

SOWS INFECT PIGS WITH STREP

Strep suis remains one of the toughest bugs to eliminate from an early weaned herd. Researchers have known weaning at 7 days of age did not eliminate the disease in pigs.

Now, research finds strep on the tonsils of pigs just 24-hours old. Sandra Amass, DVM, of Purdue University led research to find the exact time pigs become infected with strep. Amass along with veterinarians Kirk Clark and Ching Ching Wu conducted the research.

Hardy Little Bug

Strep is a "hardy, little bug," Amass says. It can live in manure on a boot for two days and on plastic for 20 hours.

Most pigs infected with strep never show signs of it, Amass says. When it does strike, it causes infections of the brain, heart, lungs and joints. While outbreaks occur in pigs of all ages, strep's most frequent target is nursery pigs.

"Many producers are considering implementation of medicated early weaning or segregated early weaning technology to develop high health status pigs." Amass says, "Yet there is no protocol currently available to eliminate strep from these pigs."

If the early weaned pigs are sold to commercial herds, Amass says there is considerable risk of a strep outbreak.

The Purdue research may help producers design a program to control strep in their herds.

TIME OF INFECTION

Pigs contract strep at a very early age, according to the Purdue research. It was isolated from pigs at one day of age.

The research project involved checking tonsils of baby pigs for strep. In a strep-infected herd, five pigs were pulled each day from farrowing to 6 days of age. The pigs were euthanized and the tonsils collected and tested for strep. In addition, swabs were taken from all over the sow and the farrowing crate to test for strep.

Prior to farrowing, Amass says they thoroughly cleaned and disinfected the facility. Samples from the clean facility were tested for strep to make sure the area was clean. No strep was found. In addition, the sows were washed before going into the farrowing room.

After farrowing, Amass says swabs taken on the sow and in the crate indicated strep was all over the area. The baby pigs' tonsils, sows and environment yielded 45 isolates of seven different strep serotypes. One serotype was found in a third of the samples.

In samples taken from the sows, many had more than one strep serotype. Often, the baby pigs were infected with the same serotype as found on the sow.

The researchers conclude the sows were the source of strep infection in the pigs.

Strep appears to colonize in the tonsils of pigs immediately after they come in contact with the sow's excretions and secretions. They also suspect strep may even colonize before or during birth.