**Mycoplasma bovis** is a bacteria that can cause lung disease (e.g., pneumonia) in cattle, which sometimes leads to death. However, it is unclear how this bacteria leads to pneumonia and death in cattle, because there are many other contributing factors.

The purpose of this study is to find out whether the type and amount of **Mycoplasma bovis** present in cattle predicts disease, and to determine how the type and amount of this bacteria presents in young cattle changes over time after arrival in a feedlot.

**Keywords:**
Cattle, pneumonia, *Mycoplasma bovis*, bacteria, respiratory disease

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**What is this research about?**

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The purpose of this study is to find out whether the type and amount of *Mycoplasma bovis* present in cattle predicts disease, and to determine how the type and amount of this bacteria presents in young cattle changes over time after arrival in a feedlot.

**What you need to know:**

The bacteria *Mycoplasma bovis* is one of the causes of lung disease in cattle. Typical antimicrobial treatments may fail because cattle are being re-infected with multiple forms of the same bacteria over time.

**How can you use this research?**

Farmers and veterinarians can use this research to understand why typical treatments for cattle lung infections do not work, and which bacteria make these diseases worse. This may help reduce the use of ineffective treatments, and eventually help reduce the spread of lung disease among cattle.

**What did the researchers find?**

The *Mycoplasma bovis* bacteria were present in both sick and healthy calves. Findings suggest that calves become infected with multiple types of this bacteria over time rather than experiencing continuous infection with one kind of *Mycoplasma bovis*. However, neither the amount nor the type of the *Mycoplasma bovis* bacteria was related to whether or not the calves became sick.

The presence of other bacteria and the health of the calf may determine whether or not infected calves will become sick. These findings may explain one reason why typical treatments for these bacteria are not successful.
What did the researchers do?
This study was conducted in Ontario in a place that houses and feeds calves to prepare them to become beef cattle. The calves were imported from Saskatchewan and were vaccinated and given antibiotics when they arrived. The calves were monitored for any signs of lung disease. Groups of sick and healthy calves were identified. Fluid from the lungs of both sick and healthy groups was tested to find out the genetic type and amounts of *Mycoplasma bovis* bacteria present. Sick calves were given a treatment, and the health of all calves was measured over time.

Article citation:
This summary explains two citations:

AND


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