



Dairy vet Diether Prins shares his knowledge about two bacterial infections, which can become more prevalent in UK herds as cows are housed and fed winter rations. And he offers some advice about what producers should look out for.

Lumps and swellings can be signs of serious infection

# Avoid cuts and abrasions

**T**wo diseases – lumpy jaw and wooden tongue – with similar symptoms, but caused by different bacteria, are, most typically, seen in autumn and winter as cows switch to forage rations. And the reason for this? Tough forages or objects contaminating the ration, which can cause ‘micro’ injuries to the mouth or tongue and provide a ‘entry point’ for bacteria.

I’ve seen several cases of lumpy jaw, which is also known as Actinomycosis, during my career. Because it typically involves an infection of the jaw bone, it’s more difficult to treat compared to wooden tongue, but it’s not as serious. The animal can continue to eat and drink, and the disease can be treated, although this is a prolonged process. Wooden tongue (Actinobacillosis), on the other hand, causes cattle to lose body condition immediately and, in the short term, it’s ‘touch and go’, simply because the animal is unable to eat or drink. But the treatment, itself, is usually easier and outcomes are more successful. If the animal is going

to recover it will do so quickly – or not at all.

The early stages of both conditions are easy to miss. I tend to get called once swelling is severe and the animal stops eating. Lumpy jaw is slow to progress, but the bone and soft tissue infection will eventually lead to visible swelling of the jaw. Tissue swelling may be growing and breaking through the skin and pus may begin to ooze. Wooden tongue presents, as you’d expect, as swelling of the tongue, which results in hardening and enlargement. The tongue also often protrudes from the mouth and this leads to salivation, chewing problems, reduced feeding and cudding, abscesses and pus, and body condition loss.

Cattle do, on the whole, respond well to treatment. Daily antibiotic injections are often required and milk must be withheld. The animal should be separated from the rest of the herd. This is particularly important if the affected animal is oozing pus, so infection to the rest of the herd is avoided.



## The encyclopaedia **Lumpy jaw/wooden tongue**

### Cause

Lumpy jaw is caused by gram positive bacteria *Actinomyces bovis* and wooden tongue is an infection caused by gram negative bacteria *Actinobacillus lignieresii*. Both are normal inhabitants of the cow’s mouth and digestive tract.

### Symptoms

Swelling to the jaw/face/tongue. Mainly single animals affected but occasionally outbreaks can occur due to one infected animal leaking pus into feed or water troughs.

### Treatment

For lumpy jaw, prolonged (antibiotic) penicillin treatment (more than 10 days) under vet and inspection is required and, where necessary, the removal of loose teeth. Occasionally surgical debridement of affected bone and swelling might be attempted or various iodine treatments (oral and intravenously). For wooden tongue, prolonged antibiotic treatment with streptomycin is required, under vet and inspection. Sometimes surgery on abscesses and/or iodine treatments may be attempted.

### Prevention

Ensure rations are free from twigs, sharp stones, tough straw or stemmy materials that could injure soft mouth tissue.

