but it is found most often in cattle and their environment.

The 1996 National Animal Health Monitoring System survey suggested that approximately 24% of the cattle herds in the United States may have *E coli* O157 present on the farm at any one time. This particular strain does not cause disease in cattle and is shed intermittently in cattle; therefore, it is very difficult to detect or predict when it will be present on a farm.

Controlling the risks for hand to mouth contamination by the public, when they visit your farm or animals at exhibitions, will reduce the likelihood of infection due to *E coli* O157.

What are your risk areas

- Currently it is believed that all ruminants (cattle, sheep, goats, deer, bison) could harbor O157 at least transiently.
- At this time there are no conclusive tests to indicate when an animal is free of O157.
- O157 may be introduced onto your farm by newly purchased animals, wild birds, wild animals, visitors, livestock trucks/trailers, or delivery trucks.
- Apparently healthy carrier animals, especially young stock, animals under stress or those animals undergoing feed changes are more likely to shed this bacteria in their feces.
- *E coli* O157 can remain viable outside of the animal in soil, in contaminated water, or feces for several months depending on weather conditions.
- Visitors are most likely to become infected from direct or inadvertent contact with manure.

Limiting risk

- Assume that *E coli* O157 may be on your farm.
- Discourage eating and drinking in animal areas.
- Do not allow very young, elderly, or immune compromised people to have access to animals, especially if they are consuming food or beverages on your premises.
- Do not allow visitors to touch gates or pen dividers that are contaminated with manure.
- Do not allow people to walk through areas that may be contaminated with manure. Disposable footwear and boot or shoe washing stations can be provided.
- Do not allow visitors near manure storage areas.
- Do not allow contact with animals that are most likely to be shedding bacteria of concern (stressed, sick animals, very young calves, recently purchased animals, or adult cows close to parturition).