

H33 – Handling of virus in the farrowing facility



Sow colostrum normally contains antibodies against virus. When piglets are 4-8 weeks old, these 'passive' antibodies have disappeared

Prevent transmission of virus

1. Piglets must be assured of colostrum from their own mother
2. Do not move piglets between litters if they are more than 2 days old
3. Do not move old piglets back to the section with young piglets
4. Do not walk into the pens unless absolutely necessary and treat litters with diarrhoea last.
5. Make sure that all staff members know and understand all measures required to prevent transmission of virus.

Pigs should not be so old that they become infected in the farrowing facility

6. Identify the pigs you move back in the farrowing facility so that you only move them once
7. Move the smallest pigs to a "protective pen" in the weaner facility instead of moving them back in the farrowing facility

Handling of the problem

8. Make an accurate diagnosis
9. Consult your vet on possible vaccination strategy



If the pig in the creep is moved back in the farrowing facility and moved again at a later point in time, it may get so old that it no longer has colostrum antibodies and is thereby susceptible to virus.

If the risk of infection is high, the oldest pigs may become sick and you will keep moving pigs carrying virus to the weaner facility at each weaning.

Avoid

- Small sick pigs that are moved back in the farrowing facility at each weaning
- Continuous management in the farrowing facility

Additional comments - Handling of virus in the farrowing facility
Note: This fact sheet only applies where health levels are stable – not for acute outbreaks of virus.
Virus can only infect an animal once. Sows are rarely disease carriers after an infection. Virus cannot transmit from an animal that has colostrum antibodies or an animal that has developed vaccination antibodies or antibodies after it has had the infection.
There are no tables showing when the colostrum antibodies in a pig are used. The following rule of thumb is guiding and may vary greatly from pig to pig: E-coli transmits when the pig is more than 3 weeks old (3-week diarrhoea). PRRS transmits when the pig is more than 2 months old. PPV transmits when the pig is more than 3 months old. It is unknown for how long colostrum protects piglets against influenza, but transmission of influenza in the farrowing facility has been observed even though the sows are immune.
1. When a piglet drinks colostrum it absorbs colostrum antibodies whereby it is protected against all infections the sow has had or has been vaccinated against. Pigs can obtain colostrum antibody intake from a foreign sow as long as that sow is still excreting colostrum.
2. The infection pressure increases in the farrowing pens during lactation, ie. there is very little infection in the pen if newborn piglets are crossfostered before they are 36 hours old. By that point, the risk of piglets moving infection to the new pens increases greatly.
3. The oldest piglets in the farrowing facility pose the greatest risk of infection. In other words: If you move old piglets back to young piglets, there is a great risk of infecting the young piglets. A gestating sow rarely sheds virus.
4. Virus may originate from the intestine, ie. infection may be transmitted with faeces. This can be prevented by not moving pigs and faeces between pens. Therefore only walk into the pens if you absolutely have to. Treat litters with diarrhoea last and clean footwear and tools afterwards. Respiratory viruses are airborne, and it is difficult to prevent transmission within a section.
5. It only takes one staff member who, during a weekend/holiday, moves small piglets against the rules to ruin an entire week's work to prevent transmission of infection.
6. When piglets with reduced growth are repeatedly moved to younger batches they end up being so old that their blood no longer contains colostrum antibodies, and they are thus no longer protected against virus. These pigs may become infected and keep the infection in the farrowing facility. A pig that was once moved back and is then moved again has such poor growth that it is unlikely to reach slaughter weight. It may be chronically sick and you should consider destroying the pig. Identify the pig with, for instance, an ear notch/tag every time you move it back in the section. The number of ear notches/tags will show how many times the pig was moved and thereby how old it really is. In one trial, several pigs were more than 90 days old before they were weaned.
7. Rather than repeatedly moving the pig back in the farrowing section, move it to a pen in the weaner facility with an optimum environment for small pigs. Feed the pigs on the floor or in a trough the first week post-weaning.
8. In order to establish whether virus is the primary cause of death in the farrowing facility, submit a number of piglets for post-mortem examinations, Pick 30-60 sick/dead piglets with specific symptoms typical for the herd and that are sick/died at the age typical for the problem. The more specific the diagnosis, the more options for handling the problem.
9. Vaccination of sows will increase the excretion of antibodies in the colostrum from immune sows. Vaccination also ensures that first parity sows excrete antibodies against herd-specific diseases even if they have not themselves suffered from these diseases.