

21<sup>st</sup> December 2011

## ENHANCED SURVEILLANCE FOR THE RISK OF INCURSION OF ORTHOBUNYAVIRUS INFECTION INTO GREAT BRITAIN

Dear Colleagues,

We have received reports of the detection of a novel Orthobunyavirus, tentatively named "Schmallenberg virus" (SBV) in Germany and The Netherlands. The virus is related to Akabane virus, which is spread by arthropods and which classically causes foetal malformations, particularly arthrogryposis and hydranencephaly. The "Schmallenberg" virus appears to have been associated with transient disease characterised by milk drop, diarrhoea and fever in adult cattle in August to October in Germany and the Netherlands. It has recently been detected in at-term ovine foetuses with arthrogryposis or hydranencephaly in The Netherlands.

Orthobunyaviruses have previously been detected in the tropics, Australia and Japan but not, to our knowledge, in northern Europe.

We have no evidence of the presence of this virus in Great Britain. Our scanning surveillance and enhanced analysis did not detect disease in adult cattle similar to that reported in The Netherlands and Germany in the late summer of 2011.

To assist early detection, were infection to occur here, we want to fully investigate cases of arthrogryposis and nervous defects suggestive of hydranencephaly, in ruminant foetuses and neonates. These signs are likely to be profound and include "dummy" calves and lambs with blindness and lack of cerebral function.

### Requested action by veterinarians in practice

We would be very grateful if you would inform us of cases of arthrogryposis or profound nervous defects in ruminant foetuses and neonates. In addition, we would wish to screen for surveillance any stillbirth, malformation or nervous disease in neonates or foetuses born to ruminant dams that were imported from mainland Europe in 2011.

### **Clinical case definition:**

**Arthrogryposis or profound congenital nervous signs\* in a ruminant neonate or foetus and, in addition, for neonates and foetuses from ruminant dams imported from mainland Europe in 2011, any stillbirth, weakness or disease with nervous signs.**

**(\* obtundation ["dummy" signs], blindness or marked paresis / paralysis)**

If the case meets our clinical case definition, then we will request that it is submitted for necropsy examination, accompanied by a fully completed submission form to provide us with necessary clinical and epidemiological information. We can examine for orthobunyavirus infection and lesions free of charge. If a full diagnostic investigation is required, then we will apply the standard, subsidised surveillance rate charge.

Cases that meet our gross pathological case definition will be sampled for histopathological and virological examinations.

Tests for the new virus are currently being established at AHVLA; we will store samples and report results of tests to you when they are available. This could be several weeks from now.

If you encounter cases that meet the clinical case definition when our laboratories are closed over the holiday period, please keep carcasses chilled and contact your Regional Laboratory to arrange submission when it reopens.

We intend to inform cattle, sheep and goats farming bodies of this surveillance initiative and will ask farmers to inform their veterinary surgeon of suspect cases. Please would you ask your farming clients to inform you of suspect cases.

Finally, may we repeat that current evidence suggests that the likelihood of incursion of this viral infection into GB is low. This request for heightened surveillance is to obtain additional evidence to enable a full risk assessment.

Please contact your AHVLA Regional Laboratory if you require further guidance or information. We will endeavour to keep you informed of developments.

With thanks for your assistance,

Yours sincerely,

**Ian Davies, Chair, AHVLA Small Ruminant Expert Group, Shrewsbury Regional Laboratory**

**Gavin Watkins, Chair, AHVLA Cattle Expert Group, Carmarthen Regional Laboratory**

Note:

Arthrogryposis is defined as: Non-progressive, congenital contractures that develop before birth and are evident at birth. The contractures are characterized by reduced mobility of multiple joints. In the most severe forms, rotation and abduction of limbs may also occur as well as scoliosis, kyphosis and torticollis.

Hydranencephaly is defined as: Cerebral hemispheres are largely absent and replaced with fluid filled sacs contained within a normal skull compartment.