

Upcoming courses & events

Calving course 9th September

Learn how to correct malpresentations, deal with common problems around calving, and how to prepare for calving correctly to prevent those problems. Contact Hollie for more detail on 07733121545

Safe and Effective Use of Medicines **NB: New dates** 16th September (beef and sheep) & 12th October (dairy)

Understanding a little more about the medicines we prescribe will ensure you are using them in the correct and most cost-effective way. Contact Bridget on 07733121533

DIY AI **NB: New Date** 1-4th November

A 4-day in course on how to AI cattle, with plenty of opportunity to practice on a cadaver uterus and then barren cows. Contact Bridget for details (bridget@wmvets.co.uk)

Calendar competition

Send your farming and countryside-themed pictures to stephlyth@wmvets.co.uk to enter them into this year's competition and the chance to win £50!

Lungworm in cattle

Lungworm is most common around this time of year. Signs of infection include coughing, fast breathing, holding the neck extended (difficulty breathing), and milk drop. All roundworm wormers should be effective against lungworm, but it is worth splitting the animals into two groups: those with coughing/laboured breathing should be treated then moved to a new pasture, and should have a good chance of recovery; those with a high temperature or severe infection have a poorer chance of recovering, talk to a vet about treatment.

If you suspect lungworm, talk to a vet and drop in a muck sample for us to test, usually with a 24-hour turn-around.



New rules for Livestock movements

The government is making some changes intended to simplify the rules on reporting livestock movements.

The changes will be phased in over 12 months from summer 2016. All the farms affected should receive a letter with more information by the end of August.

The new scheme will include the introduction of the new 10-mile rule, the withdrawal of CTS Links (Cattle Tracing System Links) and SOAs (Sole occupancy Authorities) and the removal of batch reporting exemptions and adjacent moves reporting exemptions for sheep and goats.

You will find more information at the following website:

<https://www.gov.uk/government/publications/livestock-movements-simpler-rules-from-2016-to-2017/livestock-movements-simpler-rules-from-2016-to-2017>



TB Testing – Understanding the Results



The technical name for the skin test is the single intradermal comparative cervical tuberculin test (SICCT). Anyone who owns cattle will be familiar with it, but do you know how it works?

The test is looking for the immune response produced by the animal once it's been in contact with TB (similar to the 'six pricks' test that you may have had as a child, before receiving the BCG vaccine). We are comparing the increase in skin thickness between an injection of bovine (cattle) tuberculin (TB) against an injection of avian (bird) tuberculin. Cattle can also come into contact with avian TB and produce an immune response to it, but because the bacteria are similar, a reaction may also form at the bovine injection (this is called cross-reaction). Avian TB is not a public health concern, so by comparing the two, we avoid sending these cows as reactors.

The skin test has a sensitivity of only 80%, which means that if 100 cows are tested and 10 of these are infected with TB, then on average only 8 of these 10 are likely to be detected as reactors. The specificity of the test is over 99.9% at standard interpretation. This means that **only around 1 in 5000 of uninfected cows will be found as reactors**. In other words false negatives are far more common than false positives.

The delay between animals becoming infected to them showing up as reactors on the skin test can be several months. On top of this, **the longer an animal has had TB lesions the less they actually react to the test**. This is why animals with many lesions are sometimes found at abattoir, after they have gone clear through a TB test. Also, the more often an animal is injected with tuberculin, the less they will react to it. This is why there is a minimum 60-day gap between TB tests in an individual animal.

The cut off-point for a reactor (a bovine increase in skin thickness over 4mm, compared to the avian increase) was calculated to give this 99.9% specificity. So the test is designed to find the definite reactors. This is to try to avoid farms being shut down unnecessarily.

Inconclusive reactors (IRs) are the cows that fall in-between; they have a lump between 0-4mm bigger than the avian. From the test, we can't tell whether they have TB or not, so they are re-tested after 60 days. If they are IRs again, they are sent as reactors.

The blood test can pick up infected animals earlier than the skin test – around 7 days after infection. It has a sensitivity of 90% and a specificity of 96.5%. This means that from our 100 cows, this time we will find nine of the ten reactors, but now 3 or 4 in 100 of the cows without TB will also be reactors (false positives). So the blood test is used to try to find the missed reactors in a new breakdown.

“My reactor didn't have lesions at the abattoir, does that mean it didn't have TB?”

Unfortunately, **NO. The skin test is more accurate than abattoir results**. An animal that is 'no visible lesions' (NVL) means exactly that – the lesions just aren't visible yet, as lesions often don't develop until late on in the disease. There will be microscopic lesions in all reactors, but it would be too expensive for the government to check all reactors microscopically. **A negative culture result also does not mean that the animal was not infected**. The culture test is not used to check whether that animal was infected or not; it is to help track the spread of the different strains (spoligotypes) of TB across the country. If we can see that a strain has jumped across several counties, we can say it is due to cattle movement, and not wildlife spread. The bacteria is difficult to culture as it lives inside the cells of the cow; to culture it, the cow's cell must be broken down, without destroying the bacterium inside, which is difficult to do! A negative result means that the culture has not worked, not that the animal was not infected.