

## Protein Sources Swine Update January/February 2013 Lori Feldmann, DVM

As we have worked with multiple Mycoplasma cases in the past few months we have noticed that there is a lot of confusion with the different types of Mycoplasma and why we don't vaccinate for some of them. Here is a brief summary of the 3 most common Mycoplasmas we see:

**Mycoplasma hyopneumoniae.** This is the species of Mycoplasma that most pigs are vaccinated for. In Protein Sources managed herds this vaccination occurs at weaning and then again in the nursery. In sow herds supplied with gilts from a Protein Sources managed multiplier, we have M. hyopneumoniae positive herds that are stable. Gilts are typically exposed to low levels of M. hyopneumoniae while in the farrowing crates. They then will replicate it in the late nursery or early finishing phase, so when they enter the sow herd they are very stable and there isn't anywhere for M. hyopneumoniae to circulate.

If M. hyopneumoniae is causing clinical issues, producers typically notice a chronic cough that doesn't respond well to many of the common medications used in nurseries such as Amoxicillin, SMZ, or Excede (Zoetis). However, it will typically respond well to Lincomycin, Draxxin (Zoetis), Denagard (Novartis), and Baytril (Bayer). If it is combined with PRRS virus or influenza, there will be more of an increase in mortality and fallback pigs than we would expect with PRRS or flu alone.

**Mycoplasma hyosynoviae.** This Mycoplasma is sometimes found late in the nursery, but more often in finishing. M. hyosynoviae will cause pigs to have stiff back legs, so they are slow to get up and will walk on their tiptoes with an arched back. They also tend to sit on one ham with their legs out to the side. When caught early, most cases treat easily with injectable medications such as Tylan (Elanco) and Lincomycin. When we have a large percentage of a barn affected we can put medication in the water, but the more severely affected pigs still have the best response to an injection.

There is no commercial vaccine for M. hyosynoviae. Since it is typically cheaper to treat the few affected groups than it would be to vaccinate, we have not pursued an autogenous vaccine.

Mycoplasma hyorhinis. This Mycoplasma has been around for many years, but until more recently wasn't known to cause severe clinical issues. Clinical signs and lesions can look identical to Haemophilus parasuis, so diagnostics are necessary to confirm the presence of M. hyorhinis. M. hyorhinis will not respond to the typical treatments for H. parasuis such as Amoxicillin or SMZ in the water. It will typically respond to the standard Mycoplasma treatments listed for M. hyopneumoniae, but there are cases we have to try more than one treatment to find the right one.

There is no commercial vaccine for M. hyorhinis. Some veterinarians have tried autogenous vaccines with varying rates of success. There is still a lot to learn about this particular Mycoplasma, so it is likely our recommendations for treatment and control may change in the future.

If you are concerned about Mycoplasma in your herd and have questions, please contact Dr. Lori Feldmann or Dr. Mark FitzSimmons in the Protein Sources Management office at 507-524-4511.