

STATE OF NEW YORK  
DEPARTMENT OF AGRICULTURE AND MARKETS  
10B Airline Drive  
Albany, New York 12235

## Animal Health Advisory

**The New York State Department of Agriculture and Markets is alerting all NY dairy producers about an increased presence of the bacteria *Salmonella* Dublin.**

*Salmonella* Dublin can be a serious disease threat to cattle. It can also spread to people, but there are ways to protect yourself, your employees and your livestock.

- 1) Always be careful about new introductions to your herd.
- 2) Protect people by refraining from drinking unpasteurized milk.
- 3) Pay very close attention to biosecurity and sanitation, especially around young stock.

### **What is *Salmonella* Dublin?**

Salmonellosis caused by *Salmonella* Dublin is a bacterial infection that most commonly presents as respiratory disease in young calves. Recently, an increasing number of cases have been diagnosed on dairy farms in New York and other Northeastern states. Due to the unusual presentation of this type of *Salmonella*, it is believed that many cases may have gone undetected. *Salmonella* Dublin is resistant to most antibiotics and therefore, difficult to treat.

### **What does infection with *Salmonella* Dublin look like?**

Most cases are seen in young animals between the ages of 1 week and 8 months, although animals of any age may become infected. Affected calves primarily show signs of respiratory illness including coughing, labored breathing, and high fever. Many cases are fatal. Unlike other Salmonellosis, diarrhea is not commonly seen in young calves with this disease. Adult cattle infected with *Salmonella* Dublin may exhibit fever, diarrhea, respiratory signs, and/or abortions.

### **How is *Salmonella* Dublin spread?**

During active infection, animals shed *Salmonella* Dublin in manure, saliva, nasal secretions, urine, uterine fluids, and milk. *Salmonella* Dublin is highly contagious and sick animals may readily contaminate their environment. Contaminated feed, water, and equipment are common sources of infection. Sick animals that recover may become carrier animals that remain healthy but periodically shed bacteria in the feces and milk for the rest of their lives.

### **How can *Salmonella* Dublin infections be prevented?**

- Practice strict biosecurity. Place new arrivals in isolation for at least two weeks. Consider only purchasing animals from herds that are negative for *Salmonella* Dublin on repeated bulk tank milk testing.
- Excellent calf management is critical for prevention. Provide clean dry calving pens. Avoid group calving areas. Remove calves from their dams as soon as possible after birth and place them in a clean, dry, well-ventilated environment such as a hutch, where they do not have contact with other calves or adult cattle.
- Do not feed raw waste milk to calves. If waste milk will be used, consider pasteurizing prior to using.
- Sanitize and disinfect equipment used between animals, including water or milk pails feeders, nipple bottles, and oral medication equipment.
- Wash hands, boots, and common equipment between groups of animals. Change coveralls if they become contaminated with manure. Farm personnel should practice good personal hygiene.
- Identify and isolate any newly sick animals immediately. Personnel should handle sick animals last.
- Do not allow outside vehicles (i.e. rendering trucks, etc.) or visitors access to cattle or feed areas.
- Prevent contamination of feed and water sources by feces (cattle, birds, rodents, pets, and wild animals.) Restrict animal access to surface water sources.
- Maximize animal resistance by preventing herd stresses such as excessive heat and overcrowding and by maintaining adequate dry matter intake.

### **How do I find out if my herd is infected?**

Consider testing bulk tank milk samples using the *Salmonella* Dublin ELISA test. Ideally, bulk tank milk should be tested every three months over a period of one year to classify the herd. Individual animals may also be tested using blood or milk samples. Work with your herd veterinarian to design the optimal testing strategy for your herd.

### **Can people become infected with *Salmonella* Dublin?**

- Yes, *Salmonella* Dublin can cause illness and even death in people. Young children, the elderly, pregnant women, and others with compromised immune systems are at higher risk for infection. **The consumption of raw milk from affected farms is especially dangerous.**
- People who care for sick animals or who clean sick pens need to be cautious. Changing clothes after working in sick pens, wearing gloves, rigorous hand-washing, and avoiding inhalation of mists when power washing sick pens are always good precautions. If power washing is used to clean sick pens, use of a cartridge-style respirator is strongly recommended, regardless of which bacteria may be present. Animal caretakers showing signs of serious illness such as fever, delirium, vomiting, diarrhea with or without blood, and abdominal cramping should contact their physician or local Health Department immediately.

### **Where can I get more information about *Salmonella* Dublin?**

For more information on *Salmonella* Dublin and disease prevention practices, see the New York State Cattle Health Assurance Program (NYSCHAP) website: <http://nyschap.vet.cornell.edu> or contact the NYSCHAP program coordinator, Dr. Melanie Hemenway, at (585) 313-7541 or [Melanie.hemenway@agriculture.ny.gov](mailto:Melanie.hemenway@agriculture.ny.gov).