



Is controlling infectious disease really important?

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In recent years with the advent of global warming and increased cattle movements there have been a number of new cattle disease appearing and a rise in old diseases causing herd problems. But with most cows still appearing to be fit and healthy, do we really need to bother with controlling infectious diseases in beef herds?

In recent years cattle keepers all over the UK have been faced with a multitude of new diseases that may affect the health of their herds. Each of these diseases can cause devastating losses, especially when they experience the disease for the first time. But many of these diseases may not appear immediately obvious when they affect a herd and many producers may not notice the insidious losses that will result once the disease affects the whole herd. Therefore, what diseases are important and how likely are they to affect your herd?

Climate change has had an impact in recent years on a number of parasite and vector (midge) transmitted diseases, with a multitude of different strains of Bluetongue now affecting herds across Europe, with the potential to affect the UK through windborne midge transmission or, more likely, the importation of affected cattle.

Importance: High

Risk: Lower than 2009 following better control of the disease across Europe, especially in France

What can you do? Continue to vaccinate all stock (including youngstock) as there is still a risk from imported cattle and a (lower) risk of windborne infection across the channel

The recent wetter and warmer summers have also led to a rise in fluke and worm infections, with cattle affected in new areas, not traditionally associated with these parasites.

Importance: High

Risk: High, even areas not traditionally affected by fluke infections have shown disease in the last year

What can you do? Blood sampling cattle at housing will indicate any exposure in the recent months. Treating at housing with a flukicide that kills all stages of the parasite or three weeks after housing with an adult fluke treatment (once immature stages have developed and become susceptible to the treatment) to prevent disease over the winter

This month we have been reminded to remain vigilant for foot and mouth disease by the Chief Veterinary Officer Nigel Gibbens, following a Defra report on the increase in outbreaks of a particular type (Serotype O) in East Asia. This serotype is highly transmissible, can affect cattle without signs and was the cause of the 2001 global pandemic. The 2001 outbreak followed a similar pattern of events to the current disease spread, with outbreaks in Japan and Korea, countries that are normally free of the disease. The rise in global trade of meat and meat products is an increased risk for the introduction of disease into the UK.

Importance: High

Risk of introduction: Low, but always report suspicious cases!

What can you do? Be vigilant, 2007 outbreak demonstrates why we should never let down our guard!

And most recently, a new disease, Bovine neonatal pancytopenia (BNP) has been reported on dairy and beef units, the full cause of which is currently unknown. This disease affects young calves (less than 4 weeks of age) and characterised by spontaneous bleeding from eyes and wounds as well as blood in the faeces and general malaise. Calves usually die within two or three days. 110 cases of the disease have been recorded on 60 farms in the UK (Beef and Dairy) and the disease has also been identified all over Europe. Watch this space for more information on possible causes!

Importance: High

Risk of introduction: Unknown, a specific cause has not yet been identified!

What can you do? Report any suspect cases to your vet, who will report the disease to Animal Health and request a post mortem.

With all these new risks and the challenges of managing the risk of novel diseases, UK beef producers may be forgiven for thinking keeping your herd free of disease, or at least protected from the effects of disease, is impossible. However with all these new and emerging diseases, now is the most appropriate time to set disease control priorities.

But with all these high profile diseases, it can be difficult for producers to determine whether any of these novel diseases are of relevance to their herd. It is also difficult to prioritise which are important diseases to control in their herds on a day to day basis. All of the above diseases are obviously important, but must be put into context of their risk of affecting individual herds and the measures that can limit their impact.

BNP to date has affected relatively few herds and in each case only 1 or 2 calves have been affected. Foot and Mouth disease has caused devastation earlier in the decade, and although we must remain vigilant at both a local and national level, the current disease risk is still relatively low.

Bluetongue cases have been identified in the UK in the last twelve months, but all from imported cattle. Effective and good value Bluetongue vaccines exist and, as long as all cattle and sheep farmers make the small investment in vaccine as recommended by the NFU JAB campaign and follow appropriate precautions when importing cattle, including avoiding importation from heavily infected areas, then the risk for a national disease outbreak will continue to be low.

So with all the publicity around new diseases, beef producers should not forget that they can have a bigger impact on herd health by focussing on diseases that are endemic within the national herd. “When you live with the daily difficulties of movement restrictions and regular TB tests, it is easy to think that this is the only infectious disease that will affect your herd” says Westpoint Veterinary Group vet and Young Agricultural Consultant of the Year, Alex Walters. “But in reality the impact of uncontrolled, BVD, IBR or leptospirosis will have a far bigger impact on herd reproductive performance”

So what should be the priorities for a beef suckler herd, whether they farm in Cumbria, Cornwall or Kent? “Well, all producers should consider developing a health plan with their vet that details the individual disease risks and prioritises their control. For example all producers MUST have a plan for tackling BVD, whether this is through testing with the aim of eradicating the disease or a vaccinating programme with testing to remove persistently infected (PI) animals. Both these options will pay back many times, the investment in testing and vaccines” say Alex.

Recently, the Scottish Government have announced their intention to consider BVD eradication across Scotland (see the consultation paper at -

<http://www.scotland.gov.uk/Publications/2010/06/29143957/0>)

A number of breed societies are also requiring enrolment with a CHeCS (Cattle Health Certification Standards www.checs.co.uk) accredited scheme for BVD before you can sell any breeding stock at society sales. With more than 80% of herds affected, it is likely that either BVD exists, or could be a threat to your herd, so taking control should be a priority and not just a governmental or breed society obligation! Although BVD is a complicated disease to understand, control and eradication are possible by following the steps outlined in the CHeCS programme and working with your vet to ensure ongoing exclusion of the disease. Coupled with a very effective vaccine, controlling this disease is possible for ALL producers.

This approach is endorsed by Cornwall based vet Phil Elkins. “When working in the SW it is impossible to develop a health plan with beef farmers, without addressing the issue of TB. But it is also vital that this disease does not completely dominate our approach to controlling diseases such as BVD and IBR” says Phil. “Across the SW many herds have experienced outbreaks of IBR (Infectious Bovine Rhinotracheitis), a disease that can cause both respiratory and reproductive disease. Increasingly virulent strains of this disease can cause devastating losses in naive herds, with pneumonia outbreaks, abortion storms and poor herd fertility all possible effects of the disease – therefore addressing IBR has to now be a priority for all beef herds” says Phil.

Likewise for leptospirosis, most beef cattle are exposed to one or more of the major risk factors for this disease, namely; shared grazing with sheep, a bought in bull or purchase in replacement cattle. The advice of a dedicated farm vet though a planned approach to controlling this disease will help determine whether vaccination, blood testing or other procedures such as treating purchased bulls and cattle are appropriate.

IBR and Leptospirosis are also covered in the CHeCS programme and are the focus for national control strategies in a number of European countries. Many farmers selling breeding stock are implementing eradication or control programmes (IBR marker and leptospirosis vaccine both provide excellent protection). But not just pedigree herds planning on exporting should be eradicating these diseases. Commercial herds, rearers and finishers will all see a cost benefit in protecting stock against these diseases.

Johne disease has profound production losses through increased culling and wasting of cattle. This is also a disease where all suckler producers should be aware of the impact within their herd. Various strategies for controlling the disease in a suckler herd exist, including herd screens, testing culls and suspect cases. Setting a plan for controlling infection in your herd may take a couple of years to see big returns, so the earlier a herd starts the quicker these benefits will be realised.

“All producers must take parasite infections seriously this year” concludes Alex. “The level of new infections identified across the UK in recent years, has shown that no farm is immune to their impact. Added to the increasing problem of worm resistance, with many beef producers purchasing wormers through a merchant, it is important that they discuss their proposed control plan with their vet or the SQP (suitably qualified person) at the time of purchase”.

So despite the rise of new and novel cattle diseases in the UK, the long established diseases of BVD, IBR, leptospirosis and Johne disease continue to have the biggest financial impact for producers. While it is important not to ignore these new diseases, setting the control of the endemic diseases as a priority will pay dividends both now and in the future, by which time another new disease may have hit the headlines!