

Ringworm challenges and health threats

Ringworm, an unsightly problem that also presents a zoonotic risk, can also impact on cattle productivity, if it's severe enough. **Rachael Porter** reports

Given its potential impact on productivity, it's sound advice to tell your customers to be alert to ringworm, says vet Steve Borsberry, from Warwick-based 608 XL Farm Animal Veterinary Surgeons, particularly because it's relatively difficult to treat.

He adds that ringworm is also one of the most common skin diseases in cattle. It is a transmissible infectious skin disease, most often caused by *Trichophyton verrucosum*, and it can pass between species. The incubation period is around one week.

"It is spread by direct and indirect contact. The fungal spores can survive in wood – fences, gates and hurdles – for many years.

CIRCULAR LESIONS

"Most commonly seen are circular lesions, which are around 3cm in diameter. And

"The fungal spores can survive in wood – fences, gates and hurdles"

these lesions are typically around the head and neck – areas that press up against and through barriers and gateways.

"It's seen more commonly in calves, but can occur in adult cattle. I have seen it, occasionally, on udders.

"It's an itchy condition, so calves and cattle will rub and scratch against uprights and barriers."

If the infection is severe enough, it can have a signifi-

cant impact on productivity. In adult cows it can result in a drop in milk yield, if the irritation caused by the disease is enough to impact on dry matter intakes. "This can be exacerbated if a herd has a mange mite problem. In this case a combined infection can result and then cattle really can be severely affected," he says.

IMMUNITY CHALLENGE

"If cows' or calves' immune systems are challenged due to other diseases or health issues, such as pneumonia or BVD, this can make them more susceptible to ringworm. So that's something for your customers to think about if they have a sudden outbreak of the fungal disease. It could signify a more serious underlying health challenge for their herd."

Sunlight does aid recovery, which usually occurs without



Lesions are often seen around the head and neck areas

treatment. But the use of washes will help to reduce environmental contamination and, therefore, limit the spread of the disease.

Hanging holly on calf sheds and cattle building will do nothing to protect livestock from ringworm. That's just an old wives' tale.

VACCINATION

Vaccination is possible. There's a live vaccine available that reduces the clinical signs caused by *Trichophyton verrucosum*.

But if cattle are already incubating infection then they can go on to develop severe ringworm.



Lesions are typically circular and grey-white in colour

TIPS FOR SQPS

Cause

Ringworm is caused by a spore-forming fungus, typically *Trichophyton verrucosum*. The spores can remain alive for many years in a dry environment. Direct contact with infected animals is the most common method of spreading the infection.

Symptoms

Forms grey-white circular areas of skin, with an ash-like surface that's also slightly raised. Lesion size varies, but can become very large. They're most common around the eyes, ears and the backs of calves. In adult cattle

the chest and legs are more typical sites of infection.

Treatment

Without treatment ringworm will usually heal itself, but this can take several months. Topical treatment – application of the medication directly onto the lesion – is one way to tackle the disease. But any medication used cannot penetrate the 'crusts', so these should be removed beforehand by scraping or brushing. They should be collected and burned to avoid further contamination. Lesions should be topically treated at least

twice, between three and five days apart.

Prevention

Effective control of ringworm will only occur if the environment is properly cleaned and disinfected, because this is where the fungi like to hide!

Cleaning must be carried out between each batch of animals. Reducing the stocking rate density, and therefore direct contact, as well as increased exposure to sunlight and keeping housing as dry as possible, will also help to halt the spread of the disease.