

Pighealth BYTES

Number: 167 Vaccinology III

Your own reference source on pig health



Biorigin

Lallemand

LUBING

Norel

Perstorp

Silvateam

Wisium/Neovia

Proper handling of vaccines

During the development phase of a vaccine, it is not only tested for safety and efficacy but also for storage conditions, the location on the body of the animal where the vaccine should be administered, the tissue type (subcutaneous or in the muscle), the dose to be given, and the needle length etc.

Only when the user takes all these aspects into account, can the efficacy claimed by the developer of the vaccine be expected. Under practical conditions situations are frequently encountered where these conditions are not fulfilled.

First on the list is always the conditions under which the vaccines are stored, second place goes to the location on the animal where the vaccine is given and in third place is the needle length that is used.

Refrigerators must have a device to measure and record the temperature. Most refrigerators on farms are old and used to store lunches and drinks for the workers. This means that the refrigerator door is opened much more frequently than the machine can handle to ensure a constant (low-) temperature. This leads to higher temperatures than prescribed, which is unacceptable.

To make matters worse, reports have been published where vaccines have actually frozen in the refrigerator on farm. This is not necessarily a problem for some vaccines but it is for oil inactivated adjuvanted vaccines. In such cases, the formulation (emulsion) will break down, rendering the vaccine useless.

Needle length is important. In young piglets 1cm long needles are used and at the start of the finishing process, 2.5cm long needles are recommended. For adult pigs 4cm is the rule. Short needles might be more convenient for the vaccinator but company instructions must be followed.

Last but not least, proper records of the performed vaccinations must be kept. This includes not only the product name and the batch number, including the expiration date, but also the number of pigs vaccinated and on which date. These data combined with purchasing records and your stock position of the vaccine involved will reveal that the correct dosage scheme is used.

Conclusion

Vaccines are expensive products for companies to develop and for pig farmers to use. Every effort should be made to ensure correct storage and handling of the vaccines. Consult with your veterinarian to make sure that the protocols you are following are up to date and correct.