

Vaccination

How and why

Vaccinations protect against disease symptoms and reduce the spread of a disease (caused by a bacteria or virus). Typically, vaccinations are developed for diseases that would have a negative effect on animal welfare, productivity and medicine consumption. The medicine and zinc consumption are closely monitored in Denmark. This is why vaccines against, for instance, diarrhea after weaning have become more and more common within the last few years.

A vaccine consists of a weakened or dead part of a bacteria or virus. Therefore, we can avoid that the vaccine actually induce disease when administered. A vaccine works in a way where the immune system gets a copy of the specific disease which prepares it to fight against the real disease later.

Before starting vaccination, you should consider which age groups is to be protected: is it sows, piglets, or growing pigs?

Many of the vaccines for the sows are used as a precautionary measure, since an outbreak could infect all the pigs in the stables and cost a lot of money. Such vaccines could be against *Cl. Perfringens* type C, Erysipelas, and parvovirus (PPV). *Cl. Perfringens* Type C produce fatal necrotic and hemorrhagic enteritis in piglets. This is therefore a very serious disease, and newborn piglets will die from it. Erysipelas can cause abortions, infections in joints and skin, blood poisoning and acute death. PPV results in mummified piglets and few live born piglets. Almost all sow herds use vaccines against these diseases.

If we want to protect growing pigs, they need to be vaccinated themselves because the antibodies they get from the colostrum of the sow does not last so long. This can be done in the farrowing section or (early) in the weaning section. This is because it takes about 14-21 days from the pigs are vaccinated until they are protected. These vaccines could, for instance, protect against pneumonia (mycoplasma), circovirus, or pleuropneumonia (AP).

It's important to keep in mind that there are different needs in different herds. If you consider using a specific vaccine or want to change anything, you should ALWAYS discuss it with your veterinarian.

It's necessary to make a vaccination plan with your veterinarian based on diagnostics and knowledge of the specific disease.

Remember always to handle the vaccines with care and respect.

If the vaccines do not have the expected effect, see the list below.

Points to consider if the vaccine does not work as intended:

- ▶ The vaccine does not work

- Check that it is not incorrectly stored (the refrigerator does not work etc.)
- The vaccine could be contaminated (does it look like it usually does?)
- Check the expiry date (that it is not too old)
- ▶ Vaccinated at the wrong time
 - Influence of antibodies from colostrum (do not vaccinate piglets too early, or repeat vaccination)
 - Time of infection (it takes 14-21 days before the vaccination takes effect)
- ▶ The pig was ill when vaccinated
- ▶ Lack of re-vaccination
- ▶ Wrong injection technique
- ▶ Wrong type of vaccine / wrong diagnosis (laboratory test)
 - Vaccine confusion (vaccination plan will help you to remember the product names)
- ▶ Dosage too low
- ▶ Forgot to vaccinate ...