



VIRUS SURVEILLANCE UNIT – MOREDUN RESEARCH INSTITUTE

Shipment

All tests below for diagnostic or clinical specimens are classed as **UN3373: Biological Substance Category B** and must be packaged and shipped accordingly (<http://www.un3373.com/info/regulations/>).

Please ship samples to:

Virus Surveillance Unit,
Moredun Research Institute,
Pentlands Science Park,
Bush Loan
Penicuik EH26 0PZ.

All samples submitted for testing must be clearly marked FAO the Virus Surveillance Unit.

Cost

Please contact the Virus Surveillance Unit directly for test cost details.

Tel: 0131 445 5111

E-mail: infoVSU@moredun.ac.uk or mara.rocchi@moredun.ac.uk

BVDV/BDV/BoHV-1 Serum Neutralisation Test (SNT)

Test description

Serum neutralisation test to detect antibody to BVDV, BDV or BoHV-1 in serum or plasma samples (cattle/sheep).

Sample requirements

At least 500 µl of serum or plasma, preferably 1 ml to allow for repeat testing if necessary.

Turnaround times

This test is not carried out routinely, however turnaround can be within a fortnight (subject to staff absences and holidays). Please contact the Virus Surveillance Unit in advance of submitting samples for these tests, so we can ensure we have the relevant cells available. Please be aware that SNTs are cell-based biological tests requiring several days' incubation, therefore turnaround time is longer than for our other tests.

Louping Ill HAI

Test description

Haemagglutination inhibition test to detect antibody to louping ill virus in serum or plasma samples (all species). Note: Equine samples will only be accepted after discussion between the submitting vet and one of the Unit's vets

Sample requirements

At least 500 µl of serum or plasma, preferably 1 ml to allow for repeat testing if necessary.

Turnaround times

This test is carried out weekly (subject to staff absences and holidays). Usually if samples are received at the beginning of the week, results will be available by the end of the same week. During busy periods (usually August – October) when sample numbers are high, diagnostic samples will be prioritised over surveillance samples.

Louping Ill Virus PCR

Test description

Real-Time PCR to detect louping ill virus RNA in tissue samples (all species).

Sample requirements

Tissue (in virus transport medium). Note: If planning to submit neurological tissue samples, please contact the Virus Surveillance Unit in advance to discuss collection procedures. Louping ill virus is zoonotic and can cause serious disease in humans.

Turnaround times

This test is not carried out routinely, and requires use of our Containment Level 3 laboratory. Please contact the Virus Surveillance Unit in advance of submitting samples for this test, to allow us to provide an estimated timeframe for sample processing and testing.

Malignant Catarrhal Fever (OvHV-2) PCR

Test description

Real-Time PCR to detect OvHV-2 DNA in blood or tissue samples (cattle, exotic hoofstock).

Sample requirements

At least 1 ml of anti-coagulated (heparin, EDTA) blood, tissue (in virus transport medium).

Turnaround times

This test is carried out weekly (subject to staff absences and holidays). Usually if samples are received at the beginning of the week, results will be available by the end of the same week.

Ovine PI3 Antibody ELISA

Test description

Enzyme linked immunosorbent assay (ELISA) to detect antibody to ovine PI3 virus in serum or plasma samples (sheep).

Sample requirements

At least 200 µl of serum or plasma.

Turnaround times

This test is not carried out routinely, however turnaround can be within a week (subject to staff absences and holidays). Please contact the Virus Surveillance Unit in advance of submitting samples for this test.

Parapox Virus PCRs (Orf, Bovine Papular Stomatitis, Pseudocowpox)

Test description

Conventional PCRs to detect parapox virus DNA in scabs or swab samples (sheep/cattle).

Sample requirements

Scabs or swabs (dry). Note: Dry scabs/swabs are the preferred sample for this test, as wet scabs may decrease the test sensitivity.

Turnaround times

This test is carried out fortnightly (subject to staff absences and holidays), generally the first and third week of the month.

Pestivirus PCR

Test description

Multiplex Real-Time PCR to detect BVDV1/BVDV2/BDV RNA in tissue, blood or serum samples (all species). Note: This test does not detect atypical or Hobi-like pestiviruses. If one of these is suspected, please contact the Virus Surveillance Unit directly to discuss additional testing possibilities.

Sample requirements

Tissue (in virus transport medium), at least 1 ml anti-coagulated (heparin or EDTA) blood, serum.

Turnaround times

This test is carried out weekly (subject to staff absences and holidays). Usually if samples are received at the beginning of the week, results will be available by the end of the same week.

Rabbit Haemorrhagic Disease Virus (RHDV) PCR

Test description

Conventional PCR to detect RHDV RNA in tissue samples, followed by sequencing for variant determination (rabbits).

Sample requirements

Tissue (in virus transport medium).

Turnaround times

This test is no longer carried out routinely at the Virus Surveillance Unit. Only cases in wild rabbits (submitted through SRUC or APHA) will be processed. The test is now carried out routinely at the following labs:

BattLab (W: www.battlab.com, T: 0247 632 3275)

Laboklin (W: www.laboklin.co.uk, T: 0161 282 3066)

PALS (W: www.palsvetlab.co.uk, T: 01829 781 855)

Please contact these labs directly for further information.

Respiratory Virus PCR

Test description

Multiplex Real-Time PCR to detect BRSV/PI3/BoHV-1 nucleic acids (cattle). A new multiplex PCR is currently being validated to increase the number of bovine respiratory pathogens detectable. Sample requirements

Sample requirements

Swabs, tissue (in virus transport medium), BALs.

Turnaround times

This test is no longer carried out routinely, however it can be performed in specific circumstances (e.g. suspected BoHV-1 abortions). Please contact the Virus Surveillance Unit directly to discuss.

Schmallenberg Virus (SBV) PCR**Test description**

Real-Time PCR to detect SBV RNA in tissue or blood samples (all species).

Sample requirements

Tissue (in virus transport medium), anti-coagulated (heparin, EDTA) blood. Foetal fluids can also be tested by previous agreement.

Turnaround times

This test is carried out weekly (subject to staff absences and holidays). Usually if samples are received at the beginning of the week, results will be available by the end of the same week.

Tickborne Fever (*Anaplasma phagocytophilum*) PCR**Test description**

Real-Time PCR to detect *A. phagocytophilum* DNA in blood or tissue samples (sheep, cattle, goats).

Sample requirements

At least 2 ml anti-coagulated (heparin, EDTA) blood, tissue (in virus transport medium).

Turnaround times

This test is carried out weekly (subject to staff absences and holidays). Usually if samples are received at the beginning of the week, results will be available by the end of the same week.

Virus Isolation (VI)**Test description**

Isolation of virus on biological substrate (cell culture). (Cattle, sheep).

Sample requirements

Swabs or tissue (in virus transport medium).

Turnaround times

This test is carried out by prior arrangement only. Please contact the Virus Surveillance Unit directly to discuss testing requirements and turnaround times.

Additional Tests

A number of non-routine tests are also available (listed below). Please contact the Virus Surveillance Unit directly to discuss details, suitability, sample requirements, turnaround times and cost.

- Pan-pestivirus PCR
- Pan-herpesvirus PCR
- Bovine coronavirus PCR
- Ovine PI3 F gene PCR
- Phocine herpesvirus 1 PCR
- Phocine herpesvirus 2 PCR
- Dolphin/seal morbillivirus PCR