

SEROLOGY  
CLINICAL-  
PATHOLOGY  
VIROLOGY  
BIOCHEM-  
ISTRY  
PCR TESTING  
FARM ANI-  
MAL HEALTH  
SCHEMES  
RABIES  
TESTING  
FOOD SAFETY  
BACTERI-  
OLOGY  
PARASIT-  
OLOGY  
CONTRACT  
RESEARCH...



# Veterinary Diagnostic Laboratory

2020 Price List





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**Submission Forms** Download Biobest’s desktop app now to access our complete range of submission forms with one click: [www.biobest.co.uk/submissionformapp](http://www.biobest.co.uk/submissionformapp)

Alternatively, please visit [www.biobest.co.uk](http://www.biobest.co.uk) to print off the appropriate submission form to send with your sample.

There is also guidance for packaging your sample and a copy of Biobest’s weekly test schedule is available to download.

**Please send all samples (except ruminant bacteriology pigeon & game bird) to:**

Biobest Laboratories Ltd  
6 Charles Darwin House  
The Edinburgh Technopole  
Milton Bridge  
Nr Penicuik  
EH26 0PY  
United Kingdom

**Please send all ruminant bacteriology, pigeon and game bird samples to:**

Biobest Laboratories Ltd  
Castle House  
Dale Road  
Sheriff Hutton  
York  
YO60 6RZ  
United Kingdom

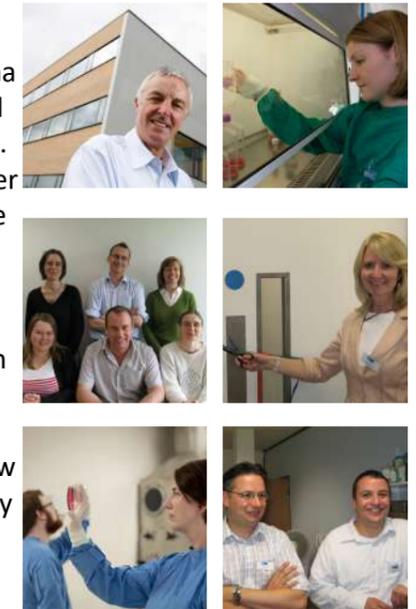
We offer local pick up of samples in Edinburgh and York areas, please call us on 0131 440 2628 for more information.

**25 Years of Biobest**

Welcome to the 2020 Biobest brochure. 2020 is a milestone year for Biobest as we reach our silver anniversary. Biobest was founded by Dr David Snodgrass in 1995 when he identified a gap in the market for a private veterinary virology laboratory. Initially Biobest operated as a specialist referral laboratory, only accepting samples via other veterinary laboratories. David soon realised that there was also a need in the market for a GLP accredited virology lab to assist pharma companies with study work and so systems were quickly introduced to allow Biobest to gain GLP accreditation, our first quality standard. Quality has remained the fundamental to Biobest’s success and, over the years, we have added ISO:17025 and GMP accreditation and are also the largest VMD authorised equine stem cell centre in the UK.

In 2000 David took the bold step of setting up a second laboratory for Biobest, a high containment facility which enabled us to perform rabies testing for the newly created pet travel scheme. This was a truly transformational event in the history of Biobest as the high demand for this test over the years has allowed the business to grow and prosper, eventually becoming a ‘one stop shop’ for all veterinary laboratory requirements.

Biobest was purchased by the Origin group in 2014 which was subsequently purchased by Vet Partners in 2018. As such Biobest are now part of one of the largest veterinary groups in the UK and have multiple specialist laboratory sites in both Edinburgh and York.



The Biobest team have strong and varied academic and technical experience, as well as enthusiasm for delivering the best for our customers. We offer our unique blend of expertise in virology and genetics with commercial dynamism and excellent customer service.



**Paul Burr BSc(VetSci)Hons BVM&S PhD MRCVS - Laboratory Director**

Paul has 5 years experience of farm practice, followed by 10 years of diagnosis and research in infectious diseases. Advising both vets and farmers on infectious disease problems and health scheme operation remains an important and enjoyable part of his role at Biobest. Paul has regularly presented papers at British Cattle Veterinary Association meetings and often does talks to vets and farmer meetings on infectious disease.



**Stuart Marshall BSc (Hons) MBA - Chief Operations Officer**

Stuart graduated from the University of Edinburgh with an honours degree in Virology in 1998. He joined Biobest in 1999 following a 12 month placement with the IBR research team at the Moredun Research Institute. Stuart also has an MBA from the University of Warwick where his thesis was on the use of lean manufacturing techniques within the laboratory environment. In his role as Chief Operations Officer of the Biobest lab group Stuart has day to day management responsibility for all the Biobest lab sites.



**Susan Duthie BVMS PhD CertVR MRCVS - Veterinary Manager**

Susan graduated from the University of Glasgow Vet School and went straight into mixed practice. Five years later, she returned to Glasgow to complete a PhD encompassing veterinary virology. After completing a related post-doctoral study, she joined Biobest in 2003. Susan has daily involvement with the HiHealth Herdcare Cattle Health Scheme, providing reports and advice for members, and is a member of the CHCS Technical committee.



**Jennifer Bunyan BSc (Hons) Cert Mgmt (Open) - Lab Manager**

After graduating with an honours degree in Neuroscience from the University of Edinburgh, Jennifer started with Biobest in 2001. Since then Jennifer has progressed within the company to Laboratory Manager overseeing a team of 22 scientists and technicians. In 2010 she also obtained an Open University professional certificate in management winning the Derek Pugh award for best student. At Biobest she takes responsibility for all aspects of laboratory management to ensure we provide our customers with the highest possible standards of testing in an efficient and timely fashion.



**Kieran McDonald BSc (Hons) MA - Technical Manager**

Since joining Biobest with a degree in microbiology, Kieran has worked in a range of roles before devoting the majority of his time to test development, as well as cell and tissue culture. Since gaining his master's degree, he has spent 15 years growing stem cells which have been used in the treatment of over 2500 competitive sports horses and companion animals.



**Maggie Carson BSc - Farm Animal Manager**

Maggie joined Biobest in 2014 as the bovine administrator for the HiHealth Herdcare team, promoted to Deputy Farm Animal Manager in 2016 and subsequently to Farm Animal Manager in 2019. A University of Edinburgh chemistry graduate, she spent a few summers working and travelling in America before taking on her role here at Biobest. Maggie is responsible for the day to day management of the bovine testing; writing reports and preparing accreditation and sales certificates. She also plays an active role in advising new and current members.



**Rebecca Mearns, MA VetMB CertSHP MRCVS - Veterinary Adviser**

Rebecca joined Biobest as Senior Veterinary Adviser in January 2015 to work within the HiHealth Herdcare cattle team but also with a wider remit to offer advice and expertise across the board on ruminants (cattle, sheep and goats). Before starting her role at Biobest Rebecca was a Veterinary Investigation Officer at Penrith Veterinary Investigation Centre and prior to that worked in a similar role at SAC Edinburgh after having started out in general veterinary practice. She is also a member of the Sheep Veterinary Society Committee and the Goat Veterinary Society.



**Kate Haig BVMS, MRCVS - Veterinary Adviser**

Kate graduated from the University of Glasgow veterinary school in 1980. Her experience within the veterinary industry includes research, general practice and the State Veterinary Service. She has also worked as a freelance copy-editor and proofreader specialising in scientific, medical and veterinary textbooks. Kate joined Biobest in 2005 and provides veterinary support to Biobest customers, including current and prospective members of HiHealth Herdcare.



**Sanne Dolieslager, DVM PhD MRCVS - ClinPath Adviser**

Sanne joined Biobest Laboratories as a Veterinary Adviser in December 2014 and her main role is to work as part of the clinical pathology team. After graduating from Utrecht University, the Netherlands, in 2008 she continued her studies at the University of Glasgow and gained a PhD in veterinary microbiology and immunology. Prior to joining Biobest she worked in small animal veterinary practice and has taught undergraduates at the Royal (Dick) School of Veterinary Studies in Edinburgh.



**Michael Johnson BVMS, MRCVS - Veterinary Adviser**

Michael graduate from University of Edinburgh Royal (Dick) Vet in 2008 and has worked in farm and mixed practices in England, Scotland and Wales. He has also spent time in outback Australia and the Canterbury plains of New Zealand. He joined Biobest at the end of 2019. His main interests lie in cattle and sheep medicine and he is still involved with his family farm.



**Scott Dawson BVSC, MRCVS (Poultry Health Services) - Poultry Veterinary Adviser**

A former dairy farmer, Scott studied veterinary medicine at Massey University in his native New Zealand, graduating in 2013. Prior to joining Poultry Health Services, Scott worked for a dairy cattle practice before taking up a poultry veterinarian position in New Zealand and Australia. His current role involves providing clinical veterinary advice and services to poultry producers. This includes the monitoring and control of disease, carrying out investigations into flock performance issues and dealing with specific bird health concerns.

Supplying specialist contract research, and laboratory support services in infectious diseases, clinical pathology and cell culture.

Working with the major pharmaceutical companies and contract research organisations to complete both regulatory and non-regulatory research studies.

Additional activities include disinfectant testing and virological reagent sales. We are compliant with Good Laboratory Practice as inspected by the UK Department of Health's GLP Monitoring Authority.

We hold a GMP Test Site (Biologicals) certificate from the MHRA. This means that we are authorised to perform biological QC testing in accordance with Article 111(1) of directive 2001/83/EC.

Providing testing services for a wide range of species including cattle, sheep, goats, dogs, cats, horses, pigs, birds, poultry and fish with a particular emphasis on virology, DNA testing and serology. As a specialist laboratory we have the skills to develop and use the best available assay technology.

Biobest gives you:

- The best available diagnostic test
- Expert interpretation on all test results
- Fast and efficient service
- The best prices

A leading CHECS accredited cattle health scheme provider. HiHealth Herdcare is a partnership with you (the farmer), your practice vet and Biobest's veterinary and scientific team. Together we can work within the guidelines of CHECS to:

- Eliminate BVD, Johne's, IBR, Lepto and Neospora from your herd and obtain accredited disease free status
- Improve biosecurity on your farm and prevent reintroduction of the five diseases into your herd
- Help you identify accredited disease-free sources of breeding cattle

A flexible membership plan helping you to get the most out of lab diagnostics for your flock and flocks under your care. Members receive expert advice and discounted testing in the following areas to improve flock health and productivity:

- Parasitology
- Clinical chemistry including trace elements
- Infectious disease testing

Testing can be used to monitor flock status and to investigate common problems such as barren ewes, thin ewes, ill thrift in lambs and worm and fluke control.

The team at Biobest work with farmers and their own vet to provide guidance and advice.

Providing a comprehensive service for all species covering haematology, biochemistry, cytology, histopathology, parasitology and bacteriology.

Biobest ClinPath is an independent, client orientated quality service providing:

- Analytical accuracy, speed and reliability
- Access to a clinical pathologist to discuss cases
- Result interpretation
- Provision of information rich, jargon free reports
- Flexibility to suit individual practice needs
- Value for money



**Mailing Guidelines**

Royal Mail should accept all samples for routine diagnostic testing. Royal Mail do not accept Category A infectious material, but this should not affect routine veterinary samples. General guidance from the HSE is that samples (blood, tissue, excreta, secretions etc.) from humans or animals are considered to be Category B infectious substances. These samples are then assigned to UN3373 and must be packaged according to IATA PI:650 for transport. There is an added complication that for Category B samples each individual package must hold a total of less than 50ml of liquid or 50g of tissue.

Samples which are taken for serology testing from a healthy animal are exempt from UN3373. Specimens for which there is minimal likelihood that pathogens are present are not subject to the regulations (meaning volumes over 50ml/50g can be sent) if the specimen is packed in a packaging which will prevent any leakage and which is marked with the words "Exempt human specimen" or "Exempt animal specimen" as appropriate.

**What to avoid when sending samples**

- Using excessive sellotape on outer packaging
- Sending haemolysed blood
- Using gloves or any other non-leak proof containers
- Writing multiple sample numbers on a single sample container
- Placing samples in non-sequential order in boxes containing multiple samples
- Using a container if sample content has seeped onto its exterior

Biochemistry profiles	Turnaround	Price (£)	Code
<b>Small animal full profile</b> (serum, fluoride, EDTA and freshly made blood smears) Routine haematology, albumin, ALT, AP, bilirubin, calcium, chloride, cholesterol, creatinine, globulin, glucose, phosphate, potassium, sodium, total protein, urea	Same to next day	49.00	PROF 006
<b>Small animal full profile, biochemistry only</b>	Same to next day	42.00	PROF 035
<b>Small animal kidney profile</b> (serum, EDTA and blood smear) Routine haematology, albumin, calcium, chloride, creatinine, globulin, phosphate, potassium, protein (total) and urea	Same to next day	32.50	PROF 027
<b>Small animal liver profile</b> (serum) Protein (total), albumin, globulin, ALT, AP, GGT, bilirubin, cholesterol	Same to next day	25.50	PROF 026
<b>Bile acids stimulation panel</b> (serum x2) Pre-prandial and post-prandial	Up to 2 days	18.00	BILE_STIM
<b>Canine malabsorption panel</b> (serum) TLI, folate and cobalamin	Up to 6 days	53.50	PROF 019
<b>Feline malabsorption panel</b> (serum) TLI, folate and cobalamin	Up to 6 days	67.00	PROF 010
<b>Canine or feline short malabsorption panel</b> (serum) Folate and cobalamin	Up to 6 days	42.50	PROF 032
<b>Electrolyte panel</b> (serum) Chloride, potassium, sodium, Na:K ratio	Same to next day	15.00	PROF 051
<b>Short FIP profile</b> (serum) FCoV, AGP and albumin/globulin	Up to 3 days	41.00	FIP_PACK
<b>Full FIP profile (wet)</b> (serum) FCoV serology, $\alpha$ 1acid glycoprotein, albumin/globulin and cytology	1 day for fluid, 3 days completed	50.00	PROF 043
<b>Full FIP profile (dry)</b> (serum and EDTA) FCoV serology, $\alpha$ 1acid glycoprotein, albumin/globulin and haematology	1 day for fluid, 3 days completed	50.00	PROF 044

Routine biochemistry	Turnaround	Price (£)
<b>Serum sample required</b> Albumin, ALT, AP, AST, bilirubin, BHB, chloride, cholesterol, CK, creatinine, GGT, GLDH, globulin, glucose, magnesium, NEFA, phosphate, potassium, protein, sodium, total calcium, urea		
<b>1-4 tests</b>	Same to next day	8.10 each
<b>5-9 tests</b>	Same to next day	5.00 each
<b>10 or more tests</b> (or in addition to any profile)	Same to next day	4.00 each

Haematology	Turnaround	Price (£)	Code
<b>Routine haematology</b> (EDTA and freshly made blood smears)	Same to next day	22.50	PROF 001
<b>Routine haematology including smear exam by a pathologist</b> (EDTA and freshly made blood smears)	Same to next day	37.50	PROF 002
<b>Blood smear report</b> (EDTA and freshly made blood smears)	Same to next day	17.00	SMEAR_RPT
<b>Smear examination for haematological parasites</b> (slide and EDTA)	Same to next day	17.00	SMEAR_HAEM
<b>Reticulocyte count</b> (EDTA)	Same to next day	13.00	RETIC_CNT
<b>Manual platelet count</b> (EDTA)	Same to next day	16.00	PLATE_MAN
<b>Coomb's test</b> (EDTA)	Up to 2 days	31.00	COOMBS
<b>Fibrinogen</b> (citrate)	Up to 2 days	10.50	FIBRINOGEN
<b>D-dimer</b> (citrate)	Up to 2 days	24.50	D_DIMER
<b>Basic coagulation profile</b> (citrate) PT, APTT, fibrinogen	Up to 2 days	41.00	PROF 004
<b>Full coagulation profile</b> (citrate) PT, APTT, fibrinogen, d-dimer (canine and equine)	Up to 2 days	56.00	PROF 005
<b>Bone marrow panel</b> (bone marrow aspirate in EDTA, bone marrow smears, EDTA, freshly made blood smears) Cytology, routine haematology and smear report	Same to next day	75.00	PROF_48
<b>Additional histopathology bone marrow core</b> (fixed bone marrow core)	Up to 7 days	30.00	BONE_HISTO

Special biochemistry	Turnaround	Price (£)	Code
<b>Ammonia*</b>	Same to next day	15.00	AMMONIA
<b>Calcium, ionized*</b>	Same to next day	14.50	CALC_ION
<b>Canine prostate specific arginine esterase</b> (CPSE/BPH) (serum)	Up to 5 days	55.00	CPSE
<b>C-Reactive protein</b> (CRP) (serum)	Up to 2 days	16.00	CRP
<b>Digoxin</b> (serum, no gel tube)	Up to 3 days	30.50	DIGOXIN
<b>Fructosamine</b> (serum)	Up to 2 days	17.00	FRUCTOS
<b>Phenobarbitone</b> (serum, no gel tube)	Up to 2 days	21.00	PHENOBARB
<b>PLI</b> (canine and feline) (serum)	Up to 4 days	66.00	PLI
<b>Amylase</b> (serum)	Up to 2 days	8.00	AMYLASE
<b>Bile acids</b> (serum)	Up to 2 days	10.50	BILE_ACIDS
<b>Lead</b> (serum)	Up to 4 days	25.50	LEAD_SA
<b>Lipase</b> (serum)	Up to 2 days	8.00	LIPASE
<b>Zinc</b> (serum)	Up to 4 days	12.00	ZINC
<b>Potassium bromide</b> (serum, no gel tube)	Up to 2 days	33.00	POTAS_BROM
<b>Serum protein electrophoresis</b> (SPE) (serum)	Up to 4 days	28.00	ELECTRO
<b>TLI (canine/feline)</b> (serum)	Up to 6 days	43.50	TLI_CANINE/ TLI_FELINE
<b>Symmetric Dimethylarginine (SDMA)</b> (serum)	Up to 2 days	33.50	SDMA

\* Notify pathologist, special sample requirements: Heparin sample, chill on ice and analyse within 30 minutes of collection for ionized calcium and within 1-2 hours for ammonia

Faecal Tests	Turnaround	Price (£)	Code
<b>Occult Blood</b> (1g faeces)	Up to 2 days	19.00	OCCULT
<b>Giardia</b> (1g faeces)	Same to next day	20.00	GIARDIA
<b>Salmonella</b> (1g faeces)	Up to 5 days	20.00	SALMONELLA
<b>Campylobacter</b> (1g faeces)	Up to 5 days	21.00	CAMPYL
<b>Worm egg count &amp; coccidia</b> (3g faeces)	Same to next day	15.00	WEC_SA
<b>Faecal Bacterial culture &amp; sensitivity</b> (includes Salmonella, Campylobacter, aerobic) (1g faeces)	Up to 6 days	36.50	BACT_FAEC
<b>Small animal faecal analysis profile</b> (3g faeces) Routine bacteriology, worm eggs, Coccidia, Giardia	Up to 6 days	69.00	PROF 024

Urine	Turnaround	Price (£)	Code
<b>Urinalysis</b> (5ml urine) USG, dipstick and deposit exam	Same to next day	17.50	PROF 020
<b>Full urinalysis</b> (5ml plain urine and 1ml boric acid) USG, dipstick, deposit exam and bacterial culture & sensitivity	Up to 6 days	45.00	PROF 055
<b>Urine cytology</b> (5ml urine)	Same to next day	35.00	UR_CYT
<b>Urine protein : creatinine ratio</b> (1ml urine)	Same to next day	21.50	UR_PRO_CRT
<b>Urine cortisol : creatinine ratio</b> (1ml urine)	Same to next day	38.50	UR_COR_CRT
<b>Urine qualitative calculi analysis</b>	Variable	35.00	CALCULI

Microbiology	Turnaround	Price (£)	Code
<b>Routine bacterial culture &amp; sensitivity</b> (swab/tissue)	Up to 6 days	35.00	BACTERIAL
<b>Bacterial culture, sensitivity + anaerobes</b> (swab/tissue) (contact us to discuss sampling methods)	Up to 6 days	37.00	BACT_ANAER
<b>Faecal bacterial culture &amp; sensitivity</b> (1g faeces) Includes aerobic plates, Salmonella and Campylobacter	Up to 6 days	36.50	BACT_FAEC
<b>Fungal culture</b> (swab)	7 days	30.00	FUNGAL
<b>Dermatophyte culture</b> (hair pluck)	14 days	25.00	DERMATO
<b>Blood culture</b> (contact us to discuss sampling methods)	Up to 5 days	33.00	BLOOD

Histopathology & cytology	Turnaround	Price (£)	Code
<b>Histopathology single site</b> (tissues in formalin)	5 days	47.00	HE_STN
<b>Histopathology additional site</b> (tissues in formalin)	5 days	13.00	HE_STN_ADD
<b>Digit/tail/tooth/ear canal histopathology</b> (tissues in formalin)	14 days	68.00	
<b>Express histopathology</b> (report in 1-2 days from arrival – contact the lab before sending samples) (tissues in formalin)	Up to 2 days	123.00	
<b>Large biopsy with margin check</b> (>10cm) (tissues in formalin)	Up to 14 days	128.00	
<b>Gram stain</b> (air dried smears)	Same to next day	14.00	GRAM_STAIN
<b>ZN stain</b> (air dried smears)	Same to next day	16.00	ZN_STAIN
<b>Bone Marrow Panel</b> (bone marrow aspirate smears)	Same to next day	75.00	PROF_48
<b>IHC for lymphoma</b> (WHO staging)	7 days	100.00	IHC
<b>IHC for mast cells tumours</b> (Ki67)	7 days	100.00	KI67
<b>Cytology single site</b> (up to 4 smears from the same location)	Same to next day	35.00	CYT_SMEAR
<b>Cytology additional site</b>	Same to next day	20.00	CYT_ADD
<b>Full fluid analysis:</b> (fluid in EDTA & plain tubes, air dried smears) Cytology, total protein, total cell count	Same to next day	42.50	PROF 013

Endocrine	Turnaround	Price (£)	Code
<b>Cortisol</b> (serum)	Up to 2 days	21.50	CORT_PRE
<b>ACTH stimulation test</b> (serum x2) Cortisol: pre and 1 hour post ACTH	Up to 2 days	32.00	ACTH_STIM
<b>Low Dose Dexamethason suppression test</b> (serum x3) Cortisol: pre, 3 and 8 hr post dexamethason	Up to 2 days	42.00	LDDST
<b>Total T4</b> (serum)	Up to 2 days	19.00	T4_TOTAL
<b>Free T4</b> (serum)	Up to 6 days	37.00	FREE_T4
<b>TSH</b> (serum)	Up to 2 days	36.00	TSH
<b>Total T4/TSH</b> (serum)	Up to 2 days	48.50	T4_TSH
<b>Anti-Mullerian Hormone</b> (serum)	Up to 7 days	81.50	AMH_CN
<b>Progesterone (canine urgent)</b> (serum)	Same day	34.00	PROGESTER

Skin	Turnaround	Price (£)	Code
<b>Skin scrape for ectoparasites</b> (scrape and hair pluck)	Same to next day	17.00	SKIN_SCRAP
<b>Direct microscopy for bacteria and fungi</b> (hair pluck, smear, skin scrape, tape strip)	Same to next day	17.00	MICRO_EXAM
<b>Skin analysis panel</b> (smear, hair pluck, swabs) Direct microscopy, bacteriology, dermatophyte culture	14 days	50.00	PROF_045

Cats	Turnaround	Price (£)	Code
<b>Rabies serology</b> Minimum 2mL blood, 1mL serum. Includes certificate and titre in IU/ml	Up to 7 days	60.00	RABIES
<b>Computer rabies certificate</b> (requested prior to testing)	Same to next day	5.00	
<b>Rabies certificate re-issue</b>	Same or next day	22.50	RAB_CERT
<b>Rabies express</b>	Up to 3 days	500.00	RABEX
<b>Antibody and related assays</b> (serum or clotted blood unless stated otherwise)			
<b>Feline coronavirus IFA</b>	Same or next day	22.50	FCOS
<b>Short FIP profile:</b> FCoV, AGP and albumin/globulin	Up to 3 days	41.00	FIP_PACK
<b>Full FIP profile (wet):</b> FCoV serology, $\alpha$ 1acid glycoprotein, albumin/globulin and cytology	1 day for fluid, 3 days completed	50.00	PROF 043
<b>Full FIP profile (dry):</b> FCoV serology, $\alpha$ 1acid glycoprotein, albumin/globulin and haematology	1 day for blood, 3 days completed	50.00	PROF 044
<b>Feline immunodeficiency virus IFA</b>	Same or next day	33.50	FIVS
<b>Toxoplasma gondii IgG and IgM IFA</b>	Up to 2 days	35.00	F_TOXO_GM
<b>Neospora IFA</b>	Up to 4 days	31.00	F_NEOS
<b>Panleukopaenia virus IIFT</b>	Up to 7 days	34.00	FPS
<b>Calicivirus VNT</b>	Up to 7 days	48.00	FCAV
<b>Herpesvirus VNT</b>	Up to 7 days	48.00	FHVS
<b>Feline TB interferon gamma test</b> (2ml Heparinised blood)	Call for advice	220.00	FTBIG
<b>Pathogen detection</b>			
<b>FelV antigen</b> (air-dried smear or EDTA blood)	Up to 7 days	31.00	FELV
<b>Respiratory virus isolation</b> (FHV/Calicivirus or Pox from swab in transport medium)	Up to 7 days	23.00	F_VIRUS_IS
<b>Triple respiratory profile</b> - respiratory VI + FHV & Chlamydia PCR (2 swabs in transport medium)	Up to 7 days	56.00	F_RESP
<b>Herpesvirus PCR</b> (ocular or nasal swab)	Up to 7 days	30.00	PCR FH
<b>Chlamydia &amp; herpesvirus PCR</b> (ocular or nasal swab)	Up to 7 days	46.00	PCR FH_FC
<b>Panleukopenia PCR</b> (faeces or tissue)	Up to 7 days	44.00	FPV_PCR



## Dogs

Dogs	Turnaround	Price (£)	Code
<b>Rabies serology</b> Min. 2mL blood, 1mL serum. Incl certificate & titre in IU/ml	Up to 7 days	60.00	RABIES
<b>Computer rabies certificate</b> (requested prior to testing)	Same to next day	5.00	
<b>Rabies certificate re-issue</b>	Same or next day	22.50	RAB_CERT
<b>Rabies express</b>	Up to 3 days	500.00	RABEX
<b>Pre-booster immunity check</b> (serum or clotted blood) Titres to Distemper Virus, Adenovirus and Parvovirus	Up to 7 days	52.50	C_PRE_VACC
<b>Canine TB interferon gamma test</b> (2ml heparinised blood)	<i>Call for advice</i>	220.00	FTBIG
<b>Antibody assays</b> (serum or clotted blood)			
<b>Distemper virus VNT</b>	Up to 7 days	22.00	CDS
<b>Adenovirus VNT</b>	Up to 7 days	22.00	CAS
<b>Parvovirus HAI</b>	Up to 7 days	22.00	CPS
<b>Toxoplasma gondii IgG &amp; IgM IFA</b>	Up to 2 days	35.00	CTOXG
<b>Neospora caninum IFA</b>	Up to 4 days	31.00	CNEOS
<b>Parainfluenza VNT</b>	Up to 10 days	62.50	CPIF
<b>Herpesvirus VNT</b>	Up to 7 days	62.50	CHVS
<b>Leptospirosis IFA</b> (detects antibodies to all pathogenic serovars but not vaccination)	Up to 7 days	65.00	CLEPTO
<b>CPSE</b> - prostate hyperplasia (detects canine prostate specific arginine esterase)	Up to 7 days	55.00	CPSE
<b>Virus Isolation</b> (adenovirus/ herpesvirus/ parainfluenza)	Up to 14 days	23.00	C_VIRUS_IS
<b>Parvovirus</b> (faeces or tissue)	Up to 7 days	44.00	CPIF_PCR
<b>Distemper</b> (CSF or swab)	Up to 7 days	52.00	CDPCR

## Stem Cell Therapy

Stem cell	Price (£)	Code
<b>Equine bone marrow aspiration kit</b> (including transport box)	110.00	
<b>Canine adipose tissue kit</b> (including transport box)	40.00	
<b>Transport box only</b>	22.00	
<b>Equine stem cell culture</b> (up to 40 million cells from bone marrow aspirate)	1045.00	STEM_CELLS
<b>Canine stem cell culture</b> (20 million cells from adipose tissue, includes cryopreservation of cells)	550.00	STEM_CN
<b>Canine stromal vascular fraction (SVF)</b> 48 hour service (includes cryopreservation of cells)	375.00	
<b>Cryopreservation of equine stem cells</b> (up to 5 yrs)	200.00	
<b>Resuscitation of cryopreserved cells</b> (10 million)	200.00	

Turnaround times will vary based on your requirements, please call to discuss

## Horses

Horses	Turnaround	Price (£)	Code
<b>Equine viral arteritis serology</b> (VNT or ELISA)	Up to 5 days	20.00	EVAS or EVA_ELISA
<b>Equine infectious anaemia serology</b> (Coggins test)	Up to 2 days	17.50	EIA
<b>Combined viral arteritis &amp; infectious anaemia serology test</b>	Up to 5 days	35.00	EQU_2TEST
<b>Rotavirus diagnostics</b> (please phone for advice)	On demand		

## Pigeon

Parasitology and Microscopy	Turnaround	Price (£)	Code
<b>Worm Egg/ Coccidian Oocyst Count</b>	Same to next day	19.20	PWECCOCCI
<b>Trichomonas (Canker)</b>	Same or next day	17.60	PTRICHOMONAS
<b>Bacteriology</b>	Up to 5 days	28.80	PASPERGILLUS

Bacteriology & Mycology	Turnaround	Price (£)	Code
<b>Salmonella Culture</b>	Up to 5 days	25.60	PSALMONELLA
<b>Aspergillus Culture</b>	2 days	17.60	PASPERGILLUS

PCR	Turnaround	Price (£)	Code
<b>Herpes Virus</b>	Up to 7 days	34.40	PHERPES
<b>Circovirus</b>	Up to 7 days	34.40	PCRCIRCO
<b>Adenovirus</b>	Up to 7 days	44.00	PADENOVIRUS
<b>Rotavirus</b>	Up to 7 days	44.00	PROTA
<b>Chlamydia</b>	Up to 7 days	34.40	PCHLAMPCR
<b>Mycoplasma</b>	Up to 7 days	34.40	PMYCOPCR

Autopsy	Turnaround	Price (£)	Code
<b>Autopsy</b>	<i>Call for advice</i>	52.00	

Special Offers	Turnaround	Price (£)	Code
<b>Basic - Worm Egg/Coccidian Count &amp; Trichomonas</b>	Same or next day	28.80	PBASIC
<b>Young bird - Worm Egg/Coccidian Count, Trichomonas &amp; Circovirus</b>	Up to 7 days	48.00	PYOUNGBIRD
<b>Racing and Respiratory - Worm Egg/Coccidian Count, Trichomonas, Mycoplasma &amp; Chlamydia</b>	Up to 7 days	76.00	PRACING & RESPIRATORY

## Birds

Birds	Turnaround	Price (£)	Code
<b>Avian chlamydia PCR</b> (faeces, cloacal swab or tissue)	Up to 4 days	32.50	PCRAC
<b>Psittacine beak and feather disease PCR</b> (feather, heparinised blood, tissue)	Up to 4 days	32.50	PCRPFBD
<b>Polyomavirus PCR</b> (feather, heparinised blood, faeces, cloacal swab or tissue)	Up to 4 days	32.50	PCRAP
<b>Avian sexing PCR</b> (egg membranes, mouth swabs, feather, heparinised blood, tissue)	Up to 6 days	32.50	PCRAS



**Poultry**

Serology	Turnaround	Price (£)	Code
Infectious Bronchitis Variant M41 HI	Up to 2 days	5.40	PHS030
Infectious Bronchitis Variant 793b HI	Up to 2 days	5.40	PHS031
Infectious Bronchitis Variant D274 HI	Up to 2 days	5.20	PHS052
Infectious Bronchitis Variant 755 HI	Up to 2 days	5.20	PHS073
Infectious Bronchitis Variant D1466 HI	Up to 2 days	5.40	PHS072
Infectious Bronchitis Variant QX388 HI	Up to 2 days	5.40	PHS065
Egg Drop Syndrome (EDS-76)	Up to 2 days	5.90	PHS038
Newcastle Disease	Up to 2 days	5.90	PHS037
Mycoplasma gallisepticum Rapid Serum Agglutination	Same or next day	1.60	PHS003
Mycoplasma synoviae Rapid Serum Agglutination	Same or next day	3.50	PHS004
Mycoplasma meleagridis Rapid Serum Agglutination	Same or next day	2.30	PHS005
Astrovirus	Up to 7 days	3.50	PHS070
<i>Ornithobacter rhinotracheale</i> ELISA	Up to 7 days	5.40	PHS076
Avian Rhinotracheitis ELISA	Up to 7 days	6.10	PHS077
Infectious Bronchitis ELISA	Up to 7 days	3.20	PHS054
Gumboro Disease ELISA (including vaccination prediction)	Up to 7 days	3.20	PHS050
Avian Reovirus ELISA	Up to 7 days	7.30	PHS066
Avian Influenza ELISA	Up to 4 days	4.80	PHS001
Fowl Adenovirus Group 1 ELISA	Up to 7 days	3.40	PHS061

Parasitology	Turnaround	Price (£)	Code
Worm Egg/Coccidian Oocyst Count	Same or next day	14.70	PHS018

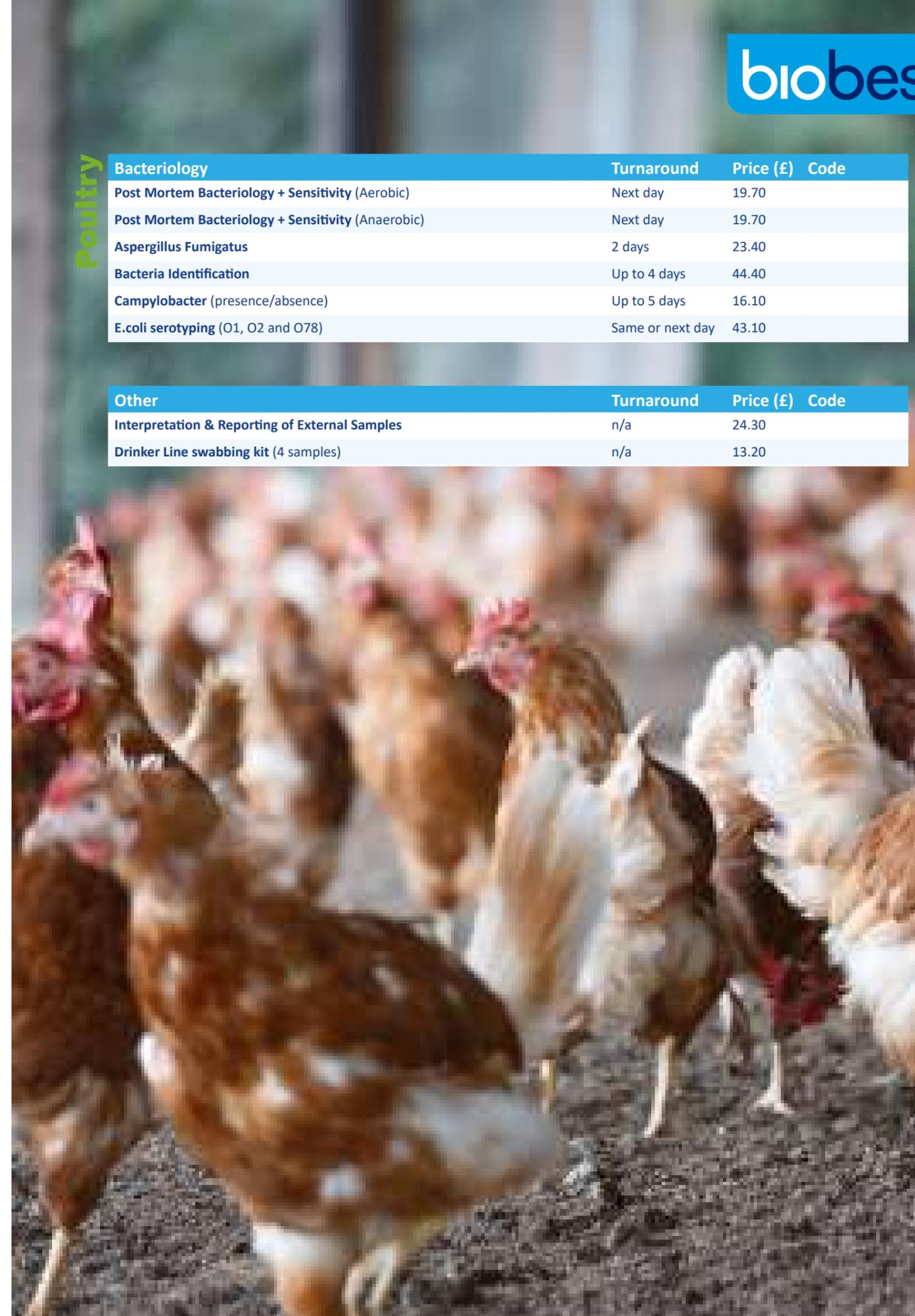
Hygiene	Turnaround	Price (£)	Code
Water - Total Viable Count (TVC)	Up to 4 days	14.30	
Swab (TVC)	Up to 2 days	14.40	
Water/Swab - TVC/Pseudomonas/Staphylococcus aureus/Coliforms/E.coli	Up to 2 days	35.00	
Water - pH	Same or next day	14.60	
Water - Oxidation Reduction Potential	Same or next day	5.30	
Water - Total Residual Chlorine	Same or next day	20.80	
Water/Swab - Enterococcus	Up to 3 days	15.10	
Dipslide - TVC	2 days	12.00	
Bedding - Pseudomonas/E.coli/Coliforms/TVC/Yeast/Mould/Aspergillusfumigatus/Salmonella/ Campylobacter	Up to 5 days	16.00 - 68.00	



**Poultry**

Bacteriology	Turnaround	Price (£)	Code
Post Mortem Bacteriology + Sensitivity (Aerobic)	Next day	19.70	
Post Mortem Bacteriology + Sensitivity (Anaerobic)	Next day	19.70	
Aspergillus Fumigatus	2 days	23.40	
Bacteria Identification	Up to 4 days	44.40	
Campylobacter (presence/absence)	Up to 5 days	16.10	
E.coli serotyping (O1, O2 and O78)	Same or next day	43.10	

Other	Turnaround	Price (£)	Code
Interpretation & Reporting of External Samples	n/a	24.30	
Drinker Line swabbing kit (4 samples)	n/a	13.20	



**Ruminant**

Biochemistry profiles & haematology	Turnaround	Price (£)	Code
<b>Large animal full profile</b> (serum, fluoride, EDTA and freshly made blood smears) Routine haematology, albumin, AST, bilirubin, calcium, CK, creatinine, GGT, GLDH, globulin, glucose, magnesium, phosphate, total protein, urea	Same to next day	44.00	PROF 012
<b>Large animal full profile, biochemistry only</b>	Same to next day	36.00	PROF 036
<b>Large animal liver profile</b> (serum) Albumin, AST, bilirubin, GGT, GLDH, globulin, total protein	Same to next day	27.00	PROF 025
<b>Ruminant metabolic profile</b> (serum and fluoride) Albumin, BHB, calcium, globulin, glucose, magnesium, NEFA, phosphate, total protein, urea	Same to next day	28.00 24.00 (5+)	PROF 009 PROF 037
<b>Downer cow profile</b> (serum) AST, calcium, CK, magnesium, phosphate, urea	Same to next day	24.00	PROF 054
<b>Bovine trace element profile</b> (serum and heparin) Copper, selenium (GSH-Px)	Up to 5 days	16.00 11.50 (5+)	PROF 008 PROF 039
<b>Ovine trace element profile</b> (serum and heparin) Copper, selenium (GSH-Px), Vitamin B12	Up to 5 days	22.00 19.00 (5+)	PROF 049 PROF 050
<b>Periparturient recumbent ewe profile</b> (serum) BHB, calcium, magnesium	Same to next day	13.00	PROF 047
<b>Pre lambing profile</b> (serum) Albumin, BHB, urea	Same to next day	13.00 6.50 (5+)	PROF 046 PROF 052
<b>Camelid profile</b> (serum, fluoride, EDTA and freshly made blood smears) Large animal full profile plus smear exam for parasites	Same to next day	52.00	PROF 057
<b>Routine haematology</b> (EDTA and freshly made blood smears)	Same to next day	22.50	PROF 001
<b>Haemoglobin or PCV</b> (EDTA)	Same to next day	13.50	HB/HCT

Routine biochemistry	Turnaround	Price (£)
<b>Serum sample required</b> Albumin, ALT, AP, AST, BHB, bilirubin, chloride, cholesterol, CK, creatinine, GGT, GLDH, globulin, glucose, magnesium, NEFA, phosphate, potassium, protein, sodium, total calcium, urea		
<b>1-4 tests</b>	Same to next day	8.10 each
<b>5-9 tests</b>	Same to next day	5.00 each
<b>10 or more tests</b> (or in addition to any profile)	Same to next day	4.00 each

Histopathology & cytology	Turnaround	Price (£)	Code
<b>Histopathology up to 3 tissues</b>	Up to 7 days	60.00	HE_LA
<b>Histopathology additional tissue</b>	Up to 7 days	9.50	HE_LA_ADD
<b>Cytology single site</b> (up to 4 slides from one site)	Same to next day	35.00	CYT_SMEAR
<b>Cytology additional site</b>	Same to next day	20.00	CYT_ADD
<b>Large animal vasectomy check</b>	Up to 7 days	46.00	VASECTOMY

**Ruminant**

Special biochemistry	Turnaround	Price (£)	Code
<b>Copper</b> (serum only)	Same to next day	8.10 6.00 5+	COPPER COPPER_4
<b>Copper - liver</b> (5g fresh tissue)	Up to 7 days	40.00	COPPER_LVR
<b>Fibrinogen</b> (citrate blood)	Up to 2 days	10.00	FIBRINOGEN
<b>Haptoglobin</b> (serum)	Up to 7 days	15.00	HAPTO GLOBIN
<b>Iodine - pooled up to 6 samples</b> (serum, heparin)	Up to 1 month	26.00	PII
<b>Lead</b> (heparin) Bovine & Ovine only	Up to 5 days	12.00	LEAD
<b>Lead - liver</b> (5g fresh tissue)	Up to 7 days	40.00	LEAD_LVR
<b>Manganese</b> (heparin)	Up to 4 days	24.00	MN
<b>Pepsinogen</b> (serum)	Up to 7 days	13.00	PEPSINOGEN
<b>Selenium (GSH-Px)</b> (heparin)	Up to 5 days	8.10 6.00 5+	GSH_PX GSH_PX_4
<b>Selenium - liver</b> (5g fresh tissue)	Up to 7 days	40.00	SELEN_LVR
<b>Selenium</b> (serum)	Up to 21 days	10.50	SELEN_SER
<b>Serum iron</b> (total iron binding capacity, % saturation) (serum)	Up to 7 days	25.50	IRON_BIND
<b>Thyroxin (T4)</b> (serum)	Up to 4 days	11.50 10.50 5+	T4_BOVINE
<b>Vitamin A</b> (serum)	Up to 7 days	10.50 8.50 5+	VIT_A VIT_A_4
<b>Vitamin B12</b> (serum)	Up to 4 days	10.00 8.00 5+	VIT_B12 VIT_B12_4
<b>Vitamin B12</b> (5g fresh tissue)	Up to 7 days	40.00	COBALT_LVR
<b>Vitamin E</b> (serum)	Up to 21 days	10.50 8.50 5+	VIT_E VIT_E_4
<b>Vitamin A &amp; E combined - liver</b>	Up to 7 days	65.00	VIT_E_LVR
<b>Zinc</b> (sodium heparin or serum)	Up to 4 days	12.00 6.00 5+	ZINC
<b>Zinc sulphate turbidity test</b> (serum)	Up to 6 days	10.00 5.00 5+	ZST ZST_4

## Ruminant

Faecal Tests	Turnaround	Price (£)	Code
Worm egg count & Coccidia (3g faeces)	Same to next day	15.00 12.00	WORM_EGG WORM_4PLUS
Fluke egg count (5g faeces)	Same to next day	18.00	FLUKE_EGG
Worm Coccidia (3g faeces)	Same to next day	11.00	WORM_COCCI
Worm egg count, no Coccidia (3g faeces)	Same to next day	11.00	WORM_ONLY
Pooling charge for up to 10 samples	n/a	15.00	CHRG_WORM
Worm egg count & Coccidia (add on to young ruminant profile)	Same to next day	11.00	WORM_ADD
Coccidial identification - ovine (3g faeces)	Up to 7 days	44.50	COCCI_SPEC
Haemonchus stain (3g faeces)	Up to 7 days	44.00	HCHUS_DIFF
Lungworm larvae (5g faeces)	Up to 3 days	19.50	LUNG_LARV
Faecal Giardia (immunological) (1g faeces)	Same to next day	20.00	GIARDIA
Cryptosporidium (1g faeces)	Same to next day	22.00	CRYPTO
Salmonella (1g faeces)	Up to 5 days	21.00	SALMONELLA
Rotavirus PAGE (1g faeces)	Up to 6 days	25.00	
Coronavirus (1g faeces)	Up to 6 days	20.00	B_CVV
Rotavirus ELISA (1g faeces)	Up to 7 days	20.00	RVV
Neonatal cattle enteritis profile (<5 days) 5g faeces for bacteriology (including Salmonella), Rotavirus, Coronavirus and Cryptosporidium, K99	Up to 7 days	46.50	PROF 030
Young cattle enteritis profile (6-21 days) 5g faeces for Salmonella, Rotavirus, Coronavirus and Cryptosporidium	Up to 7 days	43.50	PROF 029
Growing cattle enteritis profile (>22 days) 5g faeces for Salmonella, worm egg and Coccidia count	Up to 7 days	29.50	PROF 053
Adult ruminant scour (15g faeces) Johne's PCR, Fluke Coproantigen and Salmonella	Up to 7 days	52.00	PROF 056

Microbiology	Turnaround	Price (£)	Code
Routine bacterial culture & sensitivity (swab, tissue, milk)	Up to 6 days	35.00	BACTERIAL
Milk bacteriology culture & sensitivity (milk 5+)	Up to 7 days	24.00	BACT_CULT
Milk bacterial culture only	Up to 7 days	17.00 11.50 (5+)	BACT_MILK
Bacterial culture and sensitivity (including Salmonella)	Up to 6 days	36.50	BACT_FAEC
E. coli K99 (1g faeces)	Up to 5 days	23.50	K99
Yersinia culture (1g faeces)	7 days (Up to 28 days for negative)	38.00	YERSINIA
Clostridial toxins (5 ml small intestinal contents in sterile universal)	Up to 8 days	39.50	CLOSTRID

Endocrine	Turnaround	Price (£)	Code
T4 Bovine (serum)	Up to 4 days	11.50 10.50 (5+)	T4_BOVINE
Progesterone (serum)	Same day	31.00	PROGESTER

## Pigs

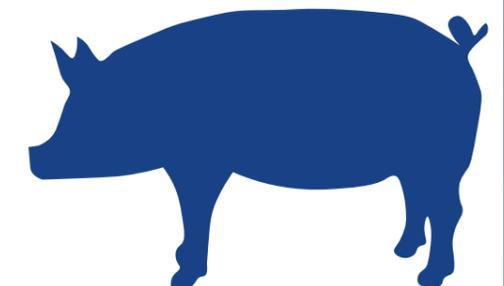
Serology	Turnaround	Price (£)	Code
<i>Mycoplasma hyopneumoniae</i> ELISA	Up to 7 days	10.00	M_HYO
PRRS ELISA (serum)	Up to 7 days	10.00	PRRS
Swine influenza ELISA	On demand	10.00	SWINE_FLU
PRRS PCR (individual/pooled)	Up to 7 days	36.00	PRRSV_PCR

Parasitology	Turnaround	Price (£)	Code
Worm Egg/Coccidian Oocyst Count	Same to next day	15.30	
Worm Egg/Coccidian Oocyst Count (additional)	Same to next day	9.90	

Hygiene	Turnaround	Price (£)	Code
Water - Total Viable Count (TVC)	2 days	12.30	
Water - Total Viable Count (TVC) & Coliforms (100ml)	2 days	15.90	
Swab (TVC)	2 days	14.40	
Water/Swab - TVC/Pseudomonas/Staphylococcus aureus/Coliforms/E.coli	2 days	35.10	
Water - pH	Same or next day	14.60	
Water - Oxidation Reduction Potential	Same or next day	5.30	
Water/Swab - Enterococcus	Next day	15.10	
Dipslide - TVC	2 days	12.00	

Bacteriology	Turnaround	Price (£)	Code
Bacteria Identification	Up to 4 days	44.40	
E. coli serotyping	Same or next day	21.40	
Aerobic Culture and Sensitivity	2 days	24.30	
Aerobic Culture and Sensitivity (additional)	2 days	12.40	
Anaerobic Culture and Sensitivity	2 days	25.20	
Anaerobic Culture and Sensitivity (additional)	2 days	13.30	
<i>Haemophilus parasuis/Actinobacillus pleuropneumoniae</i>	2 days	25.20	
<i>Haemophilus parasuis/Actinobacillus pleuropneumoniae</i> (additional)	2 days	13.00	
Semen - Count	Up to 3 days	26.00	
Semen - Morphology	Up to 3 days	30.80	
Semen - Motility	Up to 3 days	10.20	
Semen - Full Screen (Count/Morphology/Motility/Bacteriology)	Up to 3 days	46.80	

Other	Turnaround	Price (£)	Code
Rotavirus	Up to 7 days	25.00	

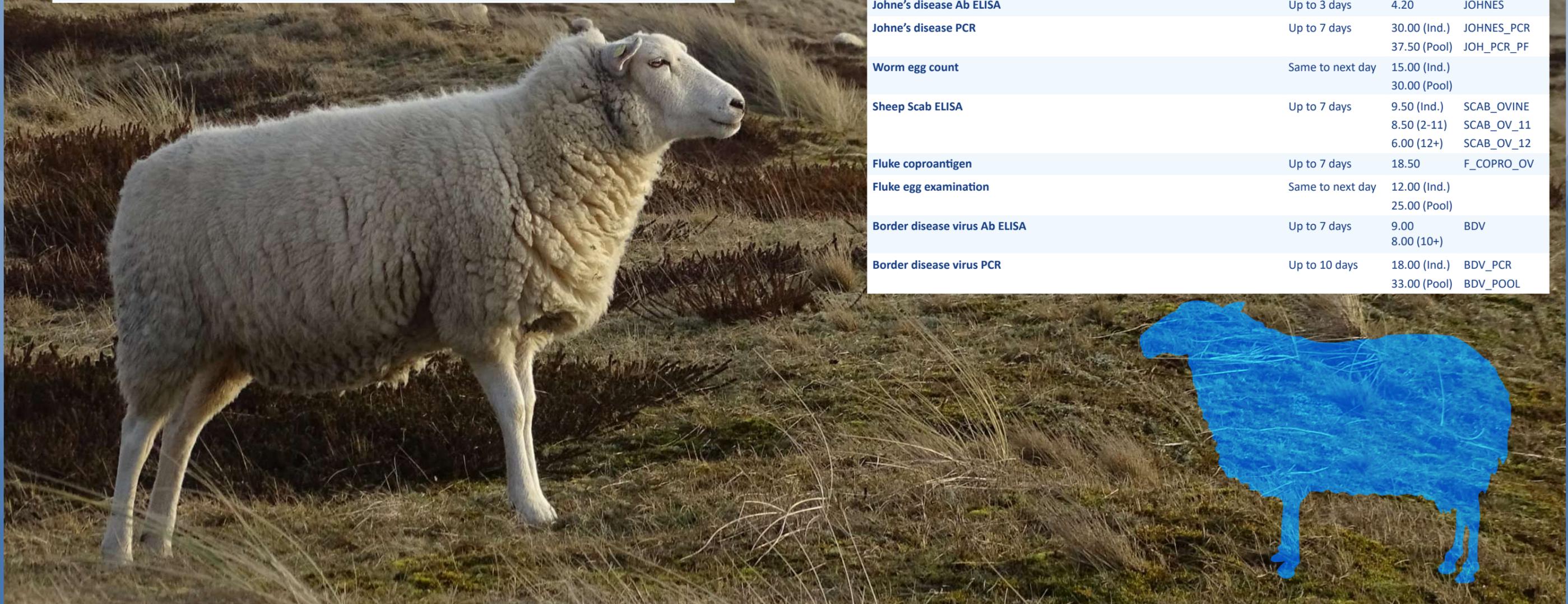


Sheep

Sheep	Turnaround	Price (£)	Code
MV/CAE	Up to 7 days	9.00	MV_CAE
CLA ELISA	Up to 15 days	9.10	CLA
EAE ELISA	Up to 10 days	10.00	EAE
Toxo ELISA	Up to 7 days	10.00	OV_TOXO
Johne's disease ELISA	Up to 3 days	5.20	JOHNES
Sheep Scab ELISA	Up to 7 days	9.50 (Ind.)	SCAB_OVINE
		8.50 (2-11)	SCAB_OV_11
		6.00 (12+)	SCAB_OV_12
Liver fluke antibody	Up to 7 days	8.00	B_FLUKE
Border disease ELISA	Up to 7 days	9.50	BDV
Antigen Detection Fluke coproantigen ELISA Pool of up to 10 samples	Up to 7 days	18.50 (Ind.)	F_COPRO_OV
		42.50 (Pool)	F_COPRO_PL
Border disease PCR Pool of up to 10 samples	Up to 10 days	20.00 (Ind.)	BDV_PCR
		35.00 (Pool)	BDV_POOL
Johne's PCR Pool of up to 5 samples	Up to 7 days	33.00 (Ind.)	JOHNES_PCR
		40.00 (Pool)	JOH_PCR_PF
ORF exam	Up to 15 days	29.50	ORF_PCR

Sheep Health Scheme

HiHealth Flockcare	Turnaround	Price (£)	Code
Annual membership	n/a	30.00	
HiHealth Flockcare & Herdcare full membership		100.00	
Pre-lambing nutritional profile (BHB, urea, albumin)	Same to next day	13.00	PROF 046
		6.50	PROF 052
Periparturient metabolic profile (Ca, Mg, BHB)	Same to next day	13.00	PROF 047
Trace element profile (samples from 6 animals - copper, cobalt, selenium)	Up to 5 days	99.00	
Trace element profile (plus fluke serology x 6)	Up to 7 days	140.00	
Trace element profile (plus fluke serology and pooled WEC)	Up to 7 days	155.00	
Trace element profile (samples from 6 animals – copper, cobalt, selenium (GSH-P), T4)	Up to 5 day	123.00	
Thin ewe package (MV, CLA ELISA x 12, Johne's PCR pooled faecal x 2)	Up to 15 days	215.00	
Pre-purchase/quarantined sheep package (Scab, MV & CLA ELISA, BVD, Johne's PCR)	Up to 15 days	65.00	
MV/CAE	Up to 7 days	8.00	MV_CAE
		6.00 (50+)	
CLA	Up to 15 days	8.10	CLA
		6.50 (50+)	
EAE	Up to 10 days	9.50	EAE
Toxo	Up to 7 days	9.50	OV_TOXO
Johne's disease Ab ELISA	Up to 3 days	4.20	JOHNES
Johne's disease PCR	Up to 7 days	30.00 (Ind.)	JOHNES_PCR
		37.50 (Pool)	JOH_PCR_PF
Worm egg count	Same to next day	15.00 (Ind.)	
		30.00 (Pool)	
Sheep Scab ELISA	Up to 7 days	9.50 (Ind.)	SCAB_OVINE
		8.50 (2-11)	SCAB_OV_11
		6.00 (12+)	SCAB_OV_12
Fluke coproantigen	Up to 7 days	18.50	F_COPRO_OV
Fluke egg examination	Same to next day	12.00 (Ind.)	
		25.00 (Pool)	
Border disease virus Ab ELISA	Up to 7 days	9.00	BDV
		8.00 (10+)	
Border disease virus PCR	Up to 10 days	18.00 (Ind.)	BDV_PCR
		33.00 (Pool)	BDV_POOL



**Cattle**

Cattle	Turnaround	Price (£)	Code
<b>Antibody assays</b> (Most tests can be done on serum, milk or bulk milk. Please call for details)			
<b>BVD ELISA</b>	Up to 3 days	4.00	BVDS
<b>Johne's ELISA</b>	Up to 3 days	5.20 4.50 (50+)	JOHNES JOHNES_50
<b>Leptospira hardjo ELISA</b>	Up to 4 days	5.80	LEPTOS
<b>IBR ELISA</b>	Up to 3 days	5.60	IBRS
<b>IBR gE marker ELISA (serum)</b>	Up to 7 days	8.20	IBR_GE_MAR
<b>IBR gE marker ELISA (bulk milk)</b>	Up to 7 days	16.00	IBR_GE_MAR
<b>Neospora caninum ELISA (&lt;40/40+ samples)</b>	Up to 7 days	8.00 6.60 (40+)	NEO_ELISA NEO_40
<b>Fasciola hepatica (Liver Fluke) ELISA</b>	Up to 7 days	8.00	B_FLUKE
<b>Salmonella ELISA</b>	Up to 15 days	12.50	SALM_ELISA
<b>RSV ELISA</b>	Up to 7 days	6.75	RSVS
<b>PI3 ELISA</b>	Up to 7 days	6.75	PI3S
<b>Mycoplasma bovis ELISA</b>	Up to 7 days	8.00	M-BOVIS
<b>Total IgG</b>	Up to 7 days	32.00	TOTAL_IGG
<b>Rotavirus serology (colostrum or milk only)</b>	Up to 7 days	80.00	RVS
<b>Coronavirus serology (colostrum or milk only)</b>	Up to 7 days	80.00	B_CSV
<b>Rotavirus/coronavirus combined</b>	Up to 7 days	120.00	RVS_CSV
<b>Ostertagia ostertagi ELISA (recommended bulk milk only)</b>	Up to 7 days	16.00	OSTERTAG
<b>IBR or BVD VNT (minimum of 5 samples)</b>	On demand	POA	
<b>Antigen detection</b>			BVDV /
<b>BVD antigen (serum/ear tissue)</b>	Up to 4 days	6.10	BVDVE
<b>Fluke coproantigen ELISA (faeces)</b>	Up to 7 days	18.50	F_COPRO_BV
<b>PCR</b>			
<b>Johne's (faecal sample)</b>	Up to 7 days	33.00	JOHNES_PCR
<b>Johne's pool (5 faecal samples)</b>	Up to 7 days	40.00	JOH_PCR_PF
<b>BVD (individual serum)</b>	Up to 4 days	25.00	BVD_PCR
<b>BVD (ear tissue test only)</b>	Up to 4 days	4.50	BVD_PCR004
<b>BVD (ear tissue tag and test)</b>	Up to 4 days	5.65	
<b>BVD (pooled serum up to 10 samples)</b>	Up to 5 days	35.00	BVD_PCR003
<b>BVD (bulk milk)</b>	Up to 4 days	31.00	BVD_PCR_BM
<b>Leptospirosis (urine)</b>	Up to 7 days	52.50	LEPTOS_PCR
<b>Bactoproof™ mastitis PCR test (preserved milk)</b> Detects 16 pathogens, see website for further details	Up to 4 days	50.00	MAST-16
<b>Respiratory PCR* (swab)</b>	Up to 7 days	60.00	RESP_PCR
<b>Respiratory PCR* (BAL or tissue)</b>	Up to 7 days	75.00	RESP_BAL
<b>Respiratory PCR* (pool of up to 5 samples - must be same sample type)</b> <small>*Includes BoHV-1 (causative agent of IBR), PI3, RSV, Bovine coronavirus, Mycoplasma bovis, Histophilus somni, Pasteurella multocida, Mannheimia haemolytica</small>	Up to 7 days	80.00	RESP_POOL
Fee for posted copies of report	n/a	2.00	
BVDFree antibody test upload	n/a	0.50	
BVDFree antigen test upload	n/a	0.25	

**Cattle Health Scheme**

HiHealth Herdcare membership options	Price (£)
CHeCS herd health programmes for BVD, leptospirosis, IBR, Johne's and Neospora <b>BVD only</b> BVD testing and control	40.00*
<b>bTB only</b>	35.00
<b>bTB add on to BVD or full membership</b>	25.00
<b>Full</b> Eradication, monitoring & accreditation for up to 5 diseases	85.00*
<b>Bulk milk monitoring programme</b> (3 bulk milk samples per annum including testing, milk pots and veterinary reporting)	
<b>Silver</b> BVD, IBR & leptospirosis CHeCS programme & Johne's, Neospora, liver fluke and Ostertagia	120.00*
<b>Gold</b> Silver plus 3 Bactoproof™ mastitis tests	190.00*

\*A £10 discount will be applied to all members who choose to accept results and invoices by e-mail or fax.

Disease Testing	Turnaround	Price (£)	Code
<b>CHeCS Testing</b>			
<b>Antibody assays (serum or individual milk)</b>			
<b>BVD ELISA</b>	Up to 3 days	3.50	BVDS
<b>Johne's ELISA</b>	Up to 3 days	4.20	JOHNES
<b>Leptospira hardjo ELISA</b>	Up to 4 days	4.90	LEPTOS
<b>IBR ELISA</b>	Up to 3 days	4.00	IBRS
<b>IBR gE marker ELISA</b>	Up to 7 days	7.00	IBR_GE_MAR
<b>Neospora caninum Ab ELISA</b>	Up to 7 days	6.30	NEO_ELISA
<b>Virus detection</b>			
<b>BVD antigen ELISA (serum)</b>	Up to 4 days	6.00	BVDV
<b>PCR</b>			
<b>Johne's (individual faecal sample)</b>	Up to 7 days	30.00	JOHNES_PCR
<b>Johne's (pooled faecal up to 5 samples)</b>	Up to 7 days	37.50	JOH_PCR_PF
<b>BVD (pooled serum up to 10 samples)</b>	Up to 4 days	33.00	BVD_PCR003
<b>BVD (ear tissue tag and test)</b>	Up to 4 days	5.35	
<b>BVD (ear tissue test only)</b>	Up to 4 days	4.20	BVD_PCR004
<b>Pliers for BVD Ear tissue testing</b>	n/a	20.00	
<b>Individual animal sales certificate (members)</b>	n/a	10.00	
Non members Declaration required, please contact the office		15.00	
BVD Free antibody upload (per sample)	n/a	0.50	
BVD Free antigen test upload (per sample)	n/a	0.25	
<b>Interpretation of results from another laboratory</b>	n/a	20.00	
This fee will be applied when results from another laboratory such as BVD virus ear tissue or Johne's milk antibody results are used to assign a HiHealth Herdcare member's herd status.			

Metabolic profile and trace element testing is also available. Please contact the cattle health team for further advice or information packs.

Disease	Testing requirement	Time interval between tests	Accreditation requirement	Maintaining accreditation
<b>BVD</b>	Antibody check test on 5 animals from each management group of animals 9–18 months for antibody. Consult CHeCS rules for definition of separate groups. Or Test all calves born over a 12-month period for virus. In addition bulk milk antibody testing in dairy herds not vaccinating against BVD.	12-month interval between antibody check tests. Calf virus testing ongoing throughout year. Quarterly bulk milk tests. If main bulk tank antibody positive test sample from 1st lactation heifers only – see CHeCS rules.	2 clear tests, 1 on each of 2 subsequent calf crops. Or 2 clear calf crops. Every calf born must be tested. Negative herd or 1st lactation bulk tests.	Annual young stock check test Or Continuing negative virus screens of every calf born. In addition bulk milk testing can be used to monitor dairy herds (not compulsory).
<b>IBR</b>	Antibody test all animals 12 months and over plus all younger non-homebred animals.	1-12 months	2 clear tests	Antibody testing on a statistical sample of animals 12 months and older – see CHeCS rules for further details. Breeding bulls, and for IBR all non-homebred and marker vaccinated animals must additionally be tested. In dairy herds milking animals are not included in the sample but are monitored through quarterly bulk milk tests.
<b>Leptospirosis</b>	Antibody test all animals in the herd 2 years and over plus animals between 1 and 2 years old that are to be kept for breeding.	6-12 months	2 clear tests	
<b>Johne's disease</b>	Antibody test all animals in the herd 2 years and over. Follow-up blood/dung tests on any antibody positive animals	12 months	A herd is assigned a Risk Level according to the percentage of reactors identified - see CHeCS rules for further details. 3 clear annual tests allow Risk Level 1 status.	
<b>Neospora</b>	Antibody test all females in the herd 2 years and over plus females between 1 and 2 years old that are to be kept for breeding and any purchased females.	12 months	A herd is assigned a Risk Level according to the percentage of reactors identified - see CHeCS rules for further details. 3 clear annual tests allow Risk Level 1 status.	

Bovine TB CHeCS herd accreditation is also available through HiHealth Herdcare. A herd is given a TB score based on the last 10 years of TB test data supplied by APHA. The CHeCS Bovine Tuberculosis (bTB) Herd Accreditation Programme details, and the CHeCS Technical Document incorporating rules for cattle health schemes, are available at <http://www.checs.co.uk/about-us/downloads/>



## Blood & Tissue

Test	Sample Required
All Antibody testing BVD Antigen ELISA BVD / BDV PCR Biochemistry, including minerals, vitamins & trace elements (unless otherwise stated, see GSH-Px, others below)	Clotted blood/serum tube/red-topped samples - Lithium heparin cannot be used for BVD PCR testing - Tissue samples can also be used for BVD Ag ELISA/PCR testing
GSH-Px	Lithium heparin tube, whole blood
Blood lead	Lithium heparin tube
MCF PCR	EDTA or lithium heparin (a red-top is not suitable for this test)
Blood glucose	Fluoride oxalate tube; separated plasma or serum
Blood zinc	Serum (no metal, rubber stopper/caps or gel tubes. Most modern red-top tubes are acceptable)
Inorganic iodine	Serum (individual or pool up to 6 samples)
Haematology	EDTA tube and air dried smears (a freshly made smear improves the lab's ability to provide meaningful differential counts and blood smear reports) Lithium heparin is a good back up for large animal haematology
Tissue analysis (e.g. liver copper, selenium, other elements)	> 5 g fresh (not fixed) tissue. Freezing acceptable if mailing is delayed from time of sampling. Please note on submission if sample frozen.
Histopathology	10% buffered formalin (at least 10x the tissue volume)
Ectoparasites	Wool/hair plucks, skin scrapes in sterile screw-capped container

## Milk

Test	Sample Required
Mastitis PCR	Bronopol preservative advised
Mastitis Culture	Unpreserved sample ONLY
Antibody testing/BVD virus testing	Bronopol preservative advised

## Faecal

Please submit faeces samples in a leak-proof container such as a pot with a screw on lid, NOT a glove.

Test	Sample Required
Johne's PCR	>20g faeces (one full universal)
Worm Egg/ Coccidial Oocyst Count (WEC)	3g faeces ( a heaped teaspoon)
Lungworm detection	10g faeces ( a heaped dessertspoon)
Fluke detection	10g faeces ( 40g for 'liquid' samples)
WEC, Fluke and Lungworm detection	>20g faeces (one full universal)
Fluke Coproantigen ELISA	5g faeces for bovine 2g faeces for ovine/caprine/camelid
Clostridial toxins	2 ml small intestinal contents in universal (freezing acceptable if mailing delayed)

## Ruminant Enteritis

Please state the age of the animal on the form when submitting faeces for enteritis packages – what is tested varies depending on whether the animals is 1-5 days, 6-21 days or over 21 days.

Test	Sample Required
Neonatal Ruminant enteritis profile (1-5 days) - Routine aerobic bacteriology (including Salmonella), Rotavirus, Coronavirus, Cryptosporidium, K99	5g faeces
Young ruminant enteritis profile (6-21 days) - Salmonella, Rotavirus, Coronavirus, Cryptosporidium	5g faeces
Growing cattle enteritis profile (>22 days) - Salmonella, worm egg and coccidial oocysts	5g faeces
Adult ruminant scour package - Johne's PCR, Fluke Coproantigen, Salmonella culture	20g faeces

## Respiratory swabs for PCR

Samples types:

- Plain dry nasopharyngeal swabs (gel/agar swabs cannot be tested)
- Tissue (not fixed)
- BAL fluid (>5ml)

Up to 5 samples of the same type can be pooled.

Samples should be received at the lab within 24 hours of collection; chilled transport preferred.

If samples are collected on a Friday they should be frozen at the practice over the weekend and sent to us on Monday with freezer packs to ensure they remain frozen. Do not send samples over the weekend as they will not be able to be stored correctly once they arrive.

Due to the multiple PCRs required, there is a test limit of a maximum 10 samples at a time therefore advance notice of multiple samples being sent will help us provide the best possible service.

**DISCLAIMER - All standard testing days subject to change without prior notice. Turnaround times may increase as a result of problems with tests or samples.**

## Feline Testing Days

Test	Test set up	Results Available	Notes
VNT - Antibody Test Calicivirus (FCaV) Herpesvirus (FHV)	Friday	Following Monday	
IIFT/IFA - Antibody Test Panleukopaenia (Parvo or FPV)	Tuesday	Tuesday (PM)	
IIFT/IFA - Antibody Test Toxoplasma IgG & IgM	Daily Monday-Friday	Same day if negative, following day if suspected positives.	
IIFT/IFA - Antibody Test Neospora	Tuesday & Thursday	Same day if negative, following day if suspected positives.	
IIFT/IFA - Antibody Test Coronavirus	Daily Monday-Friday	Same day	
IIFT/IFA - Antibody Test FIV	Monday, Wednesday & Friday	Same day	
IIFT/IFA - Antigen Test Feline Leukaemia Virus (FeLV)	Tuesday	Tuesday (PM)	Heparin Blood preferred but EDTA can be used
Feline TB	1st & 3rd Thursday of each month	Following Monday	Heparin must be used Blood must NOT be chilled
Virus Detection - Virus Isolation Calicivirus (FCaV) Herpesvirus (FHV)	Monday Friday	Test read Thur in the first instance Test read Mon in the first instance	VTM swabs preferred but can use dry if required
Virus Detection - Virus Isolation Feline Pox Virus	Friday	Read on following Monday then re-read until ready	
Virus Detection - PCR Panleukopaenia Virus (Parvo/FPV)	Wednesday	Wednesday (PM)	
Virus Detection - PCR Feline Chlamydia Herpesvirus (FHV)	Wednesday	Wednesday (PM)	Dry swabs preferred but can use VTM if required
Rabies FAVN	Monday, Wednesday & Friday	Wednesday (PM), Friday (PM) & Monday (PM)	Samples prepared on day of arrival (except Saturday)

## Canine Testing Days

Test	Test set up	Results Available	Notes
<b>VNT - Antibody Test</b> Distemper Virus (CDV) Adenovirus (CAV) (AKA Infectious Hepatitis or CAV-2) Herpesvirus (CHV) Parainfluenza (CPiV)	Thursday	CDV/CAV/CHV Following Monday  CPiV - Checked on following Monday then re-read until ready	
<b>HAI - Antibody test</b> Parvovirus HAI (CPV)	Tuesday	Tuesday (PM)	
<b>IIFT/IFA - Antibody Test</b> Toxoplasma IgG & IgM	Daily Monday-Friday	Same day if negative, following day if suspected positives.	
<b>IIFT/IFA - Antibody Test</b> Neospora	Tuesday & Thursday	Same day if negative, following day if suspected positives.	
<b>IIFT/IFA - Antibody Test</b> Canine Leptospirosis	Tuesday & Friday	Same day for negative samples. Suspected positives are titrated on following test.	
<b>CPSE</b>	Tuesday	Same day	Send as serum or plasma if possible. Best to send chilled or guaranteed O/N
<b>Virus Detection - Virus Isolation</b> CAV, CHV, CPiV	Thursday	VTM swabs preferred but can use dry if required	Heparin Blood preferred but EDTA can be used
<b>Virus Detection - PCR</b> Canine Parvovirus (CPV)	Wednesday	Wednesday (PM)	Heparin must be used Blood must NOT be chilled
<b>Virus Detection - PCR</b> Canine Distemper (CDV)	Friday	Friday (PM)	Samples required day before test for prep
<b>Virus Detection - Virus Isolation</b> Feline Pox Virus	Friday	Read on following Monday then re-read until ready	
<b>Virus Detection - PCR</b> Canine Leptospirosis	Monday	Monday (PM)	
Rabies FAVN	Monday, Wednesday & Friday	Wednesday (PM), Friday (PM) & Monday (PM)	Samples prepared on day of arrival (except Saturday)

## Equine Testing Days

Test	Test set up	Results Available	Notes
<b>VNT - Antibody Test</b> Equine Viral Arteritis (EVA)	Monday, Wednesday, Friday	Wednesday, Friday, Monday	Additional test days in busy period (Jan - Mar)
<b>ELISA - Antibody Test</b> Equine Viral Arteritis (EVA)	Friday (All year) Monday & Wednesday (Jan-Mar only)	Same day for negatives (See above if VNT required)	Test screens for negative samples Suspected positives are then tested by VNT
<b>AGID</b> Equine Infectious Anaemia (EIA)	Monday, Tuesday, Wednesday, Thursday	Tuesday, Wednesday, Thursday, Friday	

## Porcine Testing Days

Test	Test set up	Results Available	Notes
IDEXX Porcine Reproductive + Respiratory Syndrome Virus ELISA (PRRS)	Monday	Same day (PM)	
Oxoid Mycoplasma hyopneumoniae ELISA (M. hyo)	Monday	Same day (PM)	
PCV-2 ELISA	Monday	Same day (PM)	

## Avian Testing Days

Test	Test set up	Results Available	Notes
Avian Chlamydia (AKA Psittacosis)	Tuesday (AM), Thursday (AM)	Tuesday (PM), Thursday (PM)	Faeces should be pooled from samples taken over 3-5 days for maximum sensitivity Although blood can be tested there is no published evidence to support its use Samples received by 9am on Monday or Wednesday will be included on the following days test
Psittacine Beak and Feather Disease (Pbfd)	Tuesday (AM), Thursday (AM)	Tuesday (PM), Thursday (PM)	Samples received by 9am on Monday or Wednesday will be included on the following days test
Avian Polyomavirus (AKA Budgerigar Fledgling Disease)	Tuesday (AM), Thursday (AM)	Tuesday (PM), Thursday (PM)	Faeces should be pooled from samples taken over 3-5 days for maximum sensitivity Samples received by 9am on Monday or Wednesday will be included on the following days test
Pigeon Circovirus	As required	As required	Minimum of 5 samples required for this test There is limited validation of the use of blood, cloacal swabs and faeces
Sexing	Monday (O/N), Wednesday (O/N)	Tuesday (PM), Thursday (PM)	Samples received by 9am on Monday or Wednesday will be included on that nights test Extraction rate is around 60% for mouth swabs compared with around 99% for other sample types. Authorisation slip needed for mouth swabs

## Poultry Testing Days

Test	Test set up	Results Available	Notes
Salmonella CSPO	Daily Monday-Saturday	3 to 4 days for negative result 5 to 6 days for positive result	Positive sample are sent to APHA for further confirmation which might take up to 12 days
Salmonella Eggs	Daily Monday-Saturday	3 to 4 days for negative result 5 to 6 days for positive result	Positive sample are sent to APHA for further confirmation which might take up to 12 days Samples to be packed accordingly to means of transport so often they get damaged in transit Samples to be tested within 4 days from sampling date
Salmonella RVS	Daily Monday-Saturday	4 days for negative result 6 days for positive result	Positive sample are sent to APHA for further confirmation which might take up to 12 days
Salmonella RVS + MKTTn	Daily Monday-Saturday	3 days for negative result 5 days for positive result	Positive sample are sent to APHA for further confirmation which might take up to 12 days
Salmonella Selenite	Daily Monday-Saturday	3 days for negative result 5 days for positive result	Positive sample are sent to APHA for further confirmation which might take up to 12 days
TVC	Daily Monday-Saturday	2 to 3 days	
Enterobacteriaceae	Daily Monday-Saturday	1 day 3 days if confirmation is required	
Hygiene monitoring	Daily Monday-Saturday	2 days	
TVC@22, TVC @37, E.coli , Coilforms, Pseudomonas aeruginosa, Enterococcus faecalis Clostridium prefringens, SR Clostridia	Daily Monday-Saturday	3 to 4 days depending on test required by the customer	
TVC, Enterobacteriaceae, Yeast and Mould, Apsergillus and Pseudomonas	Daily Monday-Saturday	5 days	

## Bovine Testing Days

Test	Test set up	Results Available	Notes
<b>ELISA - Antibody test</b> IBR (Bovine Herpesvirus-1) BVD (Bovine Viral Diarrhoea Virus) Johnes (MAP)	Monday, Wednesday, Friday	Day after test set up	Regular IBR ELISA is not the same as the marker ELISA Regular BVD ELISA is for antibody detection NOT virus detection which is Antigen ELISA or PCR
<b>ELISA - Antibody test</b> PI3 (Parainfluenza-3 virus) RSV (Respiratory Syncytial virus) M. bovis (Mycoplasma bovis)	Tuesday	Wednesday	Milk is not a validated sample type We will test milk samples, however we have no established interpretation
<b>ELISA - Antibody Test</b> Neo (Neospora) Fluke (Fasciola hepatica)	Thursday	Friday	
<b>ELISA - Antibody Test</b> Lepto (Leptospirosis)	Tuesday, Thursday	Day after test set up	
<b>ELISA - Antibody Test</b> Ostertagia	Tuesday	Wednesday	
<b>ELISA - Antibody Test</b> IBR gE marker	Tuesday (O/N)	Wednesday	
<b>ELISA - Antigen Test</b> BVD (Bovine Viral Diarrhoea Virus)	Wednesday, Friday	Day after test set up	Ear tissue samples must be received the day before the test to be prepared
<b>ELISA - Antigen Test</b> Fluke Coproantigen	Wednesday	Thursday	
<b>VNT - Antibody Test</b> Rotavirus Coronavirus	As required	Day after test set up	
Total IgG	As required	Day after test set up	
<b>Virus Detection - PCR</b> BVD (Bovine Viral Diarrhoea Virus)	Tuesday, Thursday	Day after test set up	Serum MUST be from red top tube, heparin (green tops) cannot be tested by PCR Samples must be received the day before the test as they are pooled/aliquoted
<b>Virus Detection - PCR</b> Johnes (MAP)	Wednesday	Thursday (PM)	Faeces is a validated sample type, Milk/Colostrum/Culture material can be tested but not covered by ISO17025
<b>Virus Detection - PCR</b> Mastitis Pathogens	Tuesday, Thursday	Same or following day	Diagnostic samples follow routine procedure
<b>Virus Detection - PCR</b> Respiratory PCR	Thursday	Friday (PM)	Plain dry swab is most suitable swab type, but we can also use VTM and charcoal swabs. WE CANNOT use gel/agar swabs Ensure strict transport procedures are adhered to

## Ovine Testing Days

Test	Test set up	Results Available	Notes
<b>ELISA - Antibody Test</b> Sheep Scab	Thursday	Friday	
<b>ELISA - Antibody Test</b> MVV/CAEV	Tuesday	Wednesday	
<b>ELISA - Antibody Test</b> CLA	Tuesday (Fortnightly)	Wednesday	
<b>ELISA - Antibody Test</b> Fluke (Fasciola hepatica)	Thursday	Friday	
<b>ELISA - Antibody test</b> Johnes (MAP)	Monday, Wednesday, Friday	Day after test set up	
<b>ELISA - Antigen Test</b> Fluke Coproantigen	Wednesday	Thursday	
<b>Virus Detection - PCR</b> Johnes (MAP)	Wednesday	Thursday (PM)	Faeces is a validated sample type, Milk/Colostrum/Culture material can be tested but not covered by ISO17025
<b>Virus Detection - PCR</b> BDV (Bovine Disease Virus)	Tuesday, Thursday	Day after test set up	

## Contact Us

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