



Laboratory Catalogue 2018

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Introduction

This catalogue is a guide to the services of the **Veterinary Diagnostic Laboratories** which are located in the **School of Veterinary Medicine, University College Dublin**. We provide a rapid in-house diagnostic service for the UCD Veterinary Hospital (UCDVH) and an external, fast, friendly and highly accurate diagnostic service to veterinary practitioners around Ireland.

Our diagnostic services include:

- Clinical Pathology (haematology, biochemistry & cytology)
- Bacteriology & Mycology
- Endocrinology
- Morphological Pathology (biopsy & post-mortem examination)
- Parasitology

Useful Links

School of Veterinary Medicine
www.ucd.ie/vetmed

(UCDVH) UCD Veterinary Hospital
www.ucd.ie/vthweb



@ucdvet



@ucdvetmed

General Information

Sample Submission

Do

- Submit all owner and animal details e.g. name, tag number, on all containers.
- Please make sure your practice name and contact details are clearly displayed on all request forms.
- Please make handwriting legible.
- Use correct blood tubes, containers and packaging.
- Make sure all lids are secured tightly.

Do not

- Send any unlabelled or badly written tubes.
- Sellotape the lids of tubes.
- Send glass tubes or slides unless suitably packaged (see page 4).
- Send any sample through the post unless suitably packaged. It is the senders' responsibility and improperly packaged samples may result in the withdrawal of delivery services by An Post or our courier company.

Poor Quality Samples

If we receive a sample that is of poor quality e.g. haemolysed, we may not be able to perform the required tests. A repeat sample will be required to complete your request.

Protocols

If your practice requires any laboratory test protocols do not hesitate to contact the relevant laboratory. It is in your best interests to use the correct equipment and procedures to optimise results.

How To Address Your Sample Package

Follow the **Packaging Regulations** on page 4 and address your sample(s) to the relevant laboratory.

Example:

Only biochemistry:

**Clinical Pathology Laboratory
(Biochemistry)
School of Veterinary Medicine
UCD
Belfield
Dublin 4**

*****Packaging & Labelling Requirements*****

All samples should comply with the appropriate instructions: (PI) 650

All **Biological Substances** should follow a basic triple packaging system:

- **Primary Container:** containing the specimen should be clearly labelled, watertight and leak proof. Containers should be wrapped in sufficient absorbent material should breakage occur and placed in a secondary container.
- **Secondary Container:** should protect the primary container and be secure, leak proof and watertight, with adequate protective cushioning material should multiple primary receptacles be used.
- **Outer Shipping Package i.e. rigid box:** place the secondary receptacle in an outer shipping package, with suitable cushioning that protects it and its contents from physical damage and water etc. **For carriage**, the marker illustrated below should be displayed on the external surface of the outer packaging on a background of a contrasting colour and should be clearly visible and legible. The width of the line should be at least 2mm; the letters and numbers should be at least 6mm high. The smallest external dimension of outer packaging should be not less than 100mm.



- Each package should be clearly labelled with the words “**BIOLOGICAL SUBSTANCES**”.
- **The secondary or outer packaging must be a rigid container.**
- **For liquids:** the primary receptacle should be leak proof. The secondary packaging should be leak proof. All of the above instructions apply also. The primary receptacle or the secondary packaging shall be capable of withstanding, without leakage, an internal pressure producing a pressure differential of not less than 95 kPa (0.95 bar).
- **For solids:** the primary container should be siftproof. If several primary containers are used and placed in a single secondary container, they should be individually wrapped, separated to prevent contact between them and securely cushioned. The secondary container therefore should be siftproof.

Note: These regulations should be strictly adhered to. Further information is available from any of the laboratories.

Reports

Each laboratory test has its own turnaround time. All reports are **emailed** unless otherwise requested. Your report will have the name “UCD Veterinary Diagnostic Labs” as the sender.

If you do not receive the required report please contact the relevant laboratory:

Biochemistry: (01) 7166161/3

Cytology: (01) 7166161

Endocrinology: (01) 7166137

Haematology: (01) 7166161

Microbiology: (01) 7166173

Parasitology: (01) 7166168

Pathology (biopsy & post mortem): (01) 7166162/26

Laboratory General Enquiries: (01) 7166136

Email: ucdvetlab@ucd.ie

Opening Hours: Monday to Friday 9am - 5pm.

Nationwide Courier Service



We provide a highly efficient and reliable courier service for the collection of diagnostic samples and delivery to our laboratories. The cut off time for booking our courier is 12pm Monday to Friday. If you require further details please contact (01) 7166136 or 1800 252 967 to book.

Cost: €5 per collection outside Dublin with next day delivery / Free of charge within Dublin with same day delivery. Please call to discuss post mortem collections (max weight 15kg).

See page 23 for instructions on how to use this service.

Financial Information

We envisage that all prices given in this catalogue will remain current until end 2018. We reserve the right to alter the price at any stage if required.

Payment on all invoices is required within 30 days. Any problem or queries with payment should be directed to **Julie Guerin** on (01) 7166007/6262 or email vetfinance@ucd.ie

Haematology/Biochemistry & Cytology

*Which Blood Tube To Use



After identifying which laboratory test is required, please choose the correct blood container from the list below. Colours may vary depending on which supplier you order them from. We do not provide blood tubes due to the variability in colours and sizes. Please contact us if you require the name of a supplier.

Type of Tube	Function
Plain (clotted)	General biochemistry; bile acids; copper; serology; endocrinology.
Heparin (plasma)	Biochemistry incl. enzymes and potassium.
Heparin (whole blood)	Reptilian/avian haematology; GPx.
EDTA (whole blood)	Haematology of most species (except avian/reptilian); lead.
Fluoride Oxalate	Glucose
Sodium Citrate	Clotting Times (APTT/OSPT); Von Willebrands factor antigen.
Zinc Free	Zinc & other trace elements

NB: Please see the **A- Z index** if unsure what blood tube to use

**Packaging
Samples**

See page 4

**Send to:
Clinical Pathology Laboratory
School of Veterinary Medicine
UCD
Belfield
Dublin 4**

Contact Information

Haematology: (01) 7166161
Biochemistry: (01) 7166161/3
Cytology: (01) 7166161
Endocrinology: (01) 7166137
Email: ucdvetlab@ucd.ie
[Submission forms click here](#)

General Clinical Pathology Prices

Test	Price € inclusive of VAT
CBC ^a	25 (15 as panel add on)
Clotting times	15
Comprehensive profile	60
Cytology/Fine needle aspirate ^b	50
D-Dimers	38
GI-pancreas profile	60
Health screen	45
Liver profile	60
Photomicrographs of stained smear of FNA ^c	30
Renal profile	60
Urinalysis ^d	20 (15 as panel add on)
Urine Protein:Creatinine ratio	15

a) Includes reticulocytes

b) 1-4 slides same case (+€10 per additional slide); c) up to 10 .jpg images characterising the smear. Contact laboratory.

d) Urinalysis includes: gross evaluation, dipstick test, specific gravity, wet mount exam of sediment.

Single Parameters and Focused Biochemistry Panels

Test	Price € inclusive of VAT
Bile Acids	15
Bile acid stimulation test	20
Copper	15
Electrolytes	15
Fibrinogen	15
Hyperglycemia (glucose, fructosamine)	15
Iodine (plasma inorganic)	35
Ketosis (β -hydroxy-butyrate)	10
Lipids (triglycerides, cholesterol)	15
Liver enzymes (ALT, AST, GLD, ALP)	15
Pancreatic enzymes (DGGR-lipase, amylase)	15
Proteins (TP, Alb, Glob and A/G)	15
Se-deficiency (GPx)	15
TLL, Folate and Cobalamin	88
Urea and Creatinine	15
Single enzyme (ALT, AST, GLD, GGT, ALP, DGGR-lipase etc)	10
Single metabolite (triglycerides, chol, TP, Alb, Ur, Cr, Gluc, Ca etc)	10
Any 3 of the above Single enzymes or Single metabolites	20
Any 5 of the above Single enzymes or Single metabolites	30
Any 10 of the above Single enzymes or Single metabolites	40

*See page 6 for correct blood tube.

See A-Z index if the test you require is not displayed.

Investigative & Monitoring Panels for Canine and Feline

	Health screen	Comprehensive	GI-Pancreas ^b	Liver	Renal
CBC^a	X	X	X	X	X
TP	X	X	X	X	X
Alb	X	X	X	X	X
Glob	X	X	X	X	X
A/G	X	X	X	X	X
Na	X	X	X		X
K	X	X	X		X
Cl	X	X	X		X
Corrected Cl	X	X	X		X
TCO₂		X	X		X
Anion Gap		X	X		X
Ca	X	X			X
P	X	X			X
Bilirubin	X	X		X	
Bile Acids – pre				X	
 post				X	
Cholesterol	X	X	X	X	X
Triglycerides		X	X	X	
Glucose	X	X	X	X	X
Fructosamine			X		
GLD		X		X	
ALT	X	X		X	
AST		X		X	
AST/ALT		X		X	
ALP	X	X		X	
GGT		X		X	
CK		X			
Amylase	X	X	X		X
Lipase (DGGR)	X	X	X		
Urea	X	X	X	X	X
Creatinine	X	X			X
Urinalysis^c	c	c	c	c	X
UPC ratio					X
Price € incl VAT	45	60	60	60	60
No CBC	-	-	45	45	45
^c Add urinalysis	60	75	75	75	-

UPC= urine protein creatinine ratio

^{a)} There will be a reduction of €15 in the price of the GI-Pancreas, Liver and Renal Panels if a CBC is not required.

^{b)} It is recommended to carry out TLI, Folate and Cobalamin (B₁₂)

^{c)} Please note that urinalysis will be performed at the special discounted rate of €15 if ordered at the same time as the Health Screen, Comprehensive, GI-Pancreas, Liver or Thyroid Panels.

Investigative & Monitoring Panels for Equine

	Health screen	Comprehensive	GI-Pancreas	Liver	Renal
CBC ^a	X	X	X	X	X
TP	X	X	X	X	X
Alb	X	X	X	X	X
G	X	X	X	X	X
A/G	X	X	X	X	X
Na	X	X	X		X
K	X	X	X		X
Cl	X	X	X		X
Corrected Cl	X	X	X		X
TCO₂		X	X		X
Anion Gap		X	X		X
Ca	X	X			X
P	X	X			X
Bilirubin	X	X		X	
Bile Acids - pre				X	
post				X	
Cholesterol	X	X	X	X	X
Triglycerides		X	X	X	
Glucose	X	X	X	X	X
GLD		X		X	
AST		X		X	
ALP	X	X		X	
GGT		X		X	
CK		X			
Amylase	X	X	X		X
Lipase (DGGR)	X	X	X		
Urea	X	X	X	X	X
Creatinine	X	X			X
Urinalysis	-	-	-	-	X
UPC ratio					X
Price € incl VAT	45	60	60	60	60
No CBC	-	-	45	45	45
^bAdd urinalysis	60	75	75	75	-

UPC= urine protein creatinine ratio

^a) There will be a reduction of €15 in the price of the GI-Pancreas, Liver and Renal panels if a CBC is not required.

^b) Please note that urinalysis will be performed at the special discounted rate of €15 if ordered at the same time as the Health Screen, Comprehensive, GI-Pancreas or Liver Panels.

^c) Add Fibrinogen for €15

See A-Z index if
the test you
require is not
displayed.

*See page 6 for the
correct blood tube

Investigative & Monitoring Panels for Cattle

	Health Screen ^a	Minerals	Mineral/Trace Elements
CBC	X		
TP	X		
Alb	X		
Glob	X		
A/G	X		
Mg	X	X	X
Ca	X	X	X
P	X	X	X
Copper			X
Se-deficiency (glutathione peroxidase)			X
B-hydroxy-butyrate	X		
Glucose	X		
GLD	X		
AST	X		
GGT	X		
CK	X		
Urea	X		
Creatinine	X		
Price € incl VAT	35	20	30
^a Add Fibrinogen	50	-	-

^{a)} Fibrinogen is a useful additional test that can be added on for €15

See A-Z index if the test you require is not displayed.

*See page 6 for the correct blood tube

Note: Avian, Rodent and Reptilian Panels please contact the laboratory for information.

Endocrinology

We provide a twice weekly in-house endocrine service (Tuesday and Thursday). These results are interpreted individually by specialist staff members, under the supervision of **Prof. Carmel Mooney RCVS Specialist in Small Animal Medicine (Endocrinology)**. Emergency samples can be accommodated by contacting the laboratory.

Test Name	Sample Type	Price € incl VAT	Result Time	Comments
ACTH Stim (cortisol x 2)	0.5 ml plasma (x2)	49	2-3 days	See Protocol page 12
Cobalamin (B12)	0.5ml serum	20	2-3 days	
Cortisol	0.5ml serum/plasma	29	2-3 days	
Endogenous ACTH	EDTA	64	Contact lab	See protocol page 12
Folate/B12	1ml serum	45	2-3 days	
Free T4	0.5ml serum or plasma	55	Contact lab	Referral test
Folate	0.5 serum	25	2-3 days	
LDDS (cortisol x 3)	See protocol page 11	65	2-3 days	See Protocol page 13
Oestradiol	0.5ml serum	63	Contact lab	Referral test
Progesterone (canine ovulation monitoring)	1ml serum (not gel)	40	Contact lab	See Protocol page 13
Relaxin	1ml heparinised plasma	41	Contact lab	Sample day 28+ of gestation
Sex Hormone Alopecia	2 x 0.5ml serum/plasma	96	Contact lab	Referral test
Testosterone	0.5ml serum or plasma	40	Contact lab	Referral test
TLI (canine)	1ml serum	56	2-3 days	
TLI (feline)	1ml serum	58	Contact lab	Referral test
cTLI/Folate/B12	1ml serum	88	2-3 days	
Total T4	0.5ml serum or plasma	29	2-3 days	See Protocol page 13
TSH	0.5ml serum or plasma	32	2-3 days	See Protocol page 13
Total T4/TSH	1ml plasma or serum	61	2-3 days	See Protocol page 13

Canine and Feline Thyroid Panels

	Canine Thyroid Panel	Feline Thyroid Panel
CBC	X	X
TP	X	X
Alb	X	X
Glob	X	X
A/G	X	X
Na	X	X
K	X	X
Cl	X	X
Ca	X	X
P	X	X
Bilirubin	X	X
Cholesterol	X	X
Triglycerides	X	X
Glucose	X	X
ALT	X	X
ALP	X	X
Lipase (DGGR)	X	X
Urea	X	X
Creatinine	X	X
T4	X	X
TSH	X	-
Price € incl VAT	87	61

Endocrinology Protocols

ACTH Stimulation Test (Canine)

This assay is used to confirm hypo (Addisons) - or hyperadrenocorticism (Cushings) and assessing response to therapy in hyperadrenocorticism*

**This test must be carried out 4 hours after trilostane therapy.*

1. Withdraw 3-5 ml of blood into a heparinised tube for cortisol measurement.
2. Mark tube "Pre ACTH".
3. Administer synthetic ACTH i/m or i/v (one vial 250µg Synacthen or 125µg if patient is <5kg)
4. Collect a second sample 1-hour post administration.
5. Mark tube "Post ACTH".

Endogenous ACTH Assay (Canine)

*NB: low temperature dependent assay. This assay differentiates pituitary dependent HAC from an adrenal tumour.

1. Withdraw blood into a chilled syringe and place blood into a chilled plastic EDTA tube. Do not use glass blood tubes.

2. Centrifuge immediately preferably using a refrigerated centrifuge.
3. Remove plasma with a pipette or decant by hand into a chilled plain plastic tube.
4. Freeze immediately. The sample must arrive in the lab frozen.
5. Ring prior to sending to ensure the lab is prepared.

Low Dose Dexamethasone Suppression Test (LDDS Canine)

This test is used to diagnose Cushing's Disease (hyperadrenocorticism) and differentiate pituitary dependency from adrenal tumours.

1. Withdraw 3-5 ml of blood into a heparinised tube for cortisol measurement.
2. Mark tube "0 hour".
3. Administer soluble dexamethasone: 0.015-mg/kg i/v.
4. Take a second blood sample 3 hours post and a third sample 8 hours post.
5. Mark the tubes "3 hours post and 8 hours post".

Thyroid Function Profiles (Canine and Feline)

The minimum requirement for diagnosing **hypothyroidism in dogs** involves assessing Total T4 and cTSH values. If the result is ambiguous, measurement of free T4 and thyroglobulin autoantibodies may be useful. A clotted blood sample is required.

To diagnose **hyperthyroidism in cats** only Total T4 is measured. A free T4 may be added in ambiguous results. A clotted blood sample is required.

To monitor **thyroid hormone replacement therapy**, please collect the sample 6 hours post pill.

Note: *Certain drugs, particularly steroids and potentiated sulphonamides, are known to decrease Total T4 and elevate cTSH values, therefore they should be withdrawn 3-6 weeks prior to testing for hypothyroidism.*

Parathyroid Hormone PTH *(Canine & Feline)

*Referral test

This test is used to investigate persistent hypo or hypercalcaemia.

NB: low temperature dependent assay.

1. Collect blood into a chilled syringe and place into a chilled plastic EDTA tube.
2. Centrifuge immediately.
3. Decant plasma into a cold plain plastic tube.
4. Freeze immediately as sample must arrive at the lab frozen.

A serum sample is required also for calcium measurement. It is preferable that ionised rather than total calcium is measured. Special sample handling is required. Please contact the laboratory.

Progesterone assay (Canine)

Progesterone can be used to determine **optimum time of breeding in bitches** by predicating timing of ovulation. Blood sampling can commence as soon as the bitch has started pro-oestrus (in other words is bleeding). On average this period will take 9 days with a spread of 3-18 days. After pro-oestrus the bitch will continue into oestrus during which she will ovulate. Pre-ovulatory luteinisation as well as ovulation will cause progesterone concentrations in the blood to rise and therefore will allow for prediction of ovulation (and breeding) time. Pre-ovulatory luteinisation as well as ovulation will cause progesterone concentrations in the blood to rise and therefore will allow for prediction of ovulation (and breeding) time. More than 1 sample might be required to pinpoint the optimum breeding time.

Progesterone determinations also can be useful for diagnosis of **ovarian remnant syndrome**.

1. Withdraw 3-5 ml of blood into a plain serum tube (do not use gel tubes).
2. Label the tube with the number of days since the start of bleeding/spotting.
3. Samples are analysed on Tuesdays and Thursdays so ensure that they are delivered by 2pm on the day of testing.
4. To make sure you will determine the optimum breeding time, the sample should be taken on the day of testing or the previous day. (Before 11 am to allow time for courier collection and delivery).
5. Contact us for courier delivery instructions on (01) 7166136 (General Enquiries).
6. Ring the Endocrinology Lab if you need to discuss testing schedule.

Packaging & Addressing Your Sample(s)

Important: Package all samples by following the packaging guidelines on page 4.

Important: All endocrinology samples should be addressed as follows:

**Endocrinology Laboratory
School of Veterinary Medicine
UCD
Belfield
Dublin 4**

Contact for Endocrinology Information

Laboratory: (01) 7166137/ (01) 7166161

Email: ucdvetlab@ucd.ie

[Submission forms click here](#)



**Nationwide
Courier
1800 252 967**

**Mon-Fri
Before 12pm**

Pathology (Biopsy & Post mortem Examination)

We provide a biopsy and post-mortem examination service for the University Veterinary Hospital and to veterinary surgeons in general practice.

The laboratory participates in the Cellular Pathology Techniques Quality Assurance Scheme run by **Animal Health and Veterinary Laboratories Agency (AHVLA), UK**

Test Type	Sample Type	Price incl VAT €	Comment
Biopsy examination ^a	Fixed Tissue	50	Up to 4 blocks/case
Biopsy (>2 margins examined)	Fixed Tissue	60	
Small animal post mortem examination	Carcass	60	Contact lab in advance
Post mortem examination (Cattle /Horse)	Carcass	0	Documents required see *
Post mortem examination (Pig/Sheep/Calf/Foal)	Carcass	0	Documents required see *
Legal/forensic/commercial cases	Carcass		Contact lab in advance

^{a)} Where Pathologist is involved in margin selection because of complexity + €20

Our Services

The Biopsy Service involves interpretation by a pathologist of sections made from formalin fixed tissue specimens submitted to us. Special stains and other ancillary techniques are performed as necessary.

Tissue Submission:

- Place tissue in 10% buffered formalin immediately after biopsy or post mortem examination.
- Do not wash or freeze tissue prior to fixation.
- Use wide-necked screw capped plastic containers to contain the tissue.
- Before posting, the primary container should be placed inside a UN approved secondary container and marked “**Biological Substance Category B**”. (See packaging instructions page 4)
- A [completed pathology request form](#), detailing the relevant clinical history (*species, breed, sex, age, brief description of lesion and reason for sampling*), signed by the referring veterinarian should accompany all submissions.

The Necropsy Service: A €60 (inclusive VAT) applies for **small animal** post mortem examinations. There is **currently no charge** for post mortem examinations on **large/farm animals**. For potential legal or commercial cases, please contact the laboratory.

The laboratory must be notified in advance that a carcass is being submitted.

Carcass Submission:

- A concise clinical history written by the referring veterinarian should accompany all submissions.
- Animals for post mortem examination should be dispatched to the post mortem room at the UCDVH as soon as possible after death.
- **Do not** freeze carcasses.
- Please email clinical history to ucdvetlab@ucd.ie if no hardcopy sent.

***Documents**

*** Cattle for post-mortem examination**

The following documents must accompany the carcass

- **Blue animal passport**
- **Herd number**
- **Name and details of owner**

Addressing Your Sample Package(s)

**The Pathology Laboratory
School of Veterinary Medicine
UCD
Belfield
Dublin 4**

or

**Deliver To: Post-mortem Room
UCD Veterinary Hospital
UCD
Belfield
Dublin 4**

Pathology Contact Information

Laboratory: (01) 7166162

General Enquiries: (01) 7166136

[Submission forms click here](#)

Email: ucdvetlab@ucd.ie

Parasitology

The Parasitology Laboratory of the UCVDVH is staffed by two board-certified Veterinary Parasitologists (European College of Veterinary Pathologists [ECVP]) and highly experienced, qualified technical staff. It provides a full parasite diagnostic service capable of diagnosing parasites from domestic and wild animal faeces or tissue samples. Specialist advice on animal parasitic diseases is given to the agricultural industry and veterinary profession.

Test Name	Sample Type	Price € incl VAT	Result Time	Comments
Angiodetect test (+/- Modified Baermann)	Serum/plasma & fresh faeces	19	1-2 days	<i>Angiostrongylus vasorum</i> screen
Cryptosporidium (stain)	Fresh faeces	9.50	1-2 days	
Cryptosporidium/ Giardia antigen (canine/feline)	Fresh faeces	22	1-2days	
Faecal larval culture	Fresh faeces	33		Larval ID
Faecal egg count	Fresh faeces	9.50	1-2 days	Eggs per gram
Faecal exam Routine (egg count, coccidia, fluke, lungworm)	Fresh faeces	19	1-2 days	
Faecal exam Premium (egg count, fluke, lungworm, coccidia, & crypto stain)	Fresh faeces	25	1-2 days	
Fluke check (rumen/liver)	Fresh faeces	9.50	1-2 days	
Giardia SNAP test	Fresh faeces	19	1-2 days	
Lungworm screen	Fresh faeces	9.50	1-2 days	Modified Baermann test
Occult blood (equine)	Fresh Faeces	22	1-2 days	Large quantity of faeces 50gms
Parasite ID	Specimen	35	1-5 days	
<i>Neospora caninum</i> antibody (canine)	Serum	35	1-2 days	
Skin ectoparasites (scrape/hair pluck analysis etc.)	Skin Scrape	15	1-2 days	KOH Technique
<i>Toxoplasma gondii</i> antibodies	Serum	30	1-2 days	
New: Anthelmintic screen	Fresh faeces	250		Contact lab

Packaging & Addressing Your Sample(s)

Important: Package all samples by following the packaging guidelines on Page 4

Important: All parasitology samples should be addressed as follows:

**Parasitology Laboratory
School of Veterinary Medicine
UCD
Belfield
Dublin 4**



**Nationwide
Courier
1800 252 967**

**Mon-Fri
Before 12pm**

Contact for Parasitology Information

Laboratory: (01) 7166168

General Enquiries: (01) 7166136

[Submission forms click here](#)

Email: ucdvetlab@ucd.ie

Bacteriology/Mycology

The following information deals with the safe submission, receipt and processing of specimens sent to the Diagnostic Bacteriology and Mycology laboratory. Samples are sent from a variety of internal and external sources and it is imperative that they are handled in a safe manner to ensure limitation of risks to operating staff, in addition to ensuring sample preservation.

Test Name	Sample Type	Price € incl VAT	Result Time (days)
Culture (blood)	Blood	37	2-3 ^a
Culture (faecal)	Faeces	32	3 ^a
Culture (faecal) – incl <i>Shigella</i> and <i>Yersinia</i>	Faeces	42	2-3 ^a
Culture fluids (BAL, joint fluid etc.)	Fluid	42	2-14 ^{ab}
Culture (milk)	Milk	30	2-14 ^{ab}
Culture (urine)	Urine	37	2-3 ^a
Culture swab	Swab	42	2-3 ^a
Dermatophyte culture	Skin	23	Up to 21 days ^c
Environmental screening	Swab	15	1-2 ^a
Gram stain	-	12	1
MRSA culture	Swab etc.	22	2-3 ^a
Parvovirus detection	Faeces	20	1
Skin profile complete (microscopy, dermatophyte culture, bacterial culture)	Skin	45	2-21 ^{ac}
Skin scrape/hair pluck/skin swab (culture and microscopy)	Skin	35	2-3 ^a
Skin scrape/hair pluck microscopy	Skin	15	1

^{a)} Includes antimicrobial susceptibility test results where relevant.

^{b)} Mycoplasma takes up to 14 days.

^{c)} Fungal/dermatophyte culture up to 21 days.

Packaging & Labelling Your Sample(s)

- **Important:** Package all samples by following the packaging guidelines on page 4.
- No visible sign of external contamination of the sample container should be evident.
- All samples should be labelled as to the origin of specimen.
- All patients should be off antimicrobial therapy for 3 days at least, if possible, for culture of samples to be of use.
- **Important:** All bacteriology/mycology samples should be addressed as follows:

**Bacteriology/Mycology
Laboratory
School of Veterinary Medicine
UCD
Belfield
Dublin 4**

Sample Containers

- All **swabs** should be submitted using charcoal transport media swabs, if possible.
- **Urine** should be submitted in sterile universal containers as soon as possible. Catheterised or samples taken by cystocentesis are less likely to be contaminated.
- **Faecal** samples should be submitted in screw capped sterile containers.
- **Body fluids / aspirates** should be submitted in sterile screw capped plain tubes, without delay.
- Contact the laboratory when considering request for **blood cultures**, as special culture bottles must be used.

If any delay in submission of samples is envisaged, please place specimen at 4°C prior to collection/posting.

Contact for Bacteriology/Mycology Information

Laboratory: (01) 7166173

Email: ucdvetlab@ucd.ie
[Submission forms click here](#)

New Technology -VITEK



Since March 2015 we have been using the VITEK System (BioMérieux); this is an automated system which can be used to rapidly identify bacterial organisms. Antimicrobial susceptibility testing can also be carried out using this equipment and provides quantitative results (minimum inhibitory concentrations (MIC) of the antibiotics for the organisms tested), as opposed to the qualitative results obtained with the current system (resistant vs. susceptible). Once the organism has been isolated and is available for testing, results from the VITEK System are available in as little as 2 hours. Currently, identification and susceptibility testing requires overnight incubation, i.e. a further 18 hours following isolation.

There will be an additional cost of €5 per sample where the VITEK system is utilised.

Advantages of the VITEK system:

1. It is current international best standard
2. Results available approximately 24 hours earlier than at present
3. The availability of MIC data will allow the clinician to combine this data with

pharmacokinetic data (available on the package insert or from a textbook) and thus calculate antimicrobial dosage more accurately. This results in dosage regimens that are more efficacious and ultimately more cost effective than simply utilising the labelled doses.

4. The use of appropriate antibiotics at effective dose levels also helps reduce antimicrobial resistance.

5. The data generated will enhance the quality of research papers requiring such results.

6. Adoption of this automated test system will result in faster turnaround and more consistent results.

Referral of a Patient to the UCDVH

The **University Veterinary Hospital (UCDVH)** acts as a referral centre for all veterinary practices, covering all species, in Ireland.

To Refer a Patient:

It is our goal to provide the best medical care that can be achieved for your patients, and the best experience possible for your clients. We want your clients to return to you pleased with your primary care and pleased that you recommended that they visit the UCDVH.

To refer an animal, please complete the **UCDVH Animal Referral Request Form** and email it with any relevant histories, images and reports to vethub@ucd.ie. In cases of emergency, please telephone the Hub Coordinator directly (please email vethub@ucd.ie if you do not have the telephone number). Access to the Hub is restricted to veterinary practice staff only.

On discharge, a clinician will contact you, either by telephone or by letter. You will be given detailed information of diagnostic tests and procedures carried out, diagnosis and the type of treatment prescribed.

If you have any queries relating to the treatment of a case you referred, please contact the clinician involved, the UCDVH Clinical Director or, in the case of accounts, UCDVH Reception.

Opening Hours and Contact Numbers

Veterinary Hospital Reception

Tel: (01) 7166002 Accounts: (01) 7166007

Mon-Fri 9am to 5pm

vethospital@ucd.ie

Diagnostic Imaging

Tel: 01 7166098

vetdiagnosticimaging@ucd.ie

Dispensary

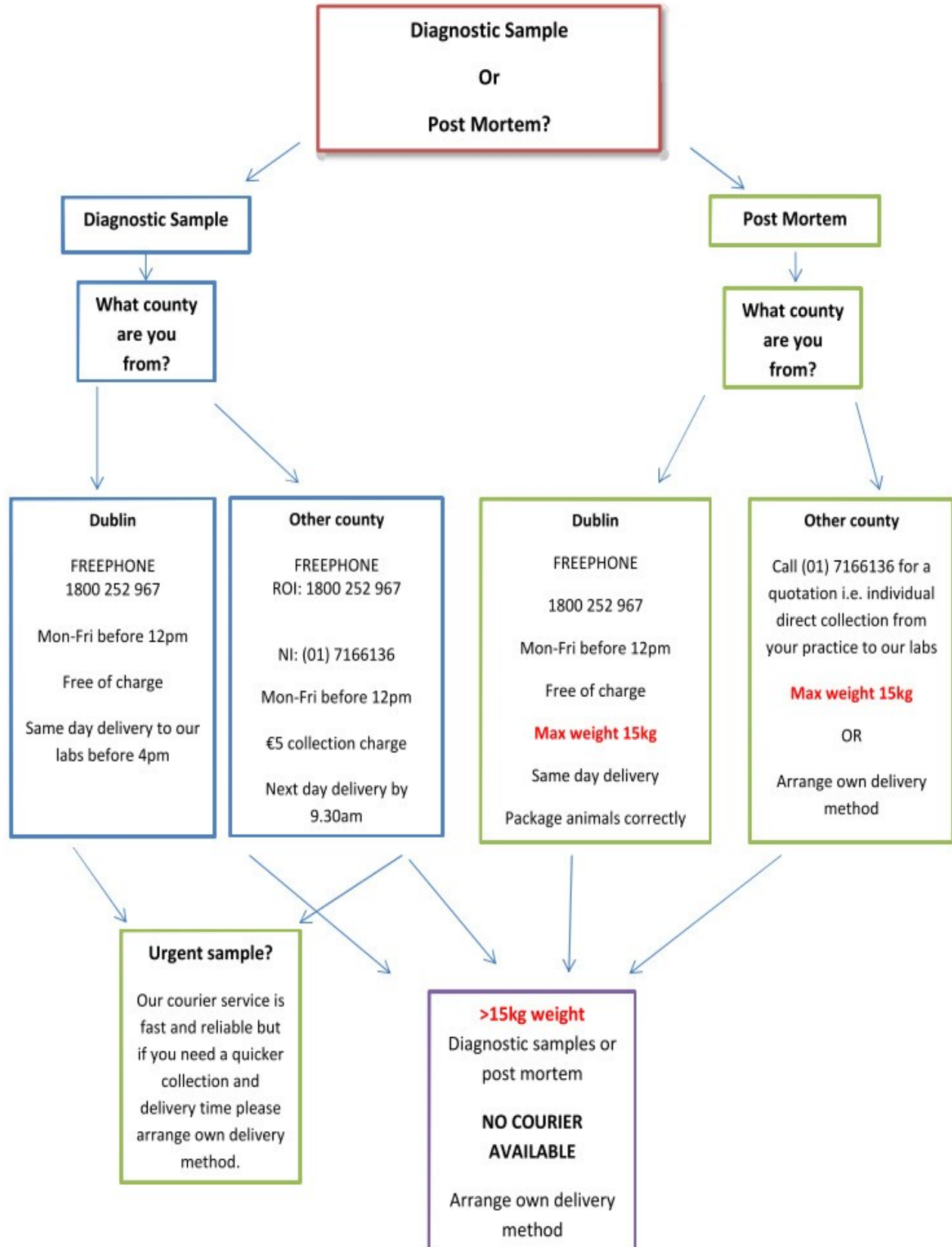
Tel: (01) 716 6010

Vet Hub

vethub@ucd.ie



Courier Service Guide



A-Z Complete Laboratory Test Index*

(*referral tests may be subject to price change in 2018)

Test Name	Sample Type	€ incl vat	Result	Comments
ACETLYCHOLINE RECEPTOR ANTIBODY	1 ml serum	125	Contact lab	Referral test
ACTH STIM TEST (CORTISOL X 2)	0.5ml plasma (pre & post)	49	2-3 days	See Protocols page 12
AHT (ANTI THROMBIN 111)	Contact lab	68	Contact lab	Contact 01 7166161
ALBUMIN	0.3 ml serum/plasma	10	Same day	
ALDOSTERONE (single)	Contact lab	59	Contact lab	Contact 01 7166161
ALP	0.3 ml serum/plasma	10	Same day	
ALT	0.3 ml serum/plasma	10	Same day	
AMYLASE	0.5 ml serum/plasma	10	Same day	
ANGIODETECT INC MOD.BAERMANN	0.5 ml serum/plasma & 10g faeces	19	1 – 2 days	<i>Angiostrongylus vasorum</i> screen
ANTINUCLEAR ANTIBODIES (ANA)	0.5ml serum	91	1-7 days	Referral test
ASPERGILLUS SEROLOGY	0.5ml serum	65	7 days	Referral test
AVIAN PROFILE	Contact lab	-	2-3 days	Contact 01 7166161
BILE ACID STIMULATION	2 x 1ml serum	20	Same day	Pre and Post Prandial
BILE ACIDS (1 sample)	1ml serum	15	Same day	
BIOPSY	Fixed Tissue	50	5-7 days	Up to 4 blocks/case
BLOOD GROUPING (Feline)	1ml EDTA	41	Same day	
BLOOD TYPE (Canine)	1ml EDTA	41	Same day	
CALCIUM	0.5 ml serum/plasma	10	Same day	
CBC (includes Retics)	1ml EDTA	25	Same day	
CHLORIDE	0.5 ml serum/plasma	10	Same day	
CHOLESTEROL	0.3 ml serum/plasma	10	Same day	
CK (CREATININE KINASE)	0.3 ml serum/plasma	10	Same day	
CLOTTING TIMES (each)	1ml Sodium Citrate	15	Same day	
COBALAMIN	0.5ml serum	20	2-3 days	
COGGINS TEST (EQUINE)	1ml whole blood	30	5 days	Equine haemolytic anaemia
COOMBS TEST	1ml EDTA	81	Contact lab	Contact 01 7166161
COPPER	0.5 ml serum	15	Same day	
CORTISOL	1ml serum/plasma	29	2-3 days	

CREATININE	0.5 ml serum/plasma	10	Same day	
CROSS MATCH	Contact lab	102	Same day	
CRYPTOSPORIDIUM (stain)	Fresh faeces	9.50	Same day	
CRYPTOSPORIDIUM/GIARDIA ANTIGEN	2gm faeces	22	Same day	
CULTURE (BLOOD)	Blood	37	Contact lab	See page 19
CULTURE (EYE, WOUND, EAR etc)	Swab	42	2-3 days	See page 19
CULTURE (FAECAL)	Fresh faeces	32	3 days	See page 19
CULTURE (FAECAL) incl <i>Shigella</i> & <i>Yersinia</i>	Fresh faeces	42	3 days	See page 19
CULTURE (MILK)	Fluid	30	2-14 days	See page 19
CULTURE FLUIDS (BAL,CSF,JOINT etc)	Fluid/aspirate	42	2-14 days	See page 19
CULTURE (SWAB)	Swab	42	2-3 days	See page 19
CULTURE URINE	Urine	37	2-3 days	See page 19
CYTOLOGY (FNA + FLUID ANALYSIS)	1ml EDTA	50	1 week	
D-DIMERS	Sodium citrate	38	Same day	
DERMATOPHYTE CULTURE	Skin	23	Up to 21 days	
DIGOXIN		41	Contact lab	Referral test
DISTEMPER VIRUS SEROLOGY	1ml EDTA	51	7 days	Referral test
EHRlichia CANIS ANTIBODY	1ml serum	107	Contact lab	Referral test
ELECTROLYTES		15	Same day	
ENDOGENOUS ACTH	EDTA	64	Contact lab	Contact lab
ENVIRONMENTAL SCREENING	Swab	15	1-2 days	
ERYTHROPOIETIN	1ml serum	106	4 weeks	
FAECAL CULTURE (parasite larva)	Fresh faeces	33	7 days	Larval ID
FAECAL EGG COUNT	Fresh faeces	9.50	1-2 days	McMaster Technique
FAECAL EXAMINATION PREMIUM	Fresh faeces	25	1-2 days	
FAECAL EXAMINATION ROUTINE	Fresh faeces	19	1-2 days	
FAECAL OCCULT BLOOD EQUINE	Large quantity of faeces (~50gms)	22	1-2 days	Contact 01 7166168
FDP (FIBRIN DEGRADATION PRODUCTS)	Sodium Citrate	19	Same day	
FeLV TEST	Serum or plasma	17	Same day	
FELINE PANCREATIC LIPASE	1 ml serum	50	Same day	
FIBRINOGEN	Serum or plasma	15	Same day	

FIV	1ml serum	17	1 day	
FLUKE (Rumen/Liver)	Fresh faeces	9.50	1-2 days	
FOLATE + COBALAMIN	1ml serum	45	2-3 days	
FOLATE	1ml serum	25	2-3 days	
FREE T4	0.5ml serum	55	Contact lab	Referral test
FRUCTOSAMINE	0.5ml serum	15	Same day	
GIARDIA SNAP TEST	Fresh faeces	19	1-2 days	
GLOBULIN	0.5ml serum/plasma	10	Same day	
GLUCOSE	0.5ml fluoride oxalate	10	Same day	
GLUCOSE TOLERANCE TEST	Fluoride oxalate x 9	29	Same day	
GPx	Heparinised plasma	15	Same day	
GRAM STAIN		12	Contact lab	
HAEMOBARTONELLA PCR	1ml EDTA	51	Contact lab	Referral test
HEARTWORM ANTIGEN	1 ml serum or plasma	35	Contact lab	Referral test
HERPES VIRUS PCR-CANINE	Contact lab	51	Contact lab	Referral test
IgE TESTING (Skin Allergy)	>2ml serum	217	Contact lab	Referral test
IGF-1	1ml serum	90	Contact lab	Referral test
INHIBIN	Contact lab	90	Contact lab	Referral test
INSULIN (Canine/Equine)	1ml serum	49	Contact lab	Referral test
IODINE (plasma inorganic)	1ml serum	35	Contact lab	Referral test
IRON	0.5ml serum	18	Contact lab	Referral test
LDDS (Cortisol X 3)	0.5ml plasma x 3	65	2-3 days	See protocol page 13
LEAD (Blood)	1ml EDTA whole blood	31	Contact lab	Referral test
LEPTOSPIRA (DNA) PCR	1ml serum	51	Contact lab	Referral test
LUNGWORM SCREEN	Fresh faeces	9.50	1-2 days	Modified Baermann test
LYME DISEASE	0.5ml serum	45	Contact lab	Referral test
MAGNESIUM	1ml serum	10	Same day	
MASTICATORY MUSCLE MYOSITIS	1-2ml serum	160	Contact lab	Referral test
MRSA SCREENING (External)	Swab etc	22	2-3 days	
NEOSPORA ANTIBODY (Canine)	0.5 serum	35	2 days	
OCCULT BLOOD (Equine)	50 gm faeces	22	Same day	
OESTRADIOL	0.5ml serum	63	Contact lab	Referral test

OHP-17-OH-PROGESTERONE	Serum or plasma	110	Contact lab	Referral test
PARTIAL THROMBOPLASTIN TIME	Sodium Citrate	15	Same day	
PARVOVIRUS SNAP	Faeces	20	Same day	
PHENOBARBITAL	0.5ml serum	35	Contact lab	Referral test
PHOSPHOROUS	0.5ml serum/plasma	10	Same day	
POST MORTEM LARGE/FARM ANIMAL	Carcass	0	Contact lab	Documents required see *pg 16
POST MORTEM LEGAL/COMMERCIAL	Carcass	-	Contact lab	Contact Lab in Advance
POST MORTEM SMALL ANIMAL	Carcass	60	Contact lab	Contact Lab in Advance
POTASSIUM	0.5ml serum/plasma	10	Same day	
POTASSIUM BROMIDE	1ml serum	33	Contact lab	Referral test
PROGESTERONE (canine ovulation monitor)	1ml serum	40	Contact lab	Ovulation in Advance
PROTEINS TOTAL	0.3ml serum	15	Same day	
PROTHROMBIN TIME	Sodium Citrate	15	Same day	
PTH PLASMA	EDTA	106	Contact lab	Contact Lab in Advance
PTH RELATED PEPTIDE	EDTA	114	Contact lab	Contact 01 7166161
RABIES TEST	Serum	91	Contact lab	Contact 01 7166161
RELAXIN	1ml heparinised plasma	41	Contact lab	Sample day 28+ of gestation
RHEUMATOID FACTOR (Canine/Feline)	1ml serum	54	Contact lab	Referral test
SARCOPTES SEROLOGY	1ml serum	66	Contact lab	Referral test
SERUM PROTEIN ELECTROPHORESIS	0.5ml serum	31	Contact lab	Referral test
SEX HORMONE ALOPECIA PROFILE	2 x 0.5ml serum/plasma	96	Contact lab	Contact 01 7166161
SKIN ECTOPARASITES (Direct KOH)	Scrape/pluck	15	Same day	
SKIN PROFILE COMPLETE (Direct/swab/fungal culture)	Skin	45	2-21 days	
SODIUM	1ml serum/plasma	10	Same day	
TESTOSTERONE	0.5ml serum/plasma	40	Contact lab	Referral test
TLI CANINE	1ml serum	56	2-3 days	
TLI FELINE	1ml serum	58	Contact lab	Referral test
TLI, B12, FOLATE (Canine)	2ml serum	88	2-3 days	
TOTAL T4	0.5 ml serum/plasma	29	2-3 days	
TOTAL T4/TSH	1ml plasma/serum	61	2-3 days	
TOXOPLASMA IgG/IgM	0.5ml serum	62	Contact lab	Referral test

TOXOPLASMA ANTIBODIES	0.5ml serum	30	1-2 days	
TRH STIMULATION TEST	Contact lab	98	2-3 days	Referral test
TRIGLYCERIDES & CHOLESTEROL (LIPIDS)	0.5ml serum	15	Same day	
TRITRICHOMONAS PCR	Fresh Faeces	55	Contact lab	Contact lab 01 7166161/68
TROPONIN	0.5ml separated serum	46	Contact lab	Referral test
TSH	0.5ml plasma/serum	32	2-3 days	
UREA	0.3 ml serum/plasma	10	Same day	
UREA AND CREATININE	0.5ml serum/plasma	15	Same day	
URINALYSIS	>2mls fresh urine	20	Same day	€15 as a profile add-on
URINE CREATINE/CORTISOL RATIO	Urine	55	Same day	Referral test
URINE PROTEIN ELECTROPHORESIS	1ml Urine	45	Contact lab	Referral test
URINE SPECIFIC GRAVITY	2ml Urine	5	Same day	
URINE: PROTEIN/CREATININE RATIO	5ml Urine	15	Contact lab	
UROLITH ANALYSIS	Urolith	Free	4 weeks	Contact 01 7166136 for submission form
VITAMIN E TEST	1 ml serum	46	Contact lab	Referral test
VON WILLEBRANDS FACTOR (incl courier)	Sodium citrate plasma on ice	159	Contact lab	Contact lab
VON WILLEBRANDS PCR		108	Contact lab	Additional courier charge
ZINC	0.3 ml separated serum	10	Contact lab	*See page 6 for correct tube