This condition is most commonly seen either in autumn (up to early October) or at the end of spring calving (around April). It is most commonly seen in Northern England and Scotland.

**What is long bone deformity?**

Occasionally pregnant cattle (particularly beef cows or heifers), overwintered on silage give birth to deformed calves. The calves are small due to shortening of the long bones in the legs, which gives them a characteristic short, bow-legged, appearance. They may also have dished faces and domed heads. Heart defects are also occasionally seen. In severe cases calves can be so deformed that they cannot stand to suckle and have to be euthanased.

The condition is seen where winter rations for pregnant cows consist almost entirely of silage. The cause is unknown but a toxin present in the silage is the most likely reason. Good quality silage that has been well made from leafy, fast growing grass seems most likely to cause the problem. As a result long bone deformity is most commonly associated with high quality pit silage but it can occur in animals fed big bales.

**Diagnosis**

Although these calves have a standard appearance, it is essential to have the condition confirmed by a full post mortem. This will ensure that there are no other causes of the problem that would require different control measures.

**Treatment**

The damage is irreversible.

**Prevention**

The most susceptible stage of pregnancy appears to be the fourth month. However it also appears that the severity of the deformity depends on the level of "toxic" compound in the silage and the duration of silage feeding during the susceptible period. As most herds have a 2-3 month range in pregnancy stage it is difficult to be precise when corrective action should be taken.

The only way to minimise the problem is to reduce silage intake so that it accounts for no more than 75% of the cow's dry matter intake (DMI). The other 25% of

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