



Association of Veterinary Students



Clinical EMS guide

Written by students, for students

Written by students, for students

Each university has its own specific variations in its requirements for clinical Extra Mural Studies (EMS) – AVS accepts no responsibility for contradicting any of these.

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Vets4Pets



British Veterinary Association (BVA) student members receive free EMS insurance

Going out on EMS each year can be stressful enough without having to worry about what will happen if you have an accident while on placement. BVA provides free EMS insurance cover for every BVA student member which includes personal liability and personal accident insurance, and a hospital cash package should you undergo treatment requiring inpatient stay. These benefits are only applicable while directly involved in the university tutorial activities or associated work experience. For more information visit: www.bva.co.uk/students and visit **BVA Blog** for Lloyd & Whyte's *What insurance is required while on EMS*.

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Applying for EMS

Finding a placement

This can be done in many ways – one of the best ways to start is to do an internet search for the vets in the area you would like and then refine it from there. Recommendations by other students, farmers or your university are also great ways to find placements.

Contacting the placement

The first step is often a phone call so you can introduce yourself and find out who to contact directly, usually by email. You may be asked to submit a CV or an application form. Make sure you are prepared with the key questions:

- ▶ Dates you are and aren't available – try and have at least three different sets of dates. Also consider if the practice will be seasonally busy: farm placements are usually busiest in the spring and autumn, whereas small animal practices are usually busy all year round.
- ▶ What to wear – do they provide scrubs for you to wear in surgery or if you are expected to bring your own?
- ▶ What to bring – see the individual sections for our top tips!
- ▶ Where and when to arrive – where would they like you to park?

When to book a placement

This depends on what sort of placement you want to book, when your university requires your paperwork to be submitted by and how determined you are to go to a particular practice. Some placements, such as exotic, referral or farm (in some places) are likely to get booked up more quickly than a small animal practice simply because there are less of them. The general rule of thumb is try to book as early as possible to avoid disappointment – you may have to book a year in advance for some placements.

After your placement

- ▶ Say thank you – a card and cakes always go down a treat!
- ▶ Reflect on what you've learnt and the progress you've made.
- ▶ Make sure you and the practice have filled out the right paperwork.

EMS grants

AVS are offering their inaugural clinical EMS grants during the academic year of 2018–19. Five grants, each worth £200, will be available, kindly sponsored by VDS. Details of how to apply for the grants can be found on our website, www.avsukireland.co.uk



EMS placements abroad

Insurance designed for tourists is usually not sufficient for EMS, so make sure you have adequate travel/health insurance for the period you are away.

Making the most of your placement

You get as much out of your placement as you put into it. It is your responsibility as a student to work with the practice regarding your expectations and what you wish to get out of your time there.



Small animal and domestics



What to expect on EMS in this area?

Small animal practices are available in a huge variety and across the UK. They cover a wide variety of species including small mammals as well as cats and dogs. Don't just focus on specialist or referral practices, first opinion practices will often enable you to get more hands-on experience. Try to build a rapport with a good practice and then spend several weeks with them throughout third, fourth and fifth year.



Some key things vets wish you would revise or practise before you undertake EMS in their area

- ▶ Common drugs, how they work and what they are used for, specifically:
 - Antibiotics (preferred first line of antimicrobial therapy)
 - Anti-inflammatories
- ▶ A knowledge of anaesthesia techniques/sedation.
- ▶ Basic animal handling and clinical examination skills.
- ▶ How to follow aseptic procedures in theatre.
 - Make sure you are aware of all aseptic areas, and don't touch anything unless asked to when assisting a sterile operation.
- ▶ Injection sites.
- ▶ Techniques and calculations for fluid therapy.
- ▶ Radiographs.
- ▶ Gestation periods for common species.
- ▶ Basic TPR (temperature, pulse and respiration) values for common species.



“I wish I had known”

- ▶ Keep notes whilst on EMS. It's difficult, but definitely a good habit to get into. It is also worth noting that you are expected to record and reflect on your EMS experiences, as this is a RCVS requirement designed to get us into good habits for after graduation. The details of requirements for this vary between the vet schools.
- ▶ Have realistic goals for the stage you are at and your existing skills. Also, don't be disheartened if friends seem to be doing more practical procedures.
 - The first time you scrub-in might just be passing instruments, but that will help learning their names and what they are for – the next time you might get to do some suturing!
- ▶ Be kind to the nurses, they will look after you and help you out so much! They are your first port of call to help you learn a procedure (e.g. handling or restraining dogs/cats).
- ▶ If you are unsure about handling an animal, ask someone – don't do it without asking for help if you feel uncomfortable. If you are eager to help them out, an offer usually results in a very grateful response and will almost certainly pay dividends in the long term.
- ▶ Be prepared that you won't always see textbook, gold standard techniques in practice – but don't bring these into your exams! You'll see many different approaches for the same technique, which could be something as simple as giving an IV injection.
 - How you are taught to give injections in the university hospital may be very different to the way you were shown on EMS, or during your first opinion rotation. Learn how your supervising vet would like you to do things to stay out of trouble, but in the end you will find your own preference.
- ▶ Brush up on common cat and dog breeds!
- ▶ When you are comfortable in a practice, try to put yourself forward for the things you find most difficult – for example if you've not had much experience with putting catheters in cats, ask a vet “if it's possible, the next time a suitable case comes in would you mind talking me through it?”



Common jobs/opportunities on EMS

- ▶ History taking
- ▶ Handling and restraint
- ▶ Measuring/recording:
 - Temperature
 - Respiration rate
 - Pulse
 - Heart rate
- ▶ Injections:
 - Subcutaneous
 - Intramuscular
- ▶ Vaccination procedure
- ▶ Oral administration of drugs
- ▶ Skin scraping
- ▶ Nail clipping
- ▶ Bandaging procedures
- ▶ Expression of anal sacs
- ▶ Taking a blood sample
- ▶ Performing and interpreting urinalysis/blood test
- ▶ Surgical procedures:
 - Pre-anaesthetic check
 - Decide what induction agent(s) to use
 - Considered fluid therapy
 - Position and drape the patient
 - Assist with small animal neutering



Don't forget you'll need to gain a good understanding for normals as well, so any opportunity to do a clinical exam is a good opportunity, be it a healthy dog in for a booster, or a dog with a differential diagnosis as long as your arm.



Vital equipment to take with you

Essential:

- ▶ Stethoscope
- ▶ Thermometer
- ▶ Notebook and pen
- ▶ Watch with second hand (to measure heart/respiratory rates)

Recommended:

- ▶ Pen torch
- ▶ Curved scissors
- ▶ Calculator



Any stand-out places to see practice with?

- ▶ Vets4Pets have 30 EMS bursaries annually worth £720 each and have an online search and booking tool. They also have an EMS toolkit for students and practices.
- ▶ Cats Protection and Dogs Trust both provide subsidised placements. Students will be able to claim back up to £100 following the production of accommodation, travel or subsistence receipts. This also relies on the production of a report detailing a relevant canine or feline issue within one month of the placement. Reports are eligible for prizes of varying amounts. Dogs Trust placements last two weeks and are available at a variety of locations, while Cats Protection placements are one-week long and available at the National Cat Centre, Sussex (the largest cattery in Europe).
- ▶ PDSA list all their available EMS placements on their website, and they tend to offer lots of surgical exposure.
- ▶ Vets Now offers around 100 placements a year, each one or two weeks long, to fourth and fifth years. This is an excellent chance to see emergency and critical care cases. They recommend booking early (details on website).



Farm animal



What to expect on EMS in this area?

Farm animal placements can be one of the most rewarding placements but also the most time-consuming. You will often work long hours doing physically hard work but it is definitely worth it! You will be given a great insight into the farming world and are often allowed to be more hands-on than on other placements. It is worth considering the practicalities of doing farm placements – many practices will expect you to have your own car, and you are likely to see and be able to learn more if you go at certain times of the year (you're likely to see most at Easter, and least in late summer).



Key things vets wish you would revise or practise before you undertake EMS in their area

- ▶ Clinical examinations
- ▶ Knowledge of the practice and local farming area
- ▶ Livestock handling skills
- ▶ Production systems/cycles
- ▶ Infectious diseases
- ▶ Procedure for a bull fertility test
- ▶ Prostaglandin/GnRH injections e.g. OVSynch protocols
- ▶ When to use PRIDs/CIDRs



“I wish I had known”

- ▶ Brush up on your farming terminology.
- ▶ You will spend a lot of time in the car with the vet, which provides an excellent opportunity to ask what you're about to go and see/do – it is sometimes better to ask then, rather than on the farm.
- ▶ Take advantage of toilet opportunities!
- ▶ Before heading home, check the practice diary for the following day (if there's a visit booked in early, you'll want to arrive earlier to avoid missing out).
- ▶ Know the value of good home baking!



Common jobs/opportunities on EMS

- ▶ Blood sampling
- ▶ Pregnancy diagnosing cows (PD-ing)
- ▶ Dehorning
- ▶ Assisting with caesareans
- ▶ TB testing
- ▶ Foot trimming



Don't forget you'll need to gain a good understanding for normals as well so any opportunity to do a clinical exam is a good opportunity be it a healthy dog in for a booster or a dog with a differential diagnosis as long as your arm.



Vital equipment to take with you

Essential:

- ▶ Wellies (preferably steel toe capped)
- ▶ Clean waterproofs (a spare set can be useful in case your first set get soaked)
- ▶ Another set of clean clothes
- ▶ Stethoscope and watch
- ▶ Lunch (take this with you on call outs – you never know when you'll get back to the practice!)

Recommended:

- ▶ Hat and warm layers (bodywarmers are great as they leave your arms bare)
- ▶ Scrub brush and bucket (allows you to wash down at the same time as the vet, rather than awkwardly waiting for them to finish)
- ▶ Notepad and pen



Any stand-out places to see practice with?

There are many brilliant farm veterinary practices across the country. In some areas they are likely to be part of a mixed practice so may require further investigation into what percentage farm work they do. It is worth booking early to try and ensure that you can do a placement in the spring and autumn; however, placements in the summer are still worthwhile.

Nationwide farm vets include:

- ▶ Westpoint Farm Vets (tend to get booked early)
- ▶ XL Vets (have a useful EMS section on their website)
- ▶ CVS Farm

Farm practices at the vet schools (e.g. Langford Vets) will usually take students in the holidays when they have no rotation students. This provides a good opportunity for excellent teaching.



Equine



What to expect on EMS in this area?

Equine clinical EMS can vary vastly depending on where you are seeing practice. Some places will allow you to do more than others mainly due to how valuable the horses are. In most places you are there to assist the vet and learn the safe way to treat and handle horses



Key things vets wish you would revise or practice before you undertake EMS in their area

- ▶ Normal anatomy
- ▶ Vaccination protocols
- ▶ Pharmacology of equine drugs
- ▶ Basic lameness examination
 - Including common reasons for lameness
- ▶ Causes of weight loss
- ▶ Normal reproductive cycle of a mare
- ▶ Types/causes of colic



“I wish I had known”

- ▶ Which radiographs are necessary for vettings
- ▶ A brief overview of how the industry runs (e.g. show jumping or racing)
- ▶ Withdrawal times for drugs in competition horses



Common jobs/opportunities on EMS

- ▶ Holding horses for vettings
- ▶ Collecting jugular blood samples
- ▶ Giving IM or IV injections
- ▶ Assisting with diagnostic x-rays
- ▶ Trotting horses up for lameness exams
- ▶ Being part of a lameness investigation discussion



Don't forget you'll need to gain a good understanding for normals as well so any opportunity to do a clinical exam is a good opportunity be it a healthy dog in for a booster or a dog with a differential diagnosis as long as your arm.



Vital equipment to take with you

- ▶ Pen and notepad for taking notes
- ▶ Appropriate clothing for working with horses
- ▶ Stethoscope



Any stand-out places to see practice with?

- ▶ Newmarket Equine Hospital
- ▶ The Philip Leverhulme Equine Hospital in Liverpool



Exotics



What to expect on EMS in this area?

Exotics can be a challenging but rewarding EMS placement – you definitely should be ready for a challenge! You never know what is going to walk in the door – it could be anything from a lion to a snail and anything in between! Exotic placements offers the most varied experience you are likely to see and is definitely never boring. A positive can-do attitude and a logical approach to each case is vital to get the most out of the experience.



Key things vets wish you would revise or practice before you undertake EMS in their area

- ▶ Husbandry (what each species needs – UV light, enrichment, etc.)
- ▶ Diet
- ▶ Handling
- ▶ Common issues (metabolic bone disease)
- ▶ Anatomy (especially birds)



“I wish I had known”

- ▶ Sexing of animals (especially small furrries)
- ▶ Restraint/holding (and when to say that you're not comfortable holding an animal – big snakes!!)
- ▶ Normal lifespan
- ▶ Reproductive activity and parity of different species
- ▶ Parasites
- ▶ Vaccination protocols and normal reference ranges for rabbits.



Common jobs/opportunities on EMS

- ▶ Observing and conducting consults
- ▶ Setting up enclosures
- ▶ Helping with handling and restraint
- ▶ Basic clinical procedures (injections and helping administer anaesthesia)



Don't forget you'll need to gain a good understanding for normals as well so any opportunity to do a clinical exam is a good opportunity be it a healthy dog in for a booster or a dog with a differential diagnosis as long as your arm.



Vital equipment to take with you

- ▶ Stethoscope (if you have a small paediatric stethoscope this can be useful)
- ▶ Watch
- ▶ Notebook and revision
- ▶ Food and pens (these are vital)



Any stand-out places to see practice with?

- ▶ Zoos (Chester, Paignton, Twycross, Bristol, Edinburgh, ZSL (London and Whipsnade) – some zoos only take students at particular times or from certain universities)
- ▶ Both Port Lympne Safari Park and Woburn Safari Park have on-site vets.
- ▶ Great Western Exotic Vets (Swindon) – a 24/7 veterinary hospital specialising in species including: birds, reptiles, mammals, amphibians, arthropods, fish and many more!
- ▶ The Fish Vet Group (Inverness and County Galway) – this specialised aquaculture centre is involved in the whole aquaculture process from consults to diagnostics to identifying the process' environmental impact.
- ▶ There are many veterinary practices across the UK and Ireland which combine Small Animal and Exotic medicine. This is normally advertised on their websites.
- ▶ RSPCA Wildlife Centres – there are four locations across the UK: East Winch in Norfolk, Mallydams Wood in East Sussex, Stapeley Grange in Cheshire and West Hatch in Somerset. These provide specialised care for the rehabilitation of wildlife.

Other options for EMS

Congresses

Some universities let you count attending congresses as clinical EMS (usually up to two weeks but check with your uni). Congresses can be a fantastic chance to attend a wide range of lectures and practicals you may not get to attend otherwise for a competitive price! For example, AVS Congress has featured wildlife dissection, panel discussions on the future of farming practice and police dog practicals! (Plus they usually have a fantastic nightlife too!) Conferences such as BSAVA Congress, BEVA Congress, London Vet Show and SPVS final year vet seminar at Lancaster all usually have student rates on offer.

Ask your AVS Rep for ticket information about this year's AVS congress and keep a close eye on the AVS Facebook for the latest updates.

Business EMS

Opportunities to undertake EMS and improve your business skills are also available at companies such as Onswitch (www.onswitch.co.uk – at present Nottingham only), Vets4Pets or even at the *Vet Record*! These opportunities allow you to improve your understanding of veterinary business and practice management which will be valuable when you working in practice.

APHA/Government

Got an interest in surveillance? Or Field Operations? Or Border control? Or Laboratory work? Then EMS with the APHA may be for you – head over to the APHA EMS page or email your EMS team who can sort you out with an application form and details of the vaccinations (e.g Tb) that you must have beforehand. For lab work you could also contact the Lab Animal Veterinary Association for research lab EMS.



Worshipful Company of Farriers

Got an interest in equine work and farriery? Then keep an eye out each year for an email from your EMS office advertising how you can apply for a week of funded EMS with the worshipful company of farriers – one place per year per university.

IVSA EMS Exchange

As well as the fantastic group exchanges your IVSA rep can work with the Exchange Officer to set up an individual exchange for you to go abroad and see practice get in contact with your IVSA rep to find out more!

Many other EMS opportunities are available so keep an eye out for events, conferences and other opportunities that you may be able to count! If you're ever unsure it's always worth emailing your uni's EMS office to see if it will count.

EMS at Vets4Pets

See where it could take you...

At Vets4Pets and Companion Care we and our practice owners love to invest in and support talent.

We know EMS provides a key part of a student's transition from the lecture theatre to becoming a practicing vet and that the best EMS provides a safe and supportive environment to practice clinical skills and put academic learning to use in the real world.

With over 450 surgeries of all shapes and sizes spread around the UK including in Northern Ireland we'll have a small animal practice to meet your requirements. Many of our practices have certificate holders and vets and vet nurses with specialist interests so whether you're looking to nail down the basics or develop an interest in anything from exotics to orthopaedics to medicine we'll have a surgery which will meet your requirements.



Here are the facts!

- Partner owned surgeries with a nationwide footprint
- Unique EMS bursary scheme
- Online booking system
- EMS toolkit and support for practices
- Business EMS placements
- Specialist centre EMS opportunities



To find out more and to apply visit:
www.vets4pets.com/ems
or email: ems@vets4pets.com

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