Disease during the youngstock rearing period has the potential to impact the herd for years to come as it can lead to reduced growth rates, later finishing, reduced milk and colostrum, decreased productivity, poor fertility and death.

Alongside effective herd management, vaccination is a key tool to minimising disease impact on your herd.

**VACCINES: WHAT ARE THEY AND HOW DO THEY WORK?**

- **Vaccines contain an agent which resembles a disease-causing micro-organism, but that have been modified to be safe for the animal.**

- **Vaccines and treatments are not the same – vaccines are used to prime a healthy animal’s immune system to fight off disease; whereas treatments are given to a sick animal with the aim to kill the disease-causing organism and/or reduce the disease symptoms.**

- **Vaccination of the herd is invariably less costly, easier to manage and less stressful for both farmers and animals vs. treatment of disease outbreak.**

**GETTING THE MOST FROM YOUR VACCINES**

If vaccines aren’t administered correctly they are a waste of time and money. Use the tips overleaf to make sure you get the most out of your vaccines.
**VACCINATE AT THE RIGHT TIME**
- Vaccines do not work immediately; vaccinate before the expected infection pressure.
- Check the data sheet to determine if the vaccine has to be given on its own or if it can be administered alongside another vaccine.
- Check if the vaccine is licenced for use in pregnancy before administering to these animals.
- Avoid vaccinating at stressful times or low health status animals; their immune system will be compromised and the vaccine will not be as effective.
- Do not use in very young calves (unless stated in the product leaflet) as their immune system will not be developed enough to respond to the vaccine sufficiently.

**VACCINATE THE RIGHT AMOUNT, IN THE RIGHT PLACE, TO THE RIGHT ANIMALS**
- Give the right volume of vaccine, lower volumes will not protect your herd; if you are using a multi-dose dosing gun make sure you calibrate it.
- Administer the vaccine in the right place; ask your vet for help or training if you are not 100% confident.
- Replacements should complete a primary course to ensure they are protected to the same level as the rest of the herd – where possible quarantine and vaccinate replacements before introducing them to the herd.
- Record which animals you vaccinate and when so you know when you need to give boosters.

**VACCINATE USING OPTIMAL VACCINE**
- Vaccines should be kept refrigerated at 2-8°C, should be protected from frost and some should not be exposed to light; if they are not stored correctly they will not work well.
- Measure the temperature of your fridge to make sure it is working correctly.
- Transport your vaccines at the correct temperature (use a cool box when transporting and do not leave them in the car).

**VACCINATE USING THE RIGHT EQUIPMENT**
- Make sure needles and animals are clean and dry to minimise abscesses or infection which could lead to reduced productivity and even death.
- Clean multi-dose syringes and equipment as per their instructions on the same day that they are used – do not use strong disinfectants on vaccinator guns intended to be used for live vaccines as the disinfectant residue can destroy the vaccine ingredients.
- If you have concerns over cleanliness or function of equipment then do not use it.
- Use the right needle type for the right procedure – if you are unsure what equipment to use then talk to your vet.
- Use needle guard and disinfection systems such as the Sterimatic® system when vaccinating your herd.

Every farm is different and so understanding the needs and pressures of your farm and how they change over time is important. Working with your vet and reviewing the product leaflet carefully will help to ensure you are vaccinating using good vaccination techniques on your farm.