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Journal of the British Veterinary Association



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1. E. Grandemange (2013) Field evaluation of the efficacy and the safety of cimicoxib in the relief of perioperative pain in dogs. Journal of Small Animal Practice 54 (6), 304-312.



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# Vet Record

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This journal's mission is to deliver high quality, relevant and engaging research, news and debate to help vets develop as professionals, progress their careers and improve animal health and welfare.

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# Editorial

## Moving to the next normal in 2021

IT is good to begin a new year with hope, and in the current circumstances, any glimmer of hope is much needed. The ongoing roll out of vaccination against Covid-19 brings with it the hope that a return to normality may be on the horizon, even if that horizon feels distant.

What form that normality will take remains to be seen, and it is unlikely life will return to how it was before Covid. More probably, there will be a series of 'next normals' before the situation settles at a level that can be considered the 'new normal'.

Something that is certain though, is that the immediate next normal will include adjusting to life outside the EU. Trade deals aside, 2021 will introduce a new era for agriculture, away from the EU's Common Agricultural Policy (CAP). The newly enacted Agriculture Act provides for the phasing out of the CAP's subsidy system and its replacement with incentives for sustainable farming, rewarding farmers for 'public goods' such as higher animal welfare and environmental stewardship.

The vet professions have been taking increased interest in the environment and sustainability in recent years, as reflected by initiatives such as Vet Sustain and the BVA's #GreenTeamVet campaign, and sustainability will form a central theme of the BVA's new strategic plan for 2021–2023.

There will also be a particularly significant focus on sustainability in November this year, when the UK hosts the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change – more simply known as COP26. This major summit, postponed by a year due to the Covid-19 pandemic, will review progress with implementing the Paris Agreement on climate change and make decisions on how best to take it forward.

In terms of possible new domestic legislation in 2021, the government is currently consulting on proposals for a ban on live exports and a ban on keeping primates as pets, both of which could benefit animal welfare if implemented. The government also hinted late last year that it had plans to crack down on puppy smuggling once it was free to break away from EU rules on the movement of dogs, although it has not yet published

any detail of how it intends to do so.

Legal recognition of animal sentience would be a welcome legislative development this year. EU provisions on recognising sentience were contained within a treaty, meaning they were not automatically adopted into UK law at the end of the Brexit transition period. Despite maintaining that it intends to recognise animal sentience in UK domestic law, the government has yet to find a suitable vehicle for doing so. To that end, the BVA will be relaunching its campaign to secure legal recognition of animal sentience.

The RCVS meanwhile will be progressing the work of its Legislation Working Party (LWP). A public consultation on the LWP's proposals for reform of the legislative framework governing the vet professions closes on 27 January and the college will no doubt be setting out how it plans to take them forward in the light of comments received.

Also this year, renewed momentum can be expected in the RCVS' review of its guidance on 'under care' and 24/7 emergency cover. The pandemic scuppered the planned timetable for this review in 2020. The use of remote services for providing veterinary care will be a key discussion point, and will no doubt be informed by the experiences of the past year.

A new era begins for *Vet Record* and the BVA's other journals too as they move to a new publisher. The transfer to Wiley this month promises to boost the journals' digital presence as well as put them on a sustainable financial footing for the future.

However, if nothing else, 2020 proved that predicting the future is an inexact science. It is impossible to say precisely what the immediate future will bring, but each next normal will bring the new normal closer, and that, surely, is to be welcomed.

**Kathryn Clark**

### VET RECORD EDITORIAL POLICY

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# News & Reports

## RCVS disciplinary cases delayed in 2020

By Josh Loeb

THE number of disciplinary hearings against veterinary professionals fell by more than 75 per cent in 2020 compared with the previous year.

Just five cases (four involving vets and one involving a registered veterinary nurse [RVN]) were heard through to completion in 2020, compared with 21 in 2019.

An obvious reason for the reduction was the Covid-19 pandemic, which meant no disciplinary hearings took place between the start of the first nationwide lockdown in March and late September.

However, several other equivalent regulators did manage to hold hearings throughout the summer, reducing case backlogs going forwards.

For example, the Medical Practitioners Tribunal Service (MPTS), which handles fitness to practise cases against doctors, has been running hearings – albeit often via videolink – throughout the pandemic.

The number of hearings the MPTS held last year fell compared with 2019, but the decline was less severe than that seen with the RCVS.

In total, 143 Medical Practitioner Tribunal hearings (the main type of MPTS hearing involving doctors) were concluded in 2020, compared with 256 the previous year – a decline of 44 per cent.

The Nursing and Midwifery Council – which has not yet provided figures on how many hearings it dealt with in 2020 – also heard some interim order cases during the summer months.

So did some police force disciplinary tribunals.

In addition, the Bar Standards Board, which regulates barristers, continued to hold hearings

throughout the spring and summer in 2020.

Historically, the number of RCVS disciplinary hearings held annually has averaged around 11. However, numbers had been growing before the pandemic, peaking at 25 in 2018 (VR, 4/11 January 2020, vol 186, p 6).

Although only five disciplinary hearings were concluded in 2020, two more were started but then adjourned to a later date. In addition, a number of restoration hearings took place for vets who had been struck off and subsequently applied to rejoin the register.

At an RCVS council meeting on 3 September 2020, the college's CEO Lizzie Lockett acknowledged the delays and said the college was in the process of hiring external venues with 'big rooms' to maintain social distancing in order to restart processes that had been paused since March.

She also acknowledged that delays in holding disciplinary hearings could impact negatively on the individuals involved but said: 'It's a balance between public safety and the personal impact on those who have a disciplinary hearing hanging over them delayed indefinitely.'

Several council members are understood to be concerned about the delays and the impact on respondents.

The RCVS refused to state the current disciplinary case backlog but a spokesperson said the college had proceeded with as many disciplinary hearings as possible in 2020.

They added: 'The interests of justice are paramount when considering how hearings should be heard, and at all times the views of registrants and their representatives have been sought and taken into consideration.'

'Matters such as restoration hearings have been relatively



“  
It's a balance between public safety and the personal impact on those who have a disciplinary hearing hanging over them

straightforward and, with the consent of those involved, have been held virtually.

'Substantive cases turn on their individual facts, however, and while some may be deemed to be suitable for virtual hearing, others are not considered to be so and must be approached on a case-by-case basis.

'This approach is in line with the case law and guidance that has been issued in relation to court hearings.

'Cases involving evidence that needs to be weighed carefully, or where a witness's credibility is in question, can be difficult to conduct virtually.'

Where respondents had been offered the opportunity to have such hearings conducted remotely they had 'generally declined to do so', the spokesperson said.

'In general terms, our approach is in line with that of other regulators and the relevant case law, in that cases that can be heard have been heard, but that not all are suitable.

'Case management conferences have been conducted remotely to consider the listing and organisation of cases, but the RCVS does not have interim powers of suspension, hearings for which have formed many of the virtual cases heard by other healthcare regulators.' ●

# Post-Brexit chaos kept at bay at the ports

By Josh Loeb

WARNINGS of post-Brexit chaos at the ports appear not to have manifested themselves as the UK begins its future outside the EU.

Four-and-a-half years on from the 2016 referendum, the country left the EU single market and customs union at 11 pm on 31 December 2020.

Although the UK had already officially left the EU on 31 January 2020, a transition period meant no change to the terms of trade until the end of last year.

A deal secured with the EU in late December 2020 allows tariff-free trade in goods to continue. However, there will be some non-tariff barriers in the form of increased veterinary checks and export health certification requirements.

Many had feared negative consequences of leaving the EU's trading structures, including mooted shortages of food and medicines.

But in the first few days of post-Brexit trading, the flow of goods across the UK-EU border (and vice versa) was reported to be smooth – although some delays were reported for consignments crossing the UK from Great Britain into Northern Ireland.

Problems may yet become manifest, however. Business analysts and experts fear there could be delays and new difficulties as trading volumes

increase later this year.

Jason Aldiss, who leads on EU issues for the Veterinary Public Health Association, said: 'The test will be in April when we have the loss of the supermarket scheme [a temporary set of arrangements to smooth trade from GB to Northern Ireland].'

However, he added: 'At the moment...I'm not hearing any horror stories of certificates being poorly completed or people struggling to find vets to do the certification.'

Speaking shortly after the UK-EU trade deal was agreed, BVA president James Russell stressed that a free-trade deal 'would not remove the need for veterinary export health certification for goods moving in and out of Great Britain', which would place 'enormous pressure' on capacity.

His warning followed the release of a report by MPs on the Environment, Food and Rural Affairs Committee that stated that official veterinarians working in the food supply chain faced an increase in their workload due to more checks on exports as a result of Brexit.

The UK is heavily reliant on



EU-trained vets, particularly in public health roles, and the BVA has called for immigration policies to be designed to reflect this.

The post-Brexit arrangement has also brought fears that UK-qualified vets may

now find it more difficult to work in continental Europe. This is because the automatic mutual recognition of professional qualifications (including veterinary) has now come to an end as a result of the UK's exit from the EU's structures.

UK-qualified vets will still be recognised as vets in Ireland and vice versa, however, under an agreement between the RCVS and the Veterinary Council of Ireland, signed in 2019.

And, since the UK-EU trade deal contains provisions for additional agreements on mutual recognition, there is the possibility of future bilateral or multilateral arrangements to enable easier access to work in Europe for UK graduates.

- Graduates from EU vet schools that have been approved or accredited by the European Association of Establishments for Veterinary Education will be able to continue to register as vets in the UK, under an agreement with the RCVS.

“  
I'm not hearing any horror stories of certificates being poorly completed

## Excellence in animal welfare recognised in honours

THE University of Edinburgh's Heather Bacon was awarded an OBE in the 2021 New Year Honours.

Bacon (pictured) is the animal welfare and veterinary outreach manager at the Jeanne Marchig International Centre for Animal Welfare (JMICA) at the University of Edinburgh's Royal (Dick) School of Veterinary Studies. She was presented with the honour for 'services to veterinary education, to animal welfare and to charity in the UK and abroad'.

At the JMICA, she is responsible for organising postgraduate courses on a variety



of MSc programmes and the undergraduate veterinary curriculum in animal welfare and ethics.

She is currently completing her PhD investigating the knowledge and attitudes of zoo staff to zoo animal welfare issues in a diverse global community.

Figures working in animal health for the government were also given honours this year, with Defra's head of animal welfare policy Marc Casale being awarded an OBE, and scientist Colin Weaver and assistant scientific officer Samira Ahmad from the APHA being given the British Empire Medal.

# Funding for bovine TB safe this year

By Josh Loeb

THE UK government says it will continue to fund its £99 million bovine TB (bTB) eradication, control and surveillance programmes this year despite no longer receiving funding from the EU for them.

European financial support for the UK's bTB programmes has now ended following Brexit.

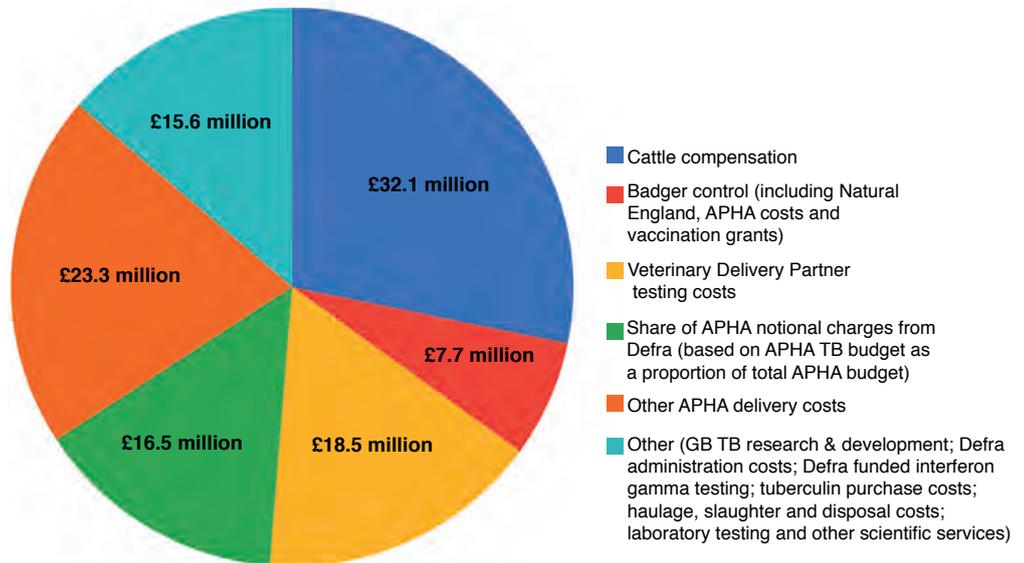
But in a statement to *Vet Record*, Defra confirmed that funding obligations to the bTB programmes would be met in full, adding that it recently received an increased share of funding from the Treasury.

Defra's total expenditure on bTB in 2019/20 totalled £113.7 million (see Graph 1). It did, however, receive EU receipts of £4.5 million and salvage receipts of £9.4 million, meaning the net cost was £99.8 million.

The funding pledge for this year follows several years of declining EU support in the run up to Brexit, which has required the UK to make up the shortfall.

Figures compiled from a variety of sources – a mixture of data from Defra and annual forecasts of funding allocations available from the European Commission – show EU allocations to the UK for bTB programmes peaked at around €31 million in 2015 and 2016 but have since declined year-on-year – hitting a low of around €3 million\* in 2020 (see Graph 2). Since Defra's net cost on bTB programmes has remained stable at around £99 million annually, the reductions have left a growing hole that the UK government has had to fill.

The UK has long relied on EU funding to support programmes to tackle the disease. Money has been paid to Defra, which in turn allocated funding to the devolved administration in Wales (Scotland is officially free of bTB) and to Northern Ireland. The EU also contributes money towards bTB eradication programmes in Ireland, Italy, Portugal and Spain.



Graph 1: Estimated costs of bTB eradication efforts to Defra for 2019/20

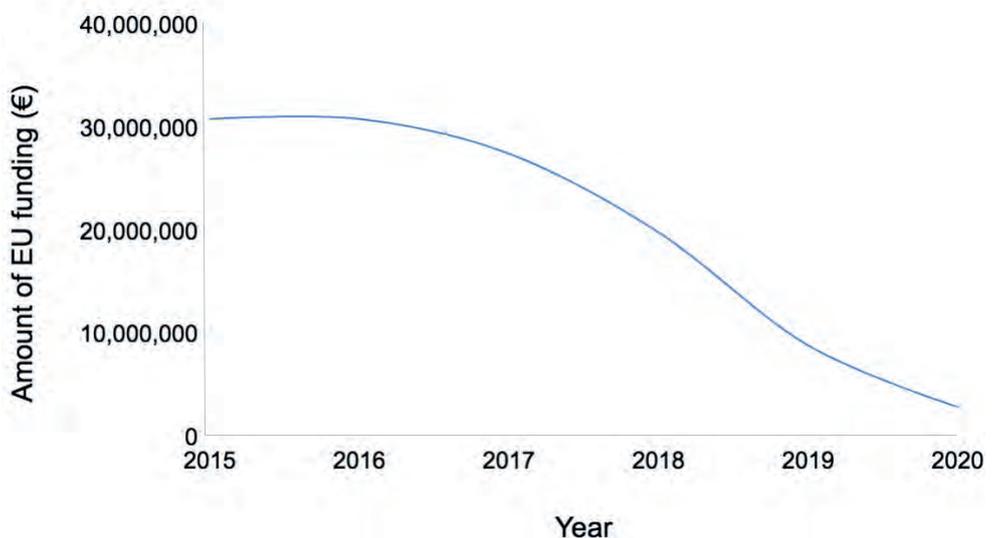
Notes: Cattle compensation represents the largest standalone cost. However, this was partially offset by £9.4 million in salvage income back to Defra; APHA 'delivery costs', eg, testing regulation, accounted for the largest proportion of the total spend. (Source: Data provided by Defra on 13 November 2020 in response to a Freedom of Information request)

An extract from a recent Welsh government report confirmed the decline in funding to the UK, stating: 'EU funding for the UK [bTB] programme has historically amounted to up to €31 million annually.'

'However, for 2017 the EU

allocated the UK €27.64 million, and for 2018 and 2019 this amount was further reduced due to reprioritisation of funding within the EU Commission.'

The UK has also been hit by a series of EU fines – amounting to millions of euros – for missing targets towards



Graph 2: EU funding to the UK for bovine TB eradication, from 2015 to 2020

achieving the eradication of bTB (VR, 3/10 October 2020, vol 187, p 250).

The European Commission has repeatedly warned the UK about its slow progress in tackling the disease and that it would apply 'financial penalties' retrospectively. It fined the UK around €2.5 million in 2017 and the penalty for 2018 is yet to be calculated but is expected to shave off 20 per cent of the funding received.

Defra insiders say the recent fall in EU funding to tackle bTB in the UK has been due to money being reallocated to other veterinary programmes that deal with high-priority diseases in Europe, such as African swine fever. This has not resulted in a shortfall, they say, as the UK government is providing all the funding necessary to help meet

the target of eradicating bTB in the UK by 2038.

The European Commission says it has allocated 'substantial funds' to support the eradication of bTB in the UK; however, its contributions have declined in recent years as priorities have shifted in Brussels.

James Russell, BVA president and a former British Cattle Veterinary Association representative for matters surrounding bTB, said that – despite a loss of EU funding – looking ahead, Brexit could bring benefits in allowing the UK more flexibility in how the disease is tackled.

He said: 'When you move away from needing your bTB programme to be signed off as an eradication programme at an EU level, that potentially gives you more scope to start thinking about novel testing

techniques. It also potentially allows you to start thinking about different biosecurity methods, and how you reward people for those as well.

'The loss of funding of course creates a shortfall – I don't want to take away from that at all, because that shortfall needs to be filled from somewhere – but there are ways that we would be able to evolve the bTB programme [in future] that we would not have as an EU state.'

\*The apparent discrepancy between the EU's allocations (€3 million) and the higher EU receipts listed by Defra (£4.5 million) arises because EU allocations are calculated by calendar year, whereas Defra provides data by financial year, meaning some of the 2019 EU allocation was received by Defra in 2019/20.



**The loss of funding of course creates a shortfall**

## Record high for badgers 'shot but wounded and lost'

THE proportion of badgers that are shot at but not necessarily killed as part of bovine TB (bTB) culling operations has reached an all-time high.

Each year Natural England monitors a small proportion of cull activities carried out by controlled shooting contractors – 'free-shooting' as opposed to cage-trapping incidents.

In 2019 (the most recent year for which figures are available), out of 149 such events observed by Natural England, six (4 per cent) were categorised by the agency's observer as ones in which the target animal was 'shot but wounded and lost'.

A further 11 (7 per cent) were categorised as 'shot at but missed', giving an overall total of 17 (11 per cent) listed as 'shot at but not retrieved'.

In the majority of observed controlled shooting events (72 per cent) the target animal was recorded as having 'dropped to the shot'.

Of the remaining 17 per cent, animals were all observed moving a short distance and then dropping after having been shot, or they fell after follow-up a shot(s).

Defra began publishing annual

data of this type in 2015. In that year, no badgers were recorded as having been 'shot but wounded and lost' during Natural England observed culling activities.

However, percentages for 2016, 2017 and 2018 were 2.6 per cent, 1 per cent and 3 per cent, respectively.

Overall around 100,000 badgers have been killed since badger culling was first piloted in 2013.

Badger ecologist Andy Robertson said 'shot but wounded and lost' figures might 'suggest that [overall] a significant number of badgers – many thousands – have been shot at and injured, or taken some time to die'.

However, he said the question of what percentage of culled badgers falling into this category would be acceptable was 'more of an ethical question than an ecological one'.

Carcasses of badgers killed in culls are meant to be incinerated at specially approved incineration



**The figures may suggest that many thousands of badgers have been shot at and injured**

plants. Classed as 'Category 1' hazardous wastes, they are, for biosecurity reasons, not meant to be left to decay in the environment.

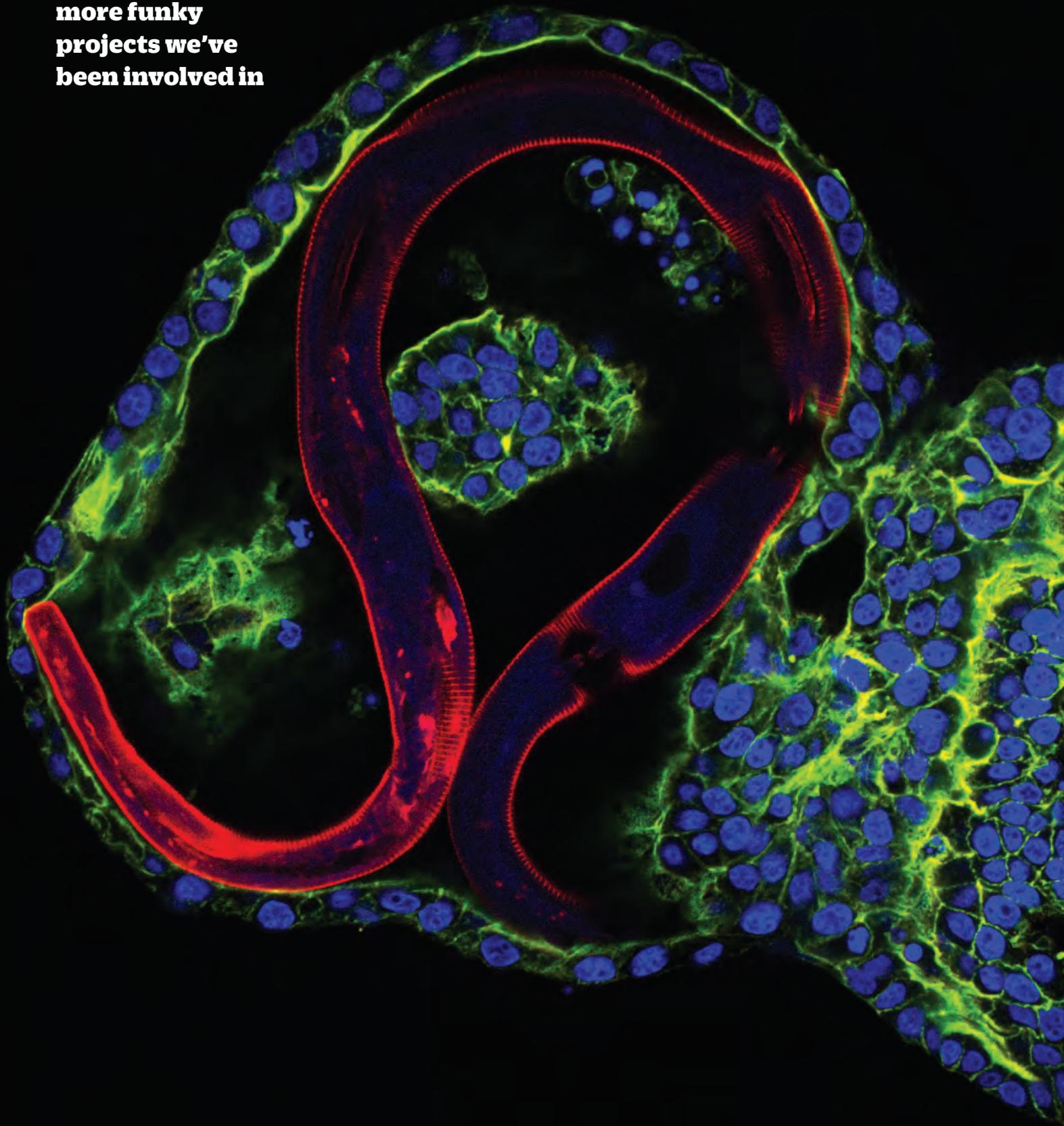
Defra said the percentage of badgers recorded as shot and wounded but lost in 2019 was broadly similar to that in 2018.

The humaneness of controlled shooting is assessed each year by the chief veterinary officer and Natural England's chief scientific adviser.

In its policy position on the control and eradication of bTB published in 2020, the BVA said it did not support the use of controlled/free shooting of badgers as 'no substantial evidence of improved humaneness has been published'.



**This is one of the  
more funky  
projects we've  
been involved in**



## Lab-grown organs to help medicines development

**Josh Loeb** discusses new techniques aiming to reduce the use of animal models in medicines' development

MINIATURE lab-grown versions of stomachs, intestines and lungs are being infested with parasites or infected with viruses to aid in the development of superior medicines.

It is hoped the groundbreaking technique could help reduce the number of mice that need to be used in experimental scientific procedures as part of a '3Rs' (replacement, reduction and refinement) approach.

At a special media event held by the Moredun Research Institute in Scotland in December last year, scientist Clare Hamilton and vet Tom McNeilly gave insights into how the technology is being used. The latter described it as 'one of the more funky projects we've been involved in'.

So-called organoids – 3D cellular structures that can be grown in the lab to reflect the organ of choice – are increasingly being used as part of work conducted at Moredun.

The picture opposite shows the *Teladorsagia circumcincta* parasite (red) in an ovine 'mini stomach' (green).

One such project involves research into *Toxoplasma gondii* parasites – single-celled organisms that are the cause of toxoplasmosis, one of the most frequently diagnosed causes of abortion in sheep in the UK. In addition, for reasons connected with differing strains of the parasite there, toxoplasmosis is regarded as a significant public health risk in parts of South America.

Hamilton explained that the idea involved 'using cells and 3D "mini guts" from different hosts' to develop 'a more relevant system for determining *T gondii* virulence and predicting disease outcome'.

'A lot of the work we do on toxoplasmosis is done in the mouse model [but] we're not exactly sure how some of the results from the mouse model extrapolate,' she said.

She added that the new approach involved using groups of cellular

tissue from the guts of mice, sheep and people to 'look at infection dynamics of the parasite'.

'We're hoping to look at the applicability of these to assess the virulence of toxoplasmosis without using the mouse model,' she explained. 'This is relevant from a 3Rs perspective, but also in that you can actually use organoids from mice, sheep and humans to assess different strains of the parasite.'

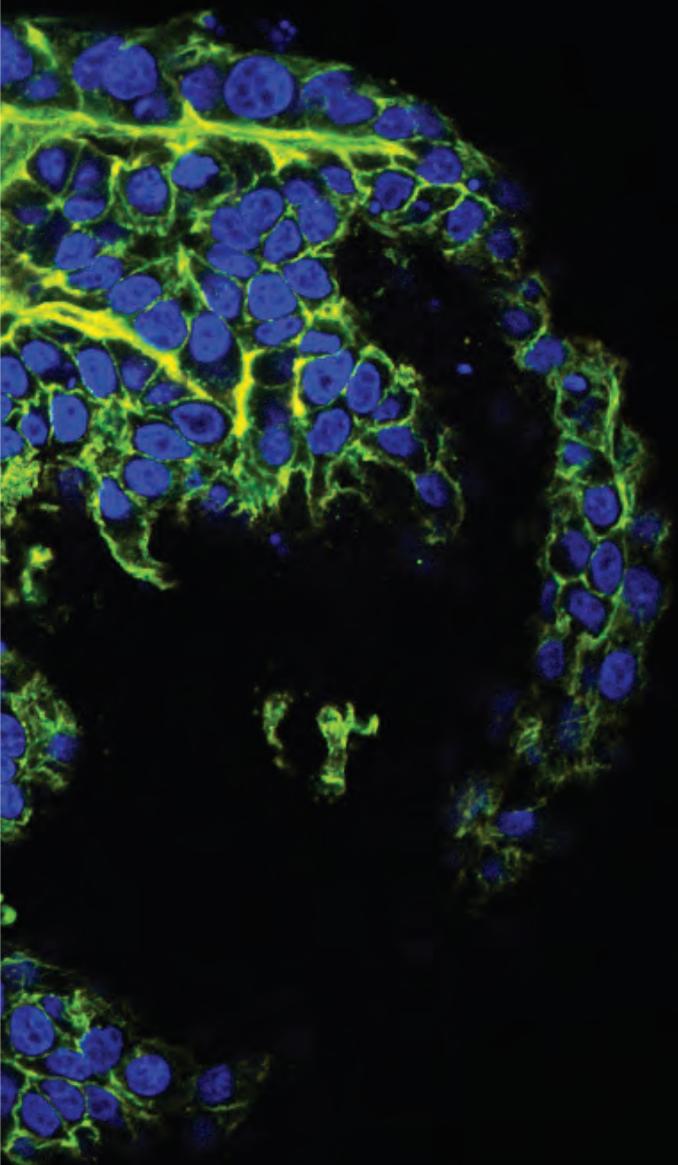
McNeilly is using similar techniques in the form of 'mini stomachs' to study the *Ostertagia ostertagi* gastrointestinal worm, a parasite that affects millions of cattle globally and is highly prevalent in the UK.

He explained: 'We knew these worms liked to interact with the lining of the stomach in the animal, but we never before knew whether they'd actually interact with our mini guts. It's really fascinating because we can put the worms into these cell cultures and on the outside of these mini guts, and they go and find the guts and burrow into them. They sort of hang out in the guts.'

'Then, after a while, they decide to come out and invade another gut. So there's a lot of really interesting novel observations we're getting from this.'

He added: 'Once we can understand how the worm is interacting with the stomach lining, we begin to understand what molecules the parasites are using to be able to survive within the gut...It's going to be a really interesting project to look at, potentially, new drug targets or ways of vaccinating animals so as to basically inactivate some of the molecules the parasite is using for this very intricate interaction with the cattle's stomachs.'

However, he added that, while organoids were, a 'fantastic technique', animal models would still be needed in order to be sure that findings observed were also represented in animals. ●



# Will the new UK lockdown affect practice?

By Josh Loeb

AS *Vet Record* went to press this week, the BVA and the RCVS were ‘urgently’ looking into what the new national lockdown rules would mean for veterinary professionals.

They aim to update their guidance accordingly now that England, Scotland, Wales and Northern Ireland are all under strict forms of lockdown – amounting to a new UK-wide lockdown equivalent to the situation in March of last year.

New lockdowns for England and Scotland were announced on 4 January with immediate effect (pending approval for some additional legislation to mandate them). Wales’ lockdown began on 20 December 2020 and Northern Ireland’s on 26 December 2020.

During the first UK-wide lockdown in March, vet practices were told to restrict themselves to providing emergency and essential services only.

But the BVA and the RCVS have insisted there will be no repeat of that injunction this time around, although neither provided an explanation as to why. Some vets have reported, however, that they have access to better provision of personal protective equipment now and greater ability to assess cases outdoors or remotely.

Defra, too, provided *Vet Record* with no explanation of why there would be no return to emergency-only work for vets. The department said RCVS guidance should continue to be followed and indicated that security of the food chain was regarded as a priority area.

During the first lockdown, veterinary work involving food-producing animals was regarded as a top priority, while the RCVS stated that safeguarding human life must be prioritised over helping animals (*VR*, 14 March 2020, vol 186, p 298).

Regular informational webinars were held for the profession in



the spring of 2020. Such was the importance of food supply that in one, the then BVA president Daniella Dos Santos even suggested that some vets should apply to stack supermarket shelves if they were not working in frontline roles (*VR*, 28 March 2020, vol 186, pp 366–367).

Covid-19 hospital admissions have now reached a higher level than at the peak in March 2020 and the UK has entered ‘Alert Level 5’, meaning there is a ‘material risk of the NHS in several areas being overwhelmed over the next 21 days’.

In a joint statement released on 4 January, the BVA and the RCVS said they were liaising with the chief veterinary officers of the UK and would be providing more information shortly.

The statement added: ‘We aim to issue updated guidance in the coming days but can confirm that we will not be reverting to emergency-only work, as we saw at the start of the first UK-wide lockdown last March.

‘Instead, we are developing guidance to support veterinary professionals to carry out work that is essential for public health

and animal health and welfare, in the context of the very strong “stay at home” messages from both governments.

‘We recognise that this continues to be a very challenging and difficult time for our colleagues, and we want to thank veterinary teams across the UK for continuing to work safely so that we can all play our part in stopping the spread of Covid.

‘Once again we thank animal owners for their understanding and ask them to continue to respect their vets’ decisions at this time. The range of services available will vary between practices so that vets can work in Covid-safe ways to keep their colleagues and clients safe.’

On key worker status for childcare purposes while schools are closed, the BVA and the RCVS pointed to a previously agreed definition of key worker that included vets working in food production and those responsible for the provision of emergency care.

They said further information would be made available on the RCVS and BVA websites as soon as possible: [www.bva.co.uk/coronavirus](http://www.bva.co.uk/coronavirus) and [www.rcvs.org.uk/coronavirus](http://www.rcvs.org.uk/coronavirus) ●



**We recognise that this continues to be a very challenging and difficult time for our colleagues**

## Views sought on microchipping cats

COMPULSORY microchipping of cats could be introduced later this year, depending on the outcome of an eight-week consultation launched by Defra just before Christmas.

The consultation is seeking views from vets and the public as part of government efforts to raise UK animal welfare standards. An earlier call for evidence on the issue indicated almost total support for the move.

It is estimated that over a quarter of the UK's pet cats are not microchipped, meaning that up to 2.6 million cats will benefit from the new measures.

The proposal for compulsory microchipping of cats follows the introduction of mandatory microchipping of dogs in 2016.

While the BVA welcomed the proposals, it urged caution, saying that any legislation around compulsory microchipping of cats must be clear in its aims and must be properly resourced.

BVA senior vice president Daniella Dos Santos said: 'Although we strongly encourage all cat owners to microchip their pet, the delivery and enforcement around compulsory microchipping of cats is complex and would need adequate resource. Before making it compulsory, the government needs to address the difficulties caused by multiple national databases and consider how feral cat populations would be managed.'

The government is also consulting on proposals to make it mandatory to scan certain dogs and cats for microchips, which have been put forward by three separate campaigns: Tuk's Law, which would make it mandatory for vets to scan cats and dogs for microchips before putting them down; Fern's Law, which would require vets to microchip cats and dogs when brought into a vet practice for the first time; and Gizmo's Legacy, to make it mandatory to scan for microchips when a cat or dog is found dead by the roadside.

The consultation closes on 16 February and can be found at <http://bit.ly/2Jujc9R>



## Wellbeing project launches survey

A KING'S College London research project looking at how upsetting workplace experiences can affect veterinary wellbeing is recruiting participants.

The study, funded by the RCVS Mind Matters Initiative's £20,000 Sarah Brown mental health research grant, aims to investigate the impact of 'moral injury' on vet professionals, including the types of moral injuries encountered, their prevalence and what support is needed when they occur. Morally injurious events are defined as experiences which violate one's moral or ethical code.

An online questionnaire has now been launched at <https://tinurl.com/y7ue5ezw>

The researchers hope to use the results to develop interventions to better meet the needs of vet professionals who may find themselves in distress due to morally injurious events in the future.

## Registration is open

- Over 130 hours of CPD**
  - At least 80 hours of live CPD across 5 streams.
  - More than 100 on-demand webinars.
- Ongoing support**
  - Welcome packs
  - Guidance
  - Technical support
- Post-event access**
  - Access to all scientific content via the platform for 30 days, then via the BSAVA Library.
- Exhibition hall**
  - Entry to the virtual exhibition showcasing the best in the industry.
  - Opportunities to chat directly with exhibitors.
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  - Network with colleagues in the lobby and lounge chat rooms, or join us for a social event!

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QR code:

*"On the clinical side, we're covering everything from chronic pain and neurology to cardiology and orthopaedics – whatever your interests, there will be something for you,"*  
said Professor Ian Ramsey, BSAVA President

# Supporting good hydration in cats

A NUTRIENT-enriched water that can promote hydration in cats has been launched by Purina.

Pro Plan Hydra Care contains organic osmolytes, including amino acids from whey protein, which play a role in fluid balance and cell volume, and are absorbed into the body after consumption.

The product is supplied in 85 g sachets. The company says that offering it to cats as a supplement alongside their normal diet and water can help to increase total daily water intake, promote hydration, and increase urine volume and dilution.

Cats' water intake varies according to factors such as body weight and diet, as well as water consumption. Cats fed dry food tend to have a lower total fluid intake for their body size.

Promoting water intake can be beneficial, particularly in cats with increased water loss; for example,

resulting from conditions affecting the renal system or the lower urinary tract, which may be exacerbated by increased urine concentration.

Increasing water intake, maintaining urine volume and ensuring urine dilution is key in managing conditions such as urolithiasis, feline idiopathic cystitis and chronic kidney disease. The need to maintain water intake is also important in the management of conditions such as constipation, exudative skin disease and diabetes.

Nutrient-enriched water has been scientifically proven to help cats consume on average 27 per cent more water every day, and helps to increase urine dilution, the company says.

Libby Sheridan, Purina's veterinary and technical affairs manager for the UK and Ireland, believes the new product will



benefit cats in need of better hydration.

'Our research shows that cats enjoy drinking water-enriched Purina Pro Plan Hydra Care and will voluntarily consume more to increase their overall water intake, beyond that achieved by feeding a wet food as their daily diet. It's a useful and easy change to make as support for maintaining hydration, urine dilution and output.'

Nestle UK,  
1 City Place,  
Gatwick RH6 0PA,  
telephone  
0208 686 3333.  
www.purina.co.uk

## APPOINTMENT

UK pet and aquatics business Interpet has appointed **Lester Bunce** as its international sales manager. Bunce, who will work on sales outside the UK, has more than 28 years' experience in the pet industry, historically with Interpet and most recently at Mars Petcare.



## Porcine circovirus vaccine gains marketing authorisation

THE first porcine circovirus type 2 (PCV-2) and *Mycoplasma hyopneumoniae* combination vaccine in the EU has been granted marketing authorisation by the European Commission, Zoetis has announced.

CircoMax Myco contains two PCV-2 genotypes (a and b) offering broader coverage against continuously evolving porcine circovirus. The ready-to-use, single-dose combination vaccine provides vets and producers with a reliable, efficacious and convenient new solution, the company says. It also offers the longest-lasting combined protection on the EU market against PCV-2 and *M hyopneumoniae*.

Alvaro Aldaz, director of global commercial development for pigs at Zoetis, said: 'For many years, intensive vaccination has contributed to selective pressure and emergence of new PCV-2 genotypes. European pig farms are often



infected with more than one genotype and subclinical disease is frequent. Commercial vaccines are all based on PCV-2a genotype while CircoMax Myco is the first vaccine that includes two PCV-2 genotypes, and the *M hyopneumoniae* purified fraction. It is formulated with adjuvant MetaStim for active immunisation, resulting in 23 weeks of protection against these threats.'

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Leatherhead KT22 7LP  
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# Medicines update

THE points below highlight changes in marketing authorisations (MAs) that may have a significant impact on veterinary surgeons' prescribing decisions.

## New marketing authorisations

New marketing authorisations relevant to veterinary surgeons in the UK that were issued or published in November 2020 are listed in Table 1.

Table 1 also indicates where a public assessment report should become available for a product. Where available, links to these reports are accessible by clicking on the relevant product on the VMD's Product Information Database [www.gov.uk/check-animal-medicine-licensed](http://www.gov.uk/check-animal-medicine-licensed)

The European Medicines Agency publishes European Public Assessment Reports for every veterinary medicine that is authorised through a centralised procedure. Links to these reports are accessible at [www.ema.europa.eu](http://www.ema.europa.eu)

There may be a delay between the issuing of a marketing authorisation to a company and the product being placed on the market.

## Changes to marketing authorisations

### Food-producing animals

- (1) Amoxycare LA suspension for injection 15% w/v (Amoxicillin) (Norbrook Laboratories)

Changes to the withdrawal periods. Cattle: meat and offal, from 28 days to 39 days; milk, from 84 hours to 108 hours (4.5 days). Pigs: meat and offal, from 19 days to 42 days. Sheep: meat and offal, from 19 days to 29

days. The product is not authorised for use in sheep producing milk for human consumption.

- (2) Betamox LA 150 mg/ml suspension for injection (Amoxicillin) (Norbrook Laboratories)

Changes to the withdrawal periods. Cattle: meat and offal, from 28 days to 39 days; milk, from 84 hours to 108 hours (4.5 days). Pigs: meat and offal, from 19 days to 42 days. Sheep: meat and offal, from 19 days to 29 days. The product is not authorised for use in sheep producing milk for human consumption.

- (3) Entericolix, emulsion for injection for pigs (*Clostridium perfringens*, *Escherichia coli*) (CZ Veterinaria S.A.)

Section 4.6 of the Summary of Product Characteristics (SPC) has been updated to include: 'Injection site reactions (swelling and reddening) occurred rarely, with a maximum of 3 cm of diameter and a maximum of 10 days of duration.'

- (4) Eprecis 5 mg/ml pour-on solution for cattle. (Eprinomectin) (Ceva Animal Health)

Addition of the following warning to section 4.4 of SPC: 'In order to limit cross-transfer of eprinomectin, treated animals may be separated from untreated animals. Non-compliance with this recommendation may lead to residue violations in untreated animals.'



- (5) Innovax-ND-IBD, suspension and solvent for suspension for injection for chickens (Cell-associated live recombinant turkey herpesvirus) (Intervet International BV)

Extension of the duration of immunity for the protection against Newcastle disease and infectious bursal disease from 8 weeks to 60 weeks.

- (6) Resflor 300/16.5 mg/ml solution for injection for cattle (Florfenicol, flunixin) (Intervet UK)

Section 4.6 has been updated to include: 'Anaphylactic reactions were reported in very rare cases during post-marketing surveillance. Those reactions might be fatal.'

### Small animals

- (1) Activyl Tick Plus Spot-on solution for dogs (Range) (Indoxacarb) (Intervet International BV)

Section 4.6 of the SPC had been updated to include: 'If adverse reactions occur bathe the animal with mild soap and rinse with large amounts of water.'

In prescribing these veterinary medicines, veterinary surgeons should be aware that changes to the Summary of Product Characteristics, labels and leaflets may, in certain cases, change how the medicines should be used. The timing of when such changes have to be taken into account will depend on the circumstances, but as a general rule unless a prescriber has been advised otherwise by the manufacturer or the VMD the labelling instructions on the pack from which the product is dispensed should be followed.

## MEDICINES UPDATE

TABLE 1: Marketing authorisations issued and/or published in November 2020

Product name	Active ingredient	Authorisation holder	Public assessment report to be made available from VMD?
Cryptisel 0.5 mg/ml oral solution for calves	Halofuginone	Livisto Int'l S.L.	No – RMS Spain
Doramax 5 mg/ml pour-on solution for cattle	Doramectin	C&H Generics	Yes
Isoflurin 1000 mg/g inhalation vapour, liquid  For use in cats, chinchilla, dogs, ferrets, gerbil, guinea pigs, hamsters, horses, mice, ornamental birds, rats, reptiles	Isoflurane	Vetpharma Animal Health, S.L.	No – RMS Netherlands

EPAR European Public Assessment Report, RMS Reference member state

(2) Cytopoint 10/20/30/40 mg/ml solution for injection (Lokivetmab) (Zoetis Belgium)

Authorised for use in dogs. To add a new therapeutic indication for the treatment of pruritus associated with allergic dermatitis in dogs.

(3) Enurace 50, 50 mg tablets for dogs (Ephedrine) (Ecuphar NV)

Section 4.6 of the SPC has been updated to include: 'Vomiting has been reported very rarely in spontaneous reports.'

- More information from Vivienne Saville; v.saville@vmd.gov.uk



## Going on parental leave or have a vet who is?

Download the **BVA guide to maternity and paternity leave** for advice for employers, employees and locums.

[www.bva.co.uk/guides](http://www.bva.co.uk/guides)



# 2020: a veterinary year in review

Covid-19 may have dominated 2020 but, as **Kathryn Clark** reflects, it was not the only thing that happened last year.

2020 was a year to remember. It was also a year that many may wish to forget. Reports of a novel viral pneumonia in China emerged at the end of 2019 but few could have imagined the impact that SARS-CoV2 would go on to have.

As cases of Covid-19 rose in the UK, the country went into lockdown on 23 March. Unlike many, veterinary professionals were not required to work from home during the restrictions – production animal vets in particular were deemed essential to the food chain, while companion animal vets continued to work, although their practice was restricted to urgent and emergency cases only. When lockdown was extended, their scope of work was widened, but vets were advised to make decisions on a case-by-case basis.

Throughout the Covid-19 crisis, the BVA supported the UK veterinary professions, providing strong leadership and valuable guidance. Its regular webinars giving the latest information and advice on how to comply with government restrictions, which ran from March to June, attracted audiences of more than 3000.

Lockdown inevitably brought fundamental changes to ways of working. Staff were furloughed, practices were closed, and vets and vet nurses formed exclusive teams to limit interactions between staff. Clients were barred from entering practices, bringing the sight of vets clad in personal protective equipment examining patients in car parks and on pavements. Production animal vets had to find ways of social distancing while treating animals that required more than one person to handle.

Among the most significant changes was a relaxation of rules on prescribing veterinary medicines. The RCVS council decided in March that vets could temporarily prescribe prescription-only veterinary



**Covid-19 dominated 2020 and brought about changes to working practices, particularly during national lockdowns**

medicines without first physically examining an animal (remote prescribing). This decision was reviewed and extended several times during the year, although the council agreed in October that, while remote prescribing should remain an option in some circumstances, it should only be used by vets who could provide a 24/7 follow-up service (or access to such a service) where a physical examination, and potentially further investigation, could be carried out if needed.

Throughout the Covid-19 restrictions, vets also embraced remote consulting (which is distinct from remote prescribing, although they are often conflated). The use of video consultations soared as clients sought new ways of accessing veterinary advice and practices found ways of providing it. By April, an RCVS survey found that the majority of practices responding were using remote consultations for new and existing clients and it seems likely that this form of telemedicine will

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**Among the most significant changes due to Covid-19 was a relaxation of rules on prescribing medicines**

become a greater part of day-to-day practice life in future, particularly for check ups following surgery or for animals that become stressed when visiting a practice.

The same RCVS survey also revealed the impact of the early weeks of lockdown on practice finances. A quarter of practices reported that their weekly turnover had reduced by 75 per cent, and two-thirds had seen turnover halved. Subsequent surveys by the RCVS in May, June and September found signs of recovery, with the September survey finding that in over half of the practices responding, turnover had at least returned to pre-Covid levels.

Although the government provided financial support to many businesses affected by the pandemic, veterinary practices were ineligible for the rates relief package announced in March. The BVA lobbied for practices to be included, and urged vet professionals to back a petition led by the British Dental Association, which called on the government to allow community-

based healthcare services access to the same financial support offered to other high street businesses affected by lockdown. Unfortunately, the petition failed to achieve the 100,000 signatures required for it to be considered for a debate in parliament.

The pandemic also took a toll on the next generation of veterinary professionals. With the implementation of lockdown in March, undergraduates returned home, and teaching was moved online – and opportunities for hands-on practical learning dried up. Practices, understandably, were unable or reluctant to offer extramural studies (EMS) placements in the normal way. Virtual EMS opportunities were made available, but even before the March lockdown, the RCVS reduced the number of weeks of EMS that final-year vet students had to complete to allow them to graduate. It later introduced temporary reduced EMS requirements for students in all years of their course, including those who began their studies in September.

EMS and undergraduate teaching were not the only veterinary education offerings to move online. Multiple conferences and congresses pivoted to provide virtual CPD instead of in-person gatherings. Meetings of all kinds took place online throughout the year, as did various awards ceremonies.

As the initial three-week lockdown extended into months, debate began about the lack of veterinary input to advice to the government on disease control. In *Vet Record* in April, Dick Sibley and Joe Brownlie pointed out that livestock vets had the required knowledge – and practical experience – of managing national disease outbreaks and delivering disease prevention and control on a major scale. Correspondence to the journal throughout the year expressed dismay at the failure of those tackling the pandemic to capitalise on veterinary expertise in infectious disease control.

For many vets and animal charities, the pandemic has served as a wake-up call to the threat of zoonotic disease and the need for greater vigilance and care in the way people interact with wildlife. Throughout

the year they gave repeated warnings about the need for a sea change in how exotic animals are traded across the world.

### Pets and the pandemic

Reports of companion animals being infected with SARS-CoV2 began to emerge as early as March and the UK saw its first case (in a pet cat) confirmed in July. There were fears of a potential backlash, as people saw animals as possible sources of the virus, but these were averted by evidence that showed human-to-animal transmission.

If anything, the UK's appetite for pet ownership grew. Over the first national lockdown demand for puppies in particular soared – as did their prices. There is concern for the future welfare of many of these hastily acquired animals. While some owners may continue to work from home for at least some of the time after restrictions are eased, inevitably many will return to their workplaces. Behavioural experts fear rising cases of separation anxiety in dogs unused to being left home alone. There are also warnings of increasing numbers of animals being relinquished to charities or abandoned as owners find themselves unable to cope with their pets' behavioural issues, or realise they no longer want them or do not have time or money to care for them.

With demand high and money to be made, there is a very tempting marketplace for puppies.

However, April saw a long-awaited ban on third-party sales of puppies and kittens coming into effect, so there is hope that this will clamp down on unscrupulous breeders and puppy farmers.

Unfortunately, animal welfare charities were not immune to the impact



**For many, the pandemic has served as a wake-up call to the threat of zoonotic disease**

of the pandemic. In October the PDSA announced that it had paused preventive care provision. Covid-19 also sounded the death knell for the Animal Health Trust. The charity, which had been a leading veterinary and scientific research centre since 1942, had been facing financial constraints for some time and these were compounded by the economic implications of the pandemic. Attempts to find a sustainable way forward failed and the trust closed at the end of July.

### Brexit

The pandemic certainly overshadowed Brexit, the issue that many might have predicted would dominate 2020. The UK formally left the EU on 31 January but remained within the single market and customs union for an 11-month transition period. Negotiations to determine trading arrangements between the EU and the UK went down to the wire, finally achieving agreement just before Christmas.

Having rated the UK's preparedness for a no-deal Brexit in a series of articles in October 2019, *Vet Record* revisited the issue a year later to see if anything had changed. Using the same traffic-light-based rating system (of red for 'not ready', green for 'ready' and amber for somewhere in between), the conclusions reached were not reassuring. Although the ratings were subjective, only in the area of medicines' supply was the UK



**While the UK formally left the EU on 31 January 2020, negotiations on a trade deal with the bloc continued throughout the year**

felt to be better prepared (improving from amber to green) than it had been in 2019. At the time of the analysis, nothing was found to have changed with regard to UK-EU trade, the Irish border, workforce, animal welfare, and education and research funding. When it came to transporting animals – pets, horses and livestock – the rating was downgraded from amber to red.

### Welfare

Post-Brexit trade deals were a thorny issue throughout 2020. The government's long-awaited Agriculture Bill was introduced into parliament in January, setting out a blueprint for farming after Brexit when the UK is no longer tied to the rules of the EU's Common Agricultural Policy. There was a general welcome for plans to reward farmers for 'public goods', including higher animal welfare standards, but also concern about a lack of assurances that imported goods produced to lower animal health and welfare standards would not be accepted as part of future trade deals. The government saw off repeated attempts to amend the Agriculture Bill to enshrine such a commitment in law, although it has insisted it will not compromise the UK's high animal welfare and environmental protection standards in pursuit of trade deals.

The government did, however, establish a Trade and Agriculture Commission in June in response to pressure from MPs and the National Farmers' Union. The commission was originally intended as a time-limited advisory body that the government would consult when drawing up policies for new free-trade agreements. However, unlike the amendments on animal welfare standards, a bid to amend the Agriculture Bill to put the commission on a more permanent and statutory footing succeeded in November. It will now produce a report for parliament on each proposed trade deal, with animal welfare, food production and environmental standards being among areas that it will consider.

Another development for production animal welfare in 2020



**It was good news for animal welfare in 2020, with the new Agriculture Bill stating farmers would be rewarded for 'public goods', including higher animal welfare standards**

was Defra's announcement of plans for an 'Animal Health and Welfare Pathway' in England. The pathway, which farmers are expected to be obliged to engage with, aims to standardise and improve the collection of data on the health and welfare of animals on farms. The data will be gathered and submitted by vets using an app, then fed into a national database and used to map health problems, flag any need for early intervention and drive improvements to health and welfare.

### Education

Despite the challenges of Covid-19, there were some important developments in veterinary education over 2020. In February, the University of Surrey's veterinary degree was formally approved by parliament. Also in February, Aberystwyth University announced the launch of Wales' first vet school, set for 2021, and in October, the new Harper & Keele school took in its first cohort of 120 students. While concerns remain about veterinary workforce capacity, particularly in light of a predicted increased demand for vets to deal with trade certification after Brexit, the growing numbers of veterinary students will mean more home-grown vets in the longer term.

These future vets will be expected to meet a new set of Day 1

competences, published by the RCVS in July. Focused on professional non-technical skills just as much as the technical aspects of veterinary work, the new 'competency model' aims to overcome a mismatch between graduates' expectations and the reality of life in practice.

### Legislative reform

Perhaps the most significant publication by the RCVS in 2020 was a report from its Legislation Working Party (LWP). Containing proposals for a radical reform of the legislation governing the

veterinary professions, the report was presented to the RCVS council in June. Among other things, the LWP proposed that the RCVS should have new powers to regulate all paraprofessionals who are part of the 'vet-led team', that there should be compulsory regulation of all practices – with the RCVS having a new legal power of entry – and that there should be regular revalidation of veterinary professionals, with mandatory CPD.

Another key recommendation from the LWP is that the veterinary disciplinary system should move away from focusing on past misconduct to a forward-looking system that focuses on whether a vet's fitness to practise is currently impaired and whether there is a risk to the public or the public interest. However, like the other LWP proposals, this would require new primary legislation to implement in full. Because it may take some time to achieve such legislation, the RCVS also put forward three separate proposals for reforms to the disciplinary system that could be achieved without new primary legislation. The aim of these reforms, it says, is to bring its disciplinary processes closer to best practice in the short term.

The first of these three proposals concerns a change to the standard of proof used in disciplinary cases. The

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**The growing numbers of veterinary students in the UK will mean more home-grown vets in the longer term**

RCVS is the only major UK regulator to still use the criminal standard of proof ('beyond reasonable doubt/so as to be sure') rather than the civil standard of proof ('on the balance of probabilities') in its disciplinary system.

The two other proposals cover dealing with minor cases of suspected misconduct under the college's charter powers, rather than resorting to a full disciplinary hearing, and introducing 'mini preliminary investigation committees' to speed up and streamline the disciplinary process.

The RCVS council approved the LWP's proposals 'in principle' and a public consultation on them, and on the proposed interim reforms to the disciplinary process, was launched on 5 November and will close on 27 January.

### Scrutiny of the RCVS

The proposals for disciplinary reform were discussed in private sessions of the RCVS council, but a confidential paper on the matter was leaked to *Vet Record*. The RCVS subsequently launched an inquiry into the source of alleged leaks of confidential information, but when no one came forward in response to informal invitations to do so, the college paid an external specialist consultancy firm to investigate.

*Vet Record* was informed about and ran a story on this investigation in August, at which point the RCVS declined to confirm or deny its existence. It was not until 3 September that the RCVS officially confirmed that an investigation of members of its council had taken place.

Despite the investigation being thought to cost tens of thousands of pounds – the RCVS has refused to disclose any costs – the college said that the source of the leaks had not been found.

Also under scrutiny as the year went on was the role of the RCVS' Covid-19 emergency taskforce. Set up in March at the start of the national lockdown, the taskforce comprised the RCVS officer team, senior staff and two representatives of RCVS council. It was established to help

the college take rapid decisions on pandemic-associated issues such as remote prescribing and EMS. As the situation began to ease, concerns emerged about the taskforce continuing to make decisions outwith the normal governance structures, and at a meeting in October, the council supported a motion calling for greater oversight of the taskforce.

### Demographics

2020 also saw publication of the results of the RCVS' latest surveys of the veterinary and veterinary nursing professions. These surveys have been taking place every few years for several decades and provide a regular snapshot of the demographics of both professions. The most recent surveys were carried out in 2019, with their results published in January last year. Among the key trends identified was evidence of an increasingly diverse veterinary profession. While this particularly applied to the nationality of respondents, with almost a quarter qualifying from a non-UK EU country, the proportion of respondents from a black and minority ethnic background had begun to rise too, from 2 per cent in 2014 (the year of the previous survey) to 3.5 per cent in 2019.

In a visible acknowledgement of increasing diversity, the college elected its first black president in July. Mandisa Greene commented that when the RCVS was founded in 1844, it would have been unthinkable for a woman, 'let alone a black woman', to become president.

Greene's election was particularly pertinent in a year that saw the spotlight fall on the issue of racism in the wake of the Black Lives Matter protests. However, while her appointment is a small, positive move in the right direction, much remains to be done to achieve a profession that is diverse, supportive and welcoming to all.

### BVA policies

Diversity, equality and fair treatment in the workplace was a key theme of a major policy position launched by the BVA in September 2020. The 'Good Veterinary Workplaces' paper made 64 recommendations



The RCVS announced proposals for radical reforms to the legislation governing the vet profession, including new powers to regulate paraprofessionals and regular revalidation of vets



**Much remains to be done to achieve a profession that is diverse, supportive and welcoming to all**

to help create fair and rewarding work environments where all members feel valued. A voluntary code was published alongside the policy position to help veterinary teams implement best employment practices, and the BVA is calling on teams to commit to the code.

The good workplaces policy was one of three significant position papers launched by the BVA last year. A second paper covered welfare at slaughter, calling for species-specific needs to be respected. It also called for better monitoring and data capture and mandatory CCTV in abattoirs across the UK and highlighted the potential of new technologies for stunning animals before slaughter. While stating the BVA's long-term aim of an end to all non-stun slaughter, the paper also recommended collaboration with Halal certification bodies and Islamic scholars to examine recoverable stunning methods, the certification of specific recoverable stunning methods and the acceptance of stunning in Halal production.

The third policy position launched by the BVA in 2020 considered the perennial problem of bovine TB (bTB). In a 72-page paper on controlling and eradicating bTB, the association discussed a broad range of issues, from cattle movements and testing, to badger culling, research and more. Of particular interest was a focus on the potential role of behavioural science in bTB control and research, to help understand how human behaviour affects decision making and drive positive changes in farming practices.

### Revised bTB strategy

The BVA was not alone in releasing a significant paper on bTB in 2020. In March, the government finally responded to the 2018 Godfray review of its 25-year bTB strategy. In the response, Defra set out a revised strategy for tackling the disease, including the development of a deployable cattle vaccine and a fully operational test to distinguish infected animals from vaccinated ones (a DIVA test). To this end, news in August that trials to validate a DIVA test were set to begin and, subject to positive results from them, trials to test a vaccine would follow, could represent a significant move towards getting to grips with this intractable disease.

The revised strategy also committed to a gradual shift away from the current intensive badger culling policy. Despite this, and amid protests from those opposed to killing badgers, 11 new cull areas were licensed in the autumn, bringing the total number of active culling areas in England to 44.

### E-books and evidence manifestos

The vet journals team maintained a 'business as usual' approach throughout 2020, although staff began working from home in March and *Vet Record* moved from weekly to fortnightly publication with more online-first content. In early June, *Vet Record* and its sister journal *In Practice* moved to online publication only for three months. The new e-book format was well

received and was continued when print publication resumed in September.

Of particular significance to *Vet Record* in 2020 was the launch of a manifesto to drive evidence-based veterinary care. A draft of the manifesto had been drawn up in July 2019 and made public for comment. It was amended in response to comments received before being formally launched in September 2020. The manifesto aims to help all those working in the veterinary professions take practical steps to make their actions more evidence based. It is intended as a living document that will develop over time, with *Vet Record* committed to revising it as needed.

### Innovation and investigation

Another achievement for *Vet Record* was the successful relaunch of its innovation award. Intended to honour excellence and innovation within the veterinary world, the 2020 award was won by Alastair Mair, a veterinary specialist in anaesthesia, for 'Vetnapp', an app that helps vets and vet nurses capture anaesthetic details.

The journal also carried out several investigations over 2020, examining issues as diverse as the increasing number of canine fertility clinics operating in the UK through to the laws around keeping dangerous species as pets. However, perhaps the most prominent of these investigations examined allegations of 'bullying and harassment' at the Royal (Dick) School of



**Is it too much to hope that 2021 might be less eventful?**

Veterinary Studies (R[D]SVS) at the University of Edinburgh. This issue had been rumbling on for a while, with an article appearing in *The Sunday Times* in August 2019 based on concerns raised by a former senior academic at the school.

However, in October 2020, following this journal's publication of anonymous testimonies from current and former members of staff at the vet school, pressure grew on Edinburgh university to publish the report of an investigation of bullying and harassment allegations at the R(D)SVS, which had been carried out by an external agency in February and March. However, the university has not done so. It has also stated that senior university management unconnected with the vet school had 'thoroughly and robustly' investigated the 'serious allegations of bullying' and had concluded 'that there was no evidence of misconduct'.

A public figure in the controversy is David Argyle, dean of the Edinburgh vet school. Argyle is also junior vice president of the RCVS but took the personal decision in

November to step back from that role while the college conducts its own investigation. This investigation, prompted by a formal concern raised with the college, will be carried out under the RCVS' normal concerns investigation process.

Looking back, 2020 will always be remembered as the year of the coronavirus pandemic, but certainly Covid-19 was not the only thing to have happened in the past 12 months. With a vaccine now being rolled out, is it too much to hope that 2021 might be less eventful? ●



**Vet Record's evidence manifesto, launched in September, aims to help all those working in the vet professions take practical steps to make their actions more evidence based**

# Surveillance

## Disease surveillance in England and Wales, December 2020

### Highlights from the scanning surveillance network

#### Cattle

##### Abomasal disorders in dairy calves

Abomasal disorders are increasingly being diagnosed in young dairy calves. Outbreaks of abomasal disease can cause multiple deaths within management groups. The APHA Shrewsbury Veterinary Investigation Centre (VIC) recorded three cases in December.

The first case was in a 200-cow block-calving herd where bloating and diarrhoea occurred in calves aged around seven to 10 days. Fifteen calves had been affected and two had died. All of the affected calves were being fed reconstituted milk powder, whereas 30 calves that had been fed whole milk were unaffected. The second dead calf was submitted for postmortem examination.

The abomasum was markedly distended with foul-smelling gas and milky fluid in the lumen; the rumen also contained similar milky fluid and a little forage. There was no milk clot within the abomasum

#### APHA DISEASE SURVEILLANCE REPORT HEADLINES

- Outbreaks of abomasal disorders in dairy calves
- Bacterial meningitis in sheep
- Renal infarcts associated with *Streptococcus dysgalactiae* subspecies *equisimilis* septicaemia in pigs
- Highly pathogenic avian influenza in wild birds
- Focus on joint ill in sheep



#### Abomasal disorders are increasingly diagnosed in young dairy calves

which suggested that the milk powder may have been reconstituted too dilute, and as such failed to satisfy the calves' hunger, making them overfeed; this can lead to bloat, bacterial proliferation and endotoxaemia.

In the second herd, calves were affected at around three weeks of age. A calf examined postmortem from the herd of 280 cows had a dilated abomasum, which was oedematous and filled with brown liquid, and the mucosa was emphysematous with necrotising inflammation.

Although no specific bacteria were isolated, an acute multifocal suppurative emphysematous abomasitis, associated with bacillary bacteria with the morphology of *Clostridium* species, was identified by histopathology.

In the third case, calves aged 10 weeks were reported with signs of pneumonia, and 10 had died. The calf examined postmortem weighed only 57 kg and was in poor condition. Multifocal ulcers were present in the abomasum and there was consolidation of the anteroventral lung lobes. There was also generalised yellow discolouration of tissues and the liver was dark orange, which was associated with *Salmonella* Dublin infection.

The specific 'trigger' for abomasal disorders is often not clear, and when such cases are identified a

review of calf management, feeding and cleanliness is recommended, including:

- ensuring optimal systemic colostrum absorption;
- checking that milk powder is reconstituted to the correct dilution;
- ensuring the milk is fed at the correct temperature;
- making sure that teats are clean and undamaged and do not allow over-fast drinking;
- regulating the amount of milk fed so that calves do not overfeed or receive varying amounts;
- providing fresh water and suitable forage.

#### Small ruminants

##### Bacterial meningitis

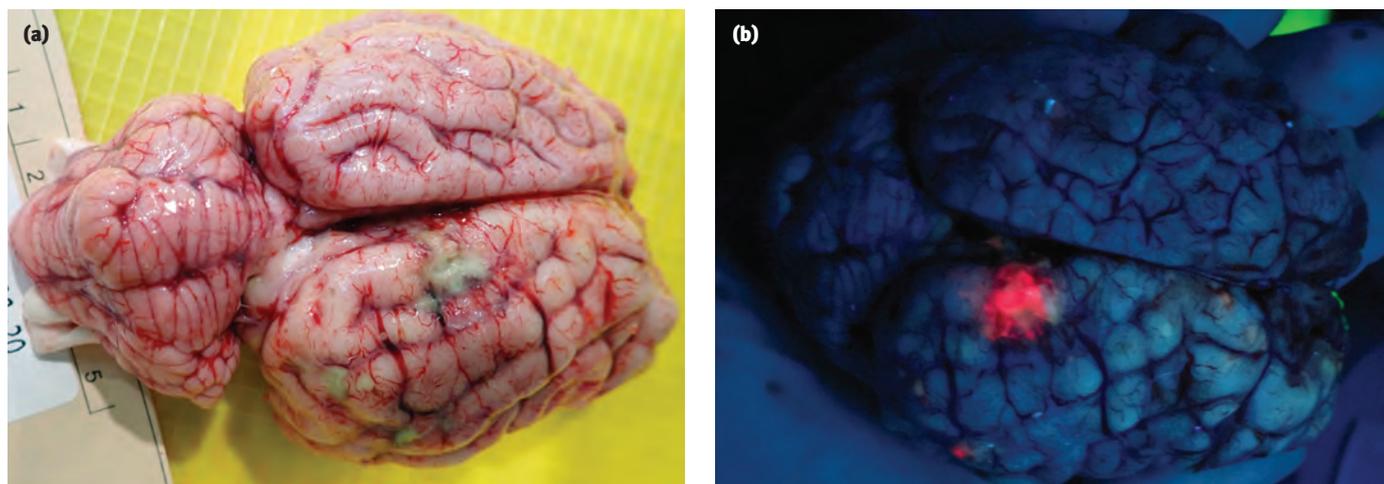
Several cases of neurological disease in sheep resulting from bacterial meningitis have been identified across the surveillance network over the past few months.

A shearling ewe was presented to the APHA Thirsk VIC having been found dead after a short period of malaise. Examination of the nervous system identified thickened dura mater with swelling of the right rostral cerebrum, and discrete areas of purulent material on the cerebral surface (Fig 1a). Examination under UV light revealed a faint yellow positive UV fluorescence over the rostral cerebrum with bright red fluorescence caudally, corresponding to the purulent areas (Fig 1b). There was dark red consolidation of the cranial lungs.

A mixed bacterial flora was isolated from the lungs and brain, and histopathology identified randomly scattered, irregularly shaped areas of necrosis, bacterial colonies and degenerate neutrophils within the brain tissue, consistent with systemic bacterial infection.

#### ABOUT THIS REPORT

This report is produced each month by the APHA Surveillance Intelligence Unit and the six Species Expert Groups (livestock and wildlife). The international horizon-scanning summaries are produced by the Defra/APHA International Disease Monitoring (IDM) team, notifiable disease reports by the APHA Veterinary Exotic and Notifiable Disease Unit (VENDU), and threat analysis by the cross-agency Veterinary Risk Group (VRG). The report is drawn from scanning surveillance information, data and reports produced by the APHA Veterinary Investigation Centres and non-APHA partner postmortem examination providers contributing to the Veterinary Investigation Diagnosis Analysis (VIDA) database and complying with standardised diagnostic and laboratory testing criteria. Other livestock and wildlife scanning surveillance reports may also be found at [www.gov.uk/government/collections/animal-disease-surveillance-reports](http://www.gov.uk/government/collections/animal-disease-surveillance-reports)



**Fig 1: (a) Swelling of the right cerebrum with purulent material visible and (b) positive UV fluorescence of the right cerebral surface in a shearling ewe with bacterial meningitis**

The route of bacterial entry was not determined, but similar cases have occurred secondary to insect bites.

A Welsh Mountain ram lamb from a small flock was submitted to the APHA Carmarthen VIC. It had damaged a horn three weeks earlier, for which broad-spectrum antibiotics had been administered. The lamb became recumbent, unable to feed and died. A purulent tract extended into the frontal sinus from the horn stump. There was an abscess in the pituitary region of the brain with erosion of the underlying bone; pus also surrounded the brain stem and cranial cervical spinal cord. Local spread of infection from the damaged horn was the suspected source of infection.

A Texel yearling ram that died unexpectedly had a skin abrasion on its head with purulent material in the adjacent subcutaneous tissues. It also had a small perforation of the cranium with pus tracking into the dorsal cranium and extending over the surface of the cerebrum into the midline sulcus.

*Trueperella pyogenes* was isolated on bacterial culture. Fighting within a group of rams was thought to be the cause of the skin wound and subsequent meningitis.

### Pigs

#### Lameness and nervous signs due to *Streptococcus suis* serotype 1 in preweaned pigs

An untreated well-grown two-week-old pig was submitted from an

outdoor weaner producer unit to investigate the cause of neurological signs and lameness observed in multiple litters. This was the second batch of litters to be affected. A good response was reported to antibiotic treatment.

The submitted pig had been seen recumbent, with paddling and shaking before euthanasia. An excess of clear fluid with fibrin clots was found in multiple joints. These findings were consistent with polyarthritis and *Streptococcus suis* serotype 1 was isolated from the meninges, joints and lungs.

No porcine reproductive and respiratory syndrome virus (PRRSV) or swine influenza virus (SIV) were detected.

*S suis* serotype 1 is most commonly associated with primary disease preweaning and in the early postweaning stages.

The *S suis* isolate was resistant to tetracycline but sensitive to other antimicrobials tested.

The Veterinary Medicines Directorate's UK Veterinary Antibiotic Resistance and Sales Surveillance report for 2019 was recently published.<sup>1</sup> This reported resistance to tetracycline in around 90 per cent of *S suis* isolates from diagnostic pig submissions to the APHA in the years 2017–2019.

In contrast, penicillin resistance in *S suis* was not detected in 2019 following detection of resistance to this antimicrobial in a single *S suis* isolate in 2018.

#### Renal infarcts in gilts with streptococcal disease

Renal infarcts were prominent postmortem lesions in two 23-week-old gilts in good body condition submitted from an outdoor breeder-finisher unit. Around 6 per cent of gilts in the group showed short-term inappetence, lost condition and then died. The gilts were treated with antibiotic and non-steroidal anti-inflammatories without success.

Abdominal fibrin stranding, reddening of the ventral skin and lymph nodes, and extensive renal infarcts (Fig 2) were found in both pigs. Histopathological examination indicated that the renal infarction was a consequence of bacterial emboli. In spite of the treatment given, *Streptococcus dysgalactiae* subspecies *equisimilis* was isolated in pure growth from the lungs of one of the pigs and the infarcts were likely to be associated with septicaemia due to this pathogen.

**Fig 2: Multiple renal infarcts (arrowed) with red margins and white centres resulting from bacterial embolism in a pig**



No bacterial pathogen was isolated from the second pig, likely due to the recent antibiotic treatment. However, bacteria resembling streptococci were identified associated with lesions in Gram-stained histological sections of the affected kidneys. This supported the likelihood that streptococcal infection was also the primary cause of disease in this gilt.

PRRSV and SIV were not detected, although coughing was noted in the group by the farmer a month earlier.

*S dysgalactiae* subspecies *equisimilis* is occasionally diagnosed in APHA pig submissions as a cause of septicaemia, endocarditis or other suppurative conditions, including arthritis. It is also occasionally found as a cause of sporadic abortion. The age of pigs affected ranges from preweaned (in which disease commonly presents as arthritis/polyarthritis) to finishers.

This pathogen has been included by veterinarians in autogenous vaccines for sows in attempts to control joint disease in piglets, alongside minimising skin trauma and improving general hygiene and colostrum quality/quantity. The organism is part of the normal flora in pigs, reported to be present in secretions (oral, nasal, vaginal, preputial and milk), thus it is an opportunistic pathogen.

As part of normal pig flora, its isolation in mixed culture from one site should be interpreted with caution. Isolation from multiple sites and several pigs, especially if pure or predominant in primary culture, adds evidence for its possible clinical involvement.

It is important to differentiate *S dysgalactiae* subspecies *equisimilis* from *Streptococcus equi* subspecies *zooepidemicus*, which has recently been reported causing outbreaks of septicaemia and high mortality in sows and finishers in North America and was discussed in the Great Britain pig disease surveillance report for July to September 2019.<sup>2</sup> Outbreaks of disease due to *S equi* subspecies *zooepidemicus* have not been diagnosed in pigs through the Great Britain scanning surveillance network and the APHA Pig Expert

Group is interested to hear of any cases diagnosed elsewhere. Contact details for the group can be found at <http://apha.defra.gov.uk/vet-gateway/surveillance/seg/pig.htm>.

### Birds Poultry Multifactorial disease in an egg-laying flock

Ten 57-week-old laying hens were submitted to the APHA to investigate increased mortality, poor production and reduced eggshell quality in a 6000-bird free-range laying unit.

The main gross findings on postmortem examination of the birds were poor body condition, varying degrees of 'egg peritonitis' seen in five birds and inactive ovaries in four birds.

A multifactorial aetiology was confirmed on laboratory testing. Three strains of infectious bronchitis virus (IBV), including the QX strain, were detected by PCR testing; *Mycoplasma synoviae* was detected by denaturing gradient gel electrophoresis/PCR testing of sinus swabs; and there were moderate burdens of *Heterakis* and *Capillaria* species worm eggs.

One bird had a different pathological picture from the others, with striking multifocal pale raised lesions throughout the liver (Fig 3) and necrosis of the caecal mucosa. In this bird, histopathology on the liver showed lymphomatous changes suggestive of Marek's disease, and this was confirmed by PCR testing which was positive for Marek's disease virus (MDV) 1. In addition



**The immuno-suppressive effects of Marek's disease may well have increased susceptibility to blackhead**

there was histopathological evidence of histomonads within the caecum, typical of blackhead (histomonosis). The recognised immunosuppressive effects of Marek's disease may well have increased the bird's susceptibility to blackhead.

The birds had received a full vaccination protocol, including for both MDV and IBV, but it is possible that vaccine-induced protection against some diseases had waned since the time of administration, in view of the age of the birds.

The clinical signs reported in this flock, including the effects on egg production and quality and the increased mortality appear to have been attributable to a variety of infectious agents and related disease processes. This illustrates the importance of thorough investigation of these types of problems in egg-laying flocks.

### Wildlife

#### Wild birds Highly pathogenic avian influenza virus in wild birds

Since the first week of November 2020, highly pathogenic avian influenza virus (HPAIV) has been confirmed in at least 18 wild bird species, including mute swan (*Cygnus olor*), whooper swan (*Cygnus cygnus*), (feral) black swan (*Cygnus atratus*), greylag goose (*Anser anser*), pink-footed goose (*Anser brachyrhynchus*), Canada goose (*Branta canadensis*), brent goose (*Branta bernicla*), shelduck (*Tadorna tadorna*), wigeon (*Mareca penelope*), lesser black-backed gull (*Larus fuscus*), little grebe (*Tachybaptus ruficollis*), herring gull (*Larus argentatus*), grey heron (*Ardea cinerea*), great white egret (*Ardea alba*), buzzard (*Buteo buteo*), sparrowhawk (*Accipiter nisus*), kestrel (*Falco tinnunculus*) and peregrine falcon (*Falco peregrinus*).

HPAIV detections have predominated in mute swans, greylag geese and Canada geese. Cases have been widely distributed and, at the time of writing, positive birds had been found in England (25 counties), Scotland (five counties) and Wales (two counties). Information about the latest

**Fig 3: Liver of a layer chicken showing multiple raised lesions due to Marek's disease**





**Fig 4: Haemorrhage on the surface of the heart of a mute swan (*Cygnus olor*) subsequently confirmed to be infected with highly pathogenic avian influenza virus**



**Fig 5: A live lesser black-backed gull (*Larus fuscus*) showing paralysis. Following euthanasia, this bird subsequently tested positive for botulinum toxin**

situation can be found at [www.gov.uk/government/publications/avian-influenza-in-wild-birds](http://www.gov.uk/government/publications/avian-influenza-in-wild-birds)

In confirmed cases examined at APHA VICs, gross pathological findings have ranged from minimal lesions to signs of widespread haemorrhages in several internal organs (Fig 4) and enlarged spleens and livers. Pancreatitis has been identified in one bird.

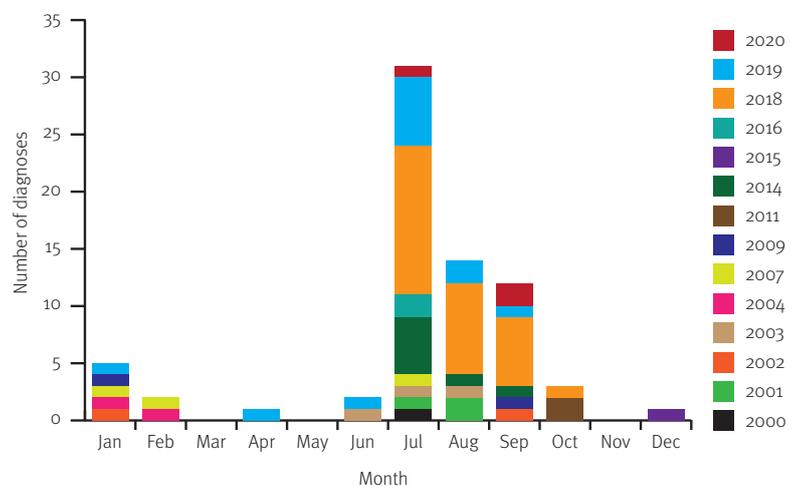
It is important in cases of mortality in wild birds to consider the possibility of avian influenza, particularly given the current outbreak. Anyone who finds dead wild waterfowl (swans, geese or ducks) or other dead wild birds, such as gulls or birds of prey, should report them to the Defra helpline (03459 335577).

**Avian botulism – patterns of disease in recent years**

Avian botulism causing illness and mass mortality in water birds is associated with public concern when carcasses and paralysed birds are seen (Fig 5). Often, multiple birds are affected in each incident.

A 2019 Surveillance Focus article (VR, 7 September 2019, vol 185, pp 261–262) described the disease and an advisory sheet is available from the APHA Diseases of Wildlife Scheme (DoWS) (<http://apha.defra.gov.uk/documents/surveillance/diseases/avian-botulism.pdf>).

Fig 6 presents DoWS diagnoses of the disease and shows that outbreaks can occur in almost any month but are most frequent in hot dry summers. The peak year for



**Fig 6: Diagnoses of avian botulism in wild birds made by the APHA Diseases of Wildlife Scheme in England and Wales between 2000 and 2020, displayed by month**

diagnoses, by a significant margin with 28 outbreaks, was the warm summer of 2018 (1.4°C above the 1981–2010 average), with lower than average rainfall (73 per cent of the 1981–2010 average).<sup>3</sup>

Fewer outbreaks (three) occurred in 2020, when higher rainfall maintained water levels and water flow rates in rivers and canals. Although usually a disease of mid- and late summer, as can be seen from Fig 6, occurrence has started extending into early autumn in more recent years.

**CONTACTING THE APHA**

- Telephone numbers and other contact details for your nearest APHA veterinary investigation centre or non-APHA partner postmortem examination provider can be found at <http://apha.defra.gov.uk/vet-gateway/surveillance/diagnostic/national-network.htm>
- Anyone wishing to report suspicion of notifiable disease, or seeking advice and guidance on animal health and welfare services, should call the Defra Rural Services Helpline on 03000 200 301 if in England. There is an out-of-hours facility at the same number for reporting suspicion of notifiable disease in animals.
- In Wales the contact telephone number is 0300 303 8268.
- In Scotland the local APHA Field Services office should be contacted. Details at [www.gov.uk/government/organisations/animal-and-plant-health-agency/about/access-and-opening#scotland-field-service-offices](http://www.gov.uk/government/organisations/animal-and-plant-health-agency/about/access-and-opening#scotland-field-service-offices)

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# Surveillance Focus

## An update on joint ill in sheep

This focus article has been prepared by **Vanessa Swinson** of the APHA Small Ruminant Expert Group.

At this time of year, sheep farmers and vets are turning their attention to the 2021 lambing season. In addition to routine annual preparations, a review of any flock problems encountered during the 2020 season is advisable. This can be used to guide a more farm-specific approach to preparing for lambing and helps formulate disease prevention protocols. For example, the links between suboptimal colostrum intake and watery mouth disease have been well documented by the Responsible Use of Medicines in Agriculture (RUMA) Alliance.<sup>1</sup>

Infectious arthritis (or joint ill) in lambs has generally been considered to be associated with poor lambing hygiene. However, cases investigated in recent years by postmortem examination providers and universities suggest multiple risk factors for this disease. This article describes some of the suggested risk factors for joint ill to consider when preparing for the upcoming lambing season.

### VIDA diagnoses

Since 2002, there have been 1085 diagnoses of arthritis in sheep recorded in the Veterinary Investigation Diagnosis Analysis (VIDA) database. The most common presenting sign recorded is lameness and musculoskeletal, but there were other clinical signs recorded in 44 per cent of the submissions (Fig A).

Arthritis in sheep is classified into three VIDA diagnosis categories:

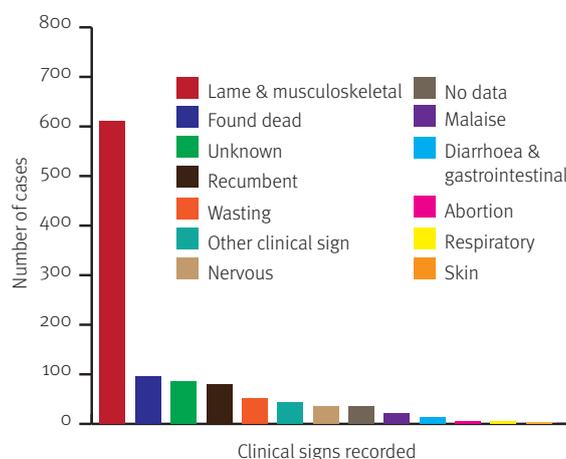
- arthritis due to *Streptococcus dysgalactiae*;
- arthritis due to erysipelas;
- arthritis due to other causes.

Arthritis due to *S dysgalactiae* is by far the most common type of joint ill,

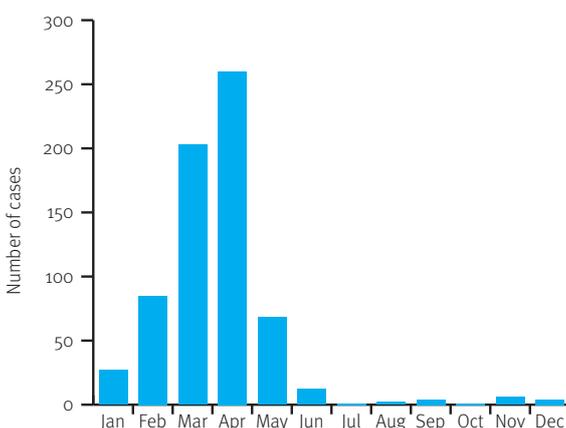
accounting for 63 per cent of arthritis diagnoses between 2002 and 2020 (Table 1).

### Arthritis due to *S dysgalactiae*

Lambs in the neonatal and preweaned age categories constituted 90 per cent of *S dysgalactiae* arthritis cases, where the age was recorded. In keeping with this finding, 91 per cent of



**Fig A: Presenting signs recorded in sheep with a VIDA diagnosis for arthritis 2002–2020**



**Fig B: Seasonality of *Streptococcus dysgalactiae* arthritis in sheep 2002–2020**

Cause	Number of diagnoses
Arthritis – <i>Streptococcus dysgalactiae</i>	673
Arthritis – other cause	284
Arthritis – erysipelas	128

the cases were recorded between February and May (Fig B).

In a study run by Scotland's Rural College (SRUC) in 2017, 59 lambs with joint ill were examined from 32 flocks.<sup>2</sup> Of those examined, 64 per cent were male, 66 per cent were between one and two weeks old and the remainder were less than four weeks old. *S dysgalactiae* was isolated from 18 flocks, making it the most common pathogen isolated. Indoor and outdoor lambing flocks were affected and in most cases the problem began in the first week of lambing.

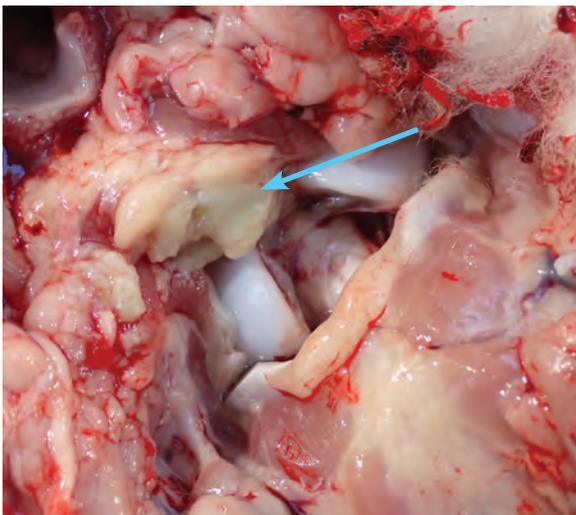
Three outbreaks of *S dysgalactiae* joint ill investigated in England and Wales during 2020 are described below. These demonstrate the multifactorial nature of this disease with different histories and risk factors, and the possible concurrent gross pathologies encountered.

### Case 1

Four two- to four-week-old lambs were submitted to investigate lameness, hindlimb gait deficits and malaise. Gross findings included polyarthritis, with excess turbid joint fluid and fibrinous material in the affected joints (Fig C). Two lambs had fibrinous material adjacent to the atlanto-occipital joint (Fig D) and one had a myocardial abscess.



**Fig C: Fibrinous material in the hock joint of a lamb with *Streptococcus dysgalactiae* arthritis**



**Fig D: Fibrinous material (arrow) adjacent to the atlanto-occipital joint in a lamb with *Streptococcus dysgalactiae* arthritis**

*S dysgalactiae* was isolated from the joints of all four lambs and liver biochemistry testing revealed hypocuprosis in two lambs.

The affected lambs were single male lambs from one group. The history and investigation findings suggested that using tail and castration rings, and hypocuprosis, were all risk factors in this case.

### Case 2

One 11-week-old lamb was submitted to investigate lameness, swelling of the neck, malaise and death. In a group of 160 lambs vaccinated nine days before submission, 15 lambs were affected.

### PREVENTION

The cases discussed in this article illustrate that risk factors for joint ill are farm-specific and therefore prevention measures must also be targeted to the needs of individual farms. This highlights the importance of diagnostic laboratory and on-farm investigations to support appropriate flock health control plans.

Postmortem examination revealed a large injection-site neck abscess, polyarthritis and catastrophic haemorrhage within the pericardium.

*S dysgalactiae* was isolated from the neck abscess and joints. Histopathology identified the source of the haemorrhage as a perforation in the ventricular free wall from a necrotising and suppurative myocarditis (Fig E), with histopathology revealing intralesional bacteria suggestive of *S dysgalactiae*.

### Case 3

A large flock with a high incidence of *S dysgalactiae* arthritis had been investigated by the farm's private vet and the APHA since 2017. The findings of the investigation from 2017–2019 were presented at the Sheep Veterinary Society meeting in autumn 2019.<sup>3</sup>

The flock had a high standard of general management and hygiene in the lambing shed. However, specific interventions were identified and

adopted, which were followed by an improvement in the clinical situation. These included:

- reduced ear-tagging;
- increased lambing outdoors;
- use of an autogenous vaccine for the last three lambing seasons;
- culling of suspected carrier ewes;
- introduction of composite breed ewes and rams into the flock.

A peak of joint ill cases occurred at four to seven days of age and was followed by a second peak when the lambs were over three weeks old. The second peak was concurrent with suboptimal vitamin E levels, and positive *Anaplasma phagocytophilum* PCR results (indicating tickborne fever) were identified in affected lambs.

A study in 2014 investigated the on-farm sources and likely transmission routes of *S dysgalactiae*.<sup>4</sup> This study suggested that the most probable reservoir of *S dysgalactiae* was the vagina of the ewe, with possible contamination of the environment via birth fluids. The maximum recorded organism survival time on straw or hay was 35 days. No isolate survival in water was detected. Poor hygiene practices, such as lack of hand-washing, increased the risk.

### Diagnosis and treatment

As with bacterial arthritis in other species, treatment in the early stages of disease is vital for a successful outcome. It is advisable to undertake bacteriology testing of untreated cases using either aseptically collected joint tap samples or postmortem examination charcoal joint swabs. (It is also advisable to collect a plain swab in case *Mycoplasma* testing is indicated.) This can be used to guide treatment of subsequent cases.

Resistance to tetracyclines is common in *S dysgalactiae* isolates<sup>5</sup> and a small number of isolates from 2018 to 2020 have been resistant to cephalexin.

Chronic joint ill can be a welfare concern. Both the use of NSAIDs in the early stages of disease and euthanasia of poorly responsive cases should be considered.



**Fig E: Necrotising myocarditis in a lamb with an injection site abscess and arthritis**

**Arthritis due to *Erysipelothrix rhusiopathiae***

Based on VIDA data, where the age group was recorded, arthritis due to *E rhusiopathiae* occurs more frequently in postweaned and older sheep (71 per cent), rather than preweaned (29 per cent) animals.

Infection with *E rhusiopathiae*, which is a soil organism, can follow any minor skin wound, such as those that occur at tagging or are acquired from rough grazing. It is also associated with ‘postdipping lameness’, which is caused by bacterial contamination and multiplication in dipping facilities, and with handling sheep through muddy or contaminated handling pens. Handling pens should be cleaned regularly and gross contamination of dips should be avoided.

In one submission affecting fattening lambs,<sup>6</sup> the carpal joints and a stifle joint were markedly swollen and could not be fully flexed and the joint capsules were thickened and fibrotic. The articular surfaces showed evidence of cartilage erosion and pitting (Fig F). Bacterial cultures identified *E rhusiopathiae* from multiple joints and erysipelas serum agglutination tests gave high positive results.

As discussed above, bacteriology is advisable to guide treatment. Porcine erysipelas vaccines have been used as part of a control programme in flocks with recurrent issues. However, the use of these vaccines is not without risk, as suspected anaphylactoid reactions have been reported.<sup>7</sup>

**Arthritis due to other causes**

During the SRUC 2017 study, *Escherichia coli*, *Trueperella pyogenes*, *Mannheimia haemolytica*, *Staphylococcus aureus* and *Fusobacterium necrophorum* were also isolated from joint ill cases.

Joint ill due to *T pyogenes* is often associated with navel infection<sup>8</sup> and visceral abscesses may also be present (Fig G). This type of joint ill can suggest suboptimal navel treatment, suboptimal colostrum intake and poor lambing pen hygiene.



**Fig F: Erysipelas joint ill in an eight-month-old lamb**

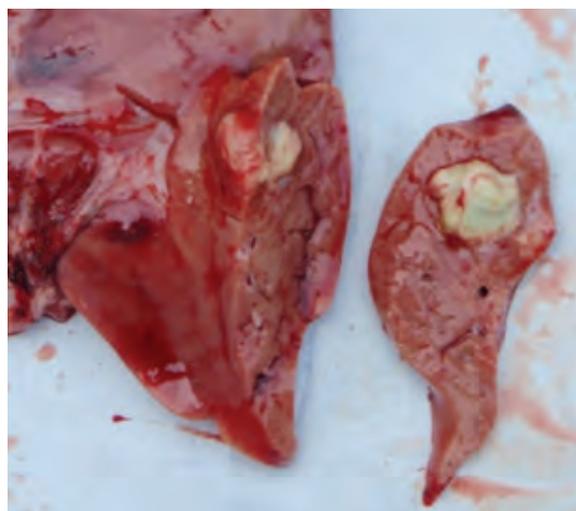
Joint fluid or plain joint swabs from arthritis cases diagnosed in sheep over six weeks old at postmortem examination are used for *Mycoplasma agalactiae* testing. This forms part of the survey for contagious agalactia.

**Summary**

Joint ill in lambs has a multifactorial aetiology. *S dysgalactiae* is the commonest pathogen involved, but other pathogens, such as *E rhusiopathiae*, can be the causal agent. The following measures help to reduce the incidence and severity of joint ill:

- maintaining strict hygiene of lambing pens, lambing equipment and hands;
- dipping navels in a strong iodine solution at birth and again four hours later;

**Fig G: Liver abscess in a lamb with Trueperella pyogenes joint ill**



- ensuring all lambs receive adequate colostrum;
- maintaining strict hygiene of dipping facilities and handling pens;
- taking appropriate hygiene measures when using injections;
- monitoring vitamin and trace element levels;
- monitoring tick burdens;
- monitoring all lambs for early signs of illness and investigating the cause;
- initiating prompt and appropriate treatment in the early stage of disease.

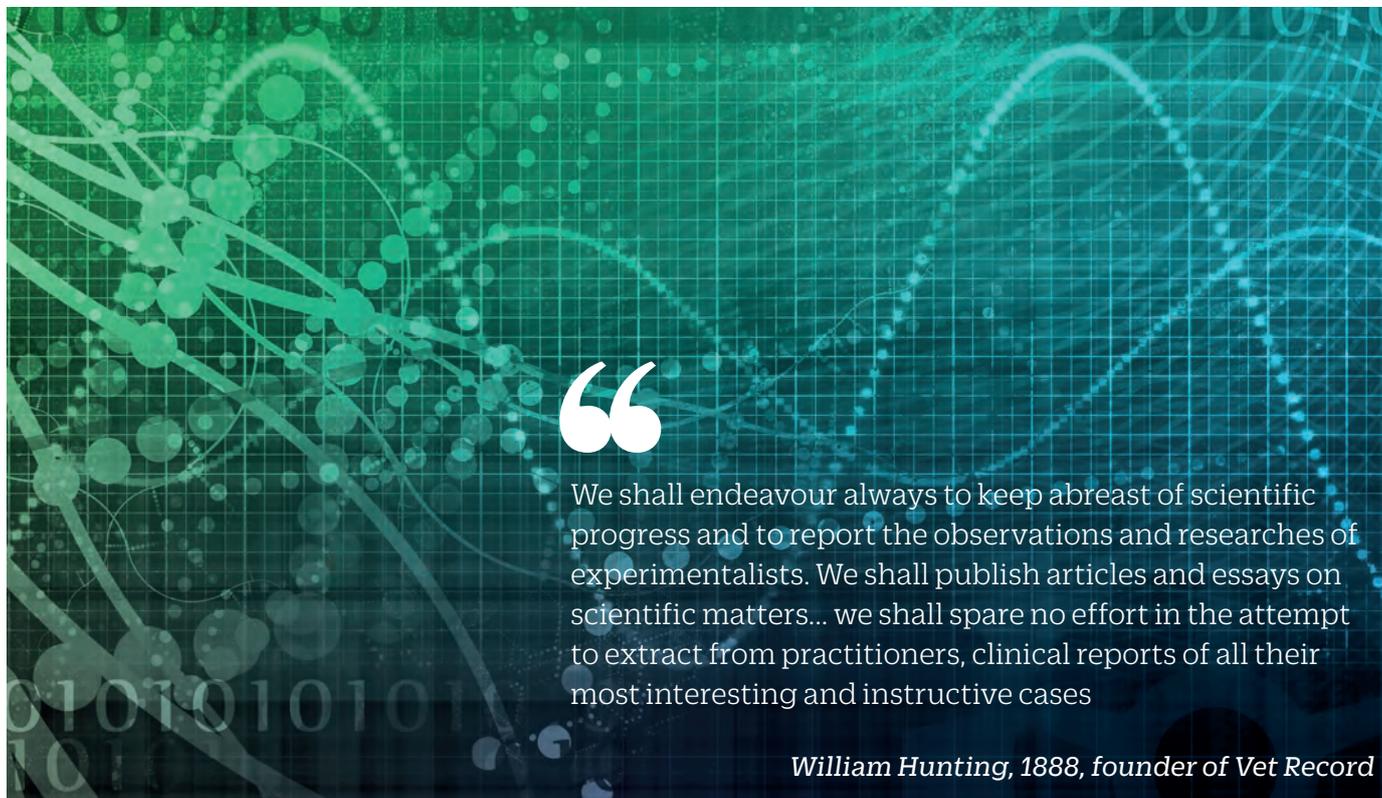
Liverpool university, the Moredun Research Institute and the Agriculture and Horticulture Development Board Beef and Lamb are undertaking a project and PhD entitled ‘Preventing lamb joint ill’. A survey for this project was recently completed by over 200 sheep farmers.

In conjunction with this, a working group to increase awareness of this disease has been established (JIGSAW: Joint Ill Group – Septic Arthritis Awareness). Liverpool university and the APHA have also stored isolates from cases with a view to undertaking whole genome sequencing on them, to further investigate their pathogenicity and antimicrobial resistance traits.

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# Research



We shall endeavour always to keep abreast of scientific progress and to report the observations and researches of experimentalists. We shall publish articles and essays on scientific matters... we shall spare no effort in the attempt to extract from practitioners, clinical reports of all their most interesting and instructive cases

*William Hunting, 1888, founder of Vet Record*

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*Vet Record* remains as committed to advancing the quality and relevance of veterinary research today as it was in 1888, the year it was founded.

Research in this journal aims to provide the most current, quality, original, peer-reviewed evidence for veterinary practitioners and those working in veterinary research and affiliated areas. It is designed so that vets can keep up to date with the best available evidence and optimise their care and management of patients.

All research papers are published in full online but a short one-page summary appears in the printed journal following online publication. Information on how to submit a research paper, our inclusion criteria, ethical standards and review process can be found at <https://bvajournals.onlinelibrary.wiley.com/hub/journal/20427670/author-guidelines>

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Impact factor	<b>2.442</b>
Acceptance rate	<b>30.2%</b>
Submission to first decision (median)	<b>29 days</b>
Acceptance to publication (median)	<b>21 days</b>

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# Open access publication in *Vet Record*: what are the benefits?

Emma Boxer

ARE you considering making your work openly accessible? Are you required to make your work openly accessible by an institutional or funding mandate? If you answered ‘yes’ to either of these questions – or if you just want to learn more about open access publication – then read on.

## What is open access?

Until relatively recently, research was primarily disseminated through publication in traditional print journals. However, since the internet became more accessible in the 1990s, researchers have been exploring new options for communicating their work more widely. One of these options is open access publication.

The basic idea of open access is that it makes published articles freely and permanently available to readers. This contrasts with the more traditional publication models, where articles are made directly available only to the journal’s paying subscribers. Various open access publication models have emerged over the past 20 years, but the two most commonly encountered are ‘gold’ and ‘green’ open access.

Gold open access means that articles are made freely available as soon as they are published online. It also means that authors can post the final, published PDF of their paper on their own website, an institutional repository or another free public server. However, to cover the cost of gold open access publication, authors are normally required to pay an article publication charge (APC).

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## WHAT YOU NEED TO KNOW

- Publishing your article as open access increases the visibility of your research, and, thus, can potentially increase its impact. This is of particular relevance in veterinary medicine, as greater visibility can lead to faster uptake in clinical practice, and, thereby, improvements in the health and welfare of animals.
- The two most common open access models are ‘gold’ and ‘green’ open access. Gold open access means that articles are made freely and permanently available as soon as they are published online. Green open access means that authors can post the accepted version of the paper in a freely accessible online repository after a defined embargo period. An article processing fee is usually charged for gold open access, but not for green open access.
- *Vet Record* supports open access through both the gold and the green routes, allowing authors to comply with most funders’ open access policies.

However, a range of more restrictive Creative Commons licences is also available.

Green open access, also called self-archiving, is when the author places a version of the article online in a repository or website after publishing in a subscription-based journal, thereby making it freely available to read. While authors are free to self-archive the submitted version of their article at any time, self-archiving of the accepted version (ie, the version that incorporates all amendments made during the peer review process, but has not yet been typeset by the publisher) is typically subject to an embargo period. Publishers do not usually allow authors to self-archive the published version of record.

## Benefits of open access publication

One of the greatest benefits of open access publication is that your research will reach a larger audience, and, thus, potentially have a larger impact. Indeed, one study found that full-text downloads of open access papers were 89 per cent higher than those for subscription access papers.<sup>2</sup> Increasing the visibility of your work by making it

openly accessible may also increase the chances of your work being cited by others.<sup>2,3</sup>

In the field of veterinary medicine, open access publication has the additional benefit of ensuring that your work is freely available to practising clinicians – many of whom may not have access to journal subscriptions. With more practitioners aware of your research, it is more likely to have a tangible impact on clinical practice. The greater visibility afforded by open access publication may also allow you to reach potential collaborators more easily.

Furthermore, research funding agencies and universities increasingly want to ensure that the research they support has the greatest possible impact. As a means of achieving this, many funders (including all UK research councils) are already mandating that the research they fund be published as open access, and others are intending to do so shortly. This move towards mandated open access publication has recently been accelerated by the funder coalition, cOAlition S, and its 'Plan S', which calls for all scientific publications that result from research funded by public grants to be published as open access.<sup>4</sup>

### Perceived barriers to open access publication

While gold open access usually requires authors or their institutions to pay an APC, full or partial waivers can be applied for, depending on the authors' circumstances. Many institutions also hold open access memberships with the major publishers, meaning that researchers based at these institutions may be eligible to publish their work as gold open access at no cost to themselves. Alternatively, authors may choose to make their work open via the green open access route. This enables them to share their paper, and comply with most funder mandates, without having to pay an APC.

Some authors may be worried that open access publication means others will be allowed to use their work without giving them credit, or that the integrity of their work will be compromised if they make it openly accessible. However, there is no cause for authors to be concerned on that score.

Although some authors opt to allow others to use their open access articles without retaining a legal right to insist on credit, the vast majority of authors select licence terms that require others to give them credit for their work. Furthermore, authors can also select licence terms that include provisions that protect against misuse and prevent

loss of integrity. It should also be noted that scholarly norms regarding citation and plagiarism are not supplanted when authors make their work openly accessible.

### Open access publication in *Vet Record*

*Vet Record* is a hybrid journal, and, as such, offers authors the option of open access publication alongside more traditional subscription access publication.<sup>5</sup> Authors opting to publish their work as gold open access can choose from a range of Creative Commons licences of varying degrees of restrictiveness. While there is an APC payable for gold open access publication, BVA members are entitled to a 25 per cent discount.

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With the options available, *Vet Record* provides authors with the means to comply with most funders' open access mandates. Authors whose funders mandate publication in a fully open access journal may wish to consider publishing in our sister journal, *Vet Record Open* – a fully gold open access journal publishing original veterinary research across a range of topic areas, including those of a more niche and specialist nature.<sup>6</sup>

### Conclusion

In summary, open access publication is one of the most effective ways of ensuring your findings can be read and built upon by a broad audience. Sharing your research without access restrictions can help create a better research culture, leading to faster advancement in veterinary clinical practice and, ultimately, improvements in the health and welfare of animals.

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# Cognitive dysfunction in cats: update on neuropathological and behavioural changes plus clinical management

L Sordo, DA Gunn-Moore

## Introduction

Cognitive dysfunction syndrome (CDS) is an age-related condition that affects up to half of cats over 15 years of age. Thanks to advances in veterinary medicine, improvements in veterinary nutrition and changes in the way we manage our pets, the life expectancy of domestic cats is increasing. As a consequence, more cats are being presented at veterinary clinics with signs of CDS.

To help improve vets' knowledge of this condition, and thereby improve the health and welfare of affected cats, this review aimed to evaluate the existing literature on the causes, neuropathology, clinical signs, diagnosis and management of CDS.

## Approach

Relevant literature discussing the causes of CDS and its neuropathology and clinical signs was reviewed. The diagnostic approaches for CDS and the various management options that could potentially be used for affected cats were also evaluated.

## Results

The exact cause of CDS remains unknown. However, several alterations in the brain are believed to be involved in its development, including oxidative damage, vascular changes and compromised cerebrovascular blood flow. Cats with CDS also develop neuropathologies that are similar to those seen in the brains of people with cognitive impairment and Alzheimer's disease, such as the accumulation of  $\beta$ -amyloid and hyperphosphorylated tau deposits.

Cats over 10 years of age have been shown to aggregate  $\beta$ -amyloid in a



## KEY FINDINGS

- As the life expectancy of pet cats increases, greater numbers of cats are presenting with signs of age-related cognitive dysfunction syndrome (CDS).
- The brains of cats with CDS show neuropathological changes similar to those found in the brains of people with Alzheimer's disease.
- Although CDS cannot be cured, there are several interventions that can help to improve the health, welfare and quality-of-life of affected cats.

diffuse pattern, with occasional loose plaques. Similarly, immunolabelling for hyperphosphorylated tau deposits in cats reveals an early stage of neurofibrillary tangle. Additional neuropathological ageing seen in the brains of elderly cats includes vascular and perivascular changes, such as micro-haemorrhages, infarcts, a non-lipid variety of arteriosclerosis and cerebral amyloid angiopathy.

The most common behavioural abnormalities displayed by cats with CDS include excessive vocalisation, altered interaction with owners (increased affection/attention), altered sleep-wake cycles, house soiling, disorientation (spatial and/or temporal), alterations in activity, anxiety and learning/memory deficits. Since other medical disorders can cause similar behavioural changes,

diagnosing CDS can be challenging. However, a prompt diagnosis is essential to enable effective management to be provided.

Although CDS cannot be cured, there are a range of management interventions that can be tailored to each individual cat, its behavioural changes and any concomitant illnesses. These include environmental enrichment, calming pheromones, dietary supplements, specific diets containing antioxidants or medium-chain triglycerides and, potentially, medication (eg, selegiline or propentofylline).

## Interpretation

As a result of increasing life expectancy, ever more cats are being recognised with behavioural changes suggestive of CDS, such as increased vocalisation and house soiling. However, CDS can be challenging to diagnose as many other medical disorders can cause similar behavioural changes. Despite these challenges, it is essential that vets undertake a full assessment of affected cats and educate owners on how to recognise the clinical signs of CDS.

Although CDS cannot be cured, there are several interventions that can help to improve the health, welfare and quality-of-life of affected cats. Reducing the signs of CDS, particularly the increased vocalisation at night, can also improve the owner's quality-of-life and preserve the strength of the cat-owner bond.

The brains of cats with CDS show neuropathological changes similar to those found in the brains of people with Alzheimer's disease. These similarities suggest that the domestic cat could be a natural model for Alzheimer's disease.

## Significance of findings

This review of the literature on CDS in cats furthers our understanding of this condition and highlights management options that could potentially improve the health, welfare and quality-of-life of affected cats. Early recognition of CDS and implementation of appropriate management could also help improve the quality-of-life of the owners of affected cats.

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# Apparent prevalence of pestivirus in sheep and goats in Northern Ireland: a serological survey

E Campbell, J McConville, J Clarke, A Donaghy, A Moyce, AW Byrne, S Verner, S Strain, IM McKeown, P Borne, M Guelbenzu-Gonzalo

## Introduction

The pestiviruses bovine viral diarrhoea virus (BVDV) and border disease virus (BDV) are endemic within the UK and Ireland and cause considerable economic losses each year. Although BVDV is usually associated with disease in cattle and BDV is associated with disease in sheep and goats, both viruses are capable of infecting either of these three species. Therefore, estimating the prevalence of pestiviruses within sheep and goat populations is necessary to maximise the effectiveness of BVDV eradication programmes.

This study aimed to evaluate the prevalence of pestiviruses in sheep and goat flocks in Northern Ireland and compare the findings with those of an earlier study.

## Approach

As part of the Department of Agriculture, Environment and Rural Affairs' annual sheep and goat survey, blood samples from up to 20 randomly selected animals from each of 197 randomly selected flocks across Northern Ireland were collected between June and November 2018. Participating farmers were also asked to complete a questionnaire about their farming practices.

The presence of pestivirus in these samples was evaluated using a

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## KEY FINDINGS

- The apparent animal- and flock-level pestivirus prevalences in sheep and goats in Northern Ireland was found to be 1.7 per cent and 17.3 per cent, respectively. These prevalences are significantly lower than those reported in 1999.
- Bovine viral diarrhoea virus was found to be the predominant pestivirus circulating within the study population.

commercially available ELISA to detect antibodies to p80 (a non-structural protein that is present in all strains of BVDV and BDV). For samples that were positive for antibodies to p80, a serum neutralisation test was then performed to identify the pestivirus strain to which the antibodies were raised. Negative samples from flocks with at least one positive antibody result were further tested using a pestivirus-specific RT-PCR kit.

Fetal fluid and organ samples from aborted lambs submitted for postmortem examination between December 2018 and May 2019 were also assessed for the presence of pestivirus using ELISA and RT-PCR.

A generalised linear model was then used to compare the apparent prevalence of pestivirus detected in this study with that from a study reporting the findings of the 1999 sheep and goat survey.

## Results

A total of 3418 animals (3372 sheep and 46 goats) were included in the study. Overall, the apparent animal- and flock-level prevalences of pestivirus antibodies were 1.7 per cent (95 per cent confidence interval [CI] 1.4–3.9 per cent) and 17.3 per cent (95 per cent CI 12.3–23.2 per cent), respectively. In flocks with at least one positive animal, the mean apparent animal-level prevalence was 9.7 per cent (95 per cent CI 5–40 per cent). When compared to the data obtained in 1999, there was a 14.1 per cent decrease in

the percentage of flocks having a positive pestivirus result.

Of the 57 pestivirus-positive samples, 30 (52.6 per cent) had a higher neutralising antibody titre against BVDV than BDV, 12 (21.1 per cent) had a higher titre against BDV than BVDV and 15 (26.3 per cent) had an inconclusive test result. All of the antibody-negative samples were also PCR-negative, suggesting that there were no animals within the sample population shedding pestivirus at the time of sampling.

Of the 177 abortion cases submitted, all had RT-PCR performed on organ pools, and 145 had an ELISA carried out on fetal fluid. All organ pools were PCR-negative for pestivirus, and only one fetal fluid sample returned a positive ELISA result.

## Interpretation

The present study found a lower apparent pestivirus prevalence, at both the animal and flock levels, than that reported in a study using data from 1999. Although both studies used the same sampling strategy, the sensitivities and specificities of the antibody tests used in the previous study are not stated, and, therefore, a direct comparison of true prevalence could not be performed. However, both studies represent robust prevalence snapshots, without any known biases in flock selection, thus allowing comparative inference.

In 2013, a voluntary BVDV eradication programme was implemented in cattle in Northern Ireland, and it became compulsory in 2016. As BVDV was found to be the predominantly circulating pestivirus in sheep and goats in both 1999 and 2018, the observed reduction in the prevalence of pestivirus antibodies could be partly explained by the roll-out this programme.

## Significance of findings

Apparent pestivirus seroprevalence within sheep flocks has decreased in Northern Ireland in the past 20 years, during which time a BVDV eradication programme was rolled out. This suggests that the eradication programme in cattle has also reduced the burden of infection in sheep and goats.

# Why do veterinarians leave clinical practice? A qualitative study using thematic analysis

AI Arbe Montoya, SJ Hazel, SM Matthew, ML McArthur

## Introduction

Having an adequate veterinary workforce to meet the needs of society is critical. However, there have been reports suggesting both an increase in intention to leave the profession and attrition from clinical practice. Previous studies indicate that low salary, lack of support, hours of work and working in a rural practice may contribute to attrition in vets, but an overall understanding of this issue, including other possible influential factors in the veterinary profession, is yet to be established.

This study aimed to further explore the factors associated with a vet's decision to leave clinical practice by analysing the working journey and decision-making process of vets that have left clinical practice.

## Approach

Semi-structured interviews were conducted with 26 former clinicians, all of whom had worked in clinical practice in Australia for six months or longer and had stopped practising – for reasons other than retirement – no more than 10 years before the study.

The participants were first asked questions about their working journey, including the positive and negative experiences they had while in practice. They were then asked to describe why they had left clinical practice. The interview recordings were then transcribed, and thematic analysis was used to identify the factors that influenced participants' decisions to leave practice.

## Results

Participants' decisions to leave practice

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## KEY FINDINGS

- In the cohort of former clinicians interviewed in this study, the decision to leave clinical practice was influenced by two main themes: personal factors and work experiences.
- The participants' responses suggested that personal factors and work experiences interacted with each other and acted as facilitators in the decision to leave clinical practice.

were influenced by two main themes: personal factors and work experiences.

The personal factors that participants described included the internal and external circumstances that impacted on their personal lives, such as personal relationships, experiencing negative thoughts and emotions, physical and mental health, core motivations and beliefs and alternative professional and personal interests. The work-related factors included workplace relationships, employment conditions (including remuneration and working hours) and clinical experiences (eg, negative clinical outcomes).

Participants' responses revealed that these two themes were interlinked in their decision to leave practice (Fig 1).

## Interpretation

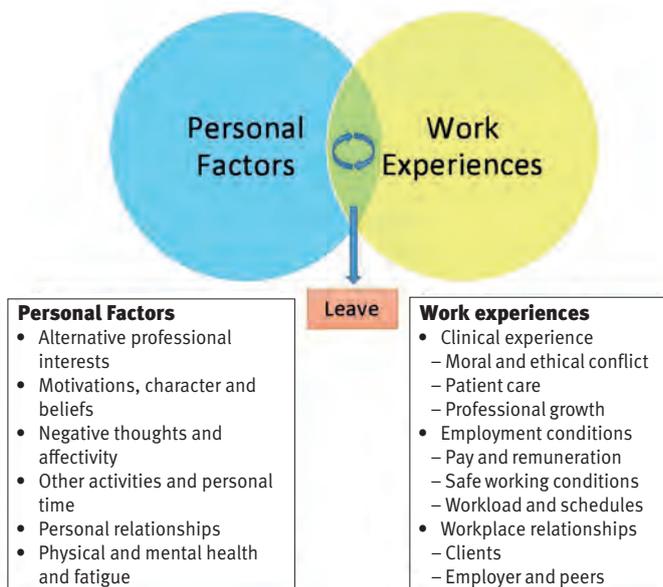
The findings of this study indicate that the interlinking of personal and work-related factors influences vets' decisions to leave clinical practice. Although there are personal factors that cannot be controlled by leadership in clinical practice, there are others that could be addressed with interventions such as flexible working schedules and clinical peer support. Such interventions could, therefore, result in decreased stress, improved job satisfaction and potentially increased retention.

However, as many of the participants left clinical practice several years before the interviews took place, there may have been memory bias in their recollection of events. Furthermore, recruitment bias may have influenced the results, since participants may have been more willing to share their stories than other former clinicians that left the profession not necessarily due to negative experiences. As such, caution should be used when extrapolating these findings to the wider veterinary profession.

## Significance of findings

This study demonstrates that the reasons

vets leave clinical practice are complex, with the decision being influenced by a combination of personal and work-related factors. These findings could be useful in guiding the development of retention strategies for the profession.



**Fig 1: Representation of the combination of themes contributing to participants' decision to leave veterinary clinical practice**

# Does metronidazole increase the speed of recovery in dogs with acute diarrhoea?

Roger Holden, Marnie Brennan

## BOTTOM LINE

- There is currently limited peer-reviewed evidence to support a clinically significant reduction in the time to resolution of clinical signs in clinically well dogs with acute idiopathic diarrhoea when metronidazole is used compared with no treatment.

## Clinical scenario

Mrs Smith brings Horace, a three-year-old male neutered crossbreed dog, into the clinic because he has had diarrhoea twice overnight and again this morning. During your clinical exam, you find Horace to be bright and alert. You detect no other abnormalities, and Mrs Smith reports no signs of haematochezia. Horace's vaccinations are up to date. Mrs Smith is keen to do the best for Horace, and you wonder whether administering metronidazole would lead to a more rapid resolution of clinical signs.

## The question

[In clinically well dogs with acute idiopathic diarrhoea] does [treatment with oral systemic metronidazole compared with no metronidazole] decrease [time to resolution of clinical signs]?

## Search parameters

The search strategy can be viewed at <https://bestbetsforvets.org/bet/574>, and is also available as a supplement to this article on *Vet Record's* website at <https://bvajournals.onlinelibrary.wiley.com/20427670/2021/188/33>

## Search outcome

- Forty-five papers were found in the Medline search.
- Forty-three were excluded because they did not answer the question.
- In total, two relevant papers were obtained.
- Ninety-eight papers were found in the CAB search.
- Ninety-six were excluded because they did not answer the question.
- In total, two relevant papers were obtained.

- Overall, two relevant papers were identified.

**Search last performed:** 9 November 2020

## Summary of evidence

**Paper 1:** A randomised double-blinded placebo-controlled clinical trial of a probiotic or metronidazole for acute canine diarrhoea<sup>1</sup>

**Patient group:** Sixty dogs presenting with acute diarrhoea without concurrent comorbidities at two emergency centres between March 2017 and August 2018 were enrolled in the study. The dogs were randomly assigned to receive either a commercial probiotic product, oral metronidazole or a placebo twice daily for 10 days, with the first dose administered following the initial examination.

**Study type:** Randomised controlled trial.

**Outcomes:** The dogs underwent a full physical examination at initial presentation, and blood samples were taken for a complete blood count and serum biochemistry analysis. Additional information collected at presentation included signalment, bodyweight, a full description of clinical signs, diarrhoea duration, any previous history of diarrhoea and details of possible triggering events (eg, dietary indiscretion, intentional diet change, stress).

Where possible, faecal samples were also taken at the time of presentation, and the presence of gastrointestinal pathogens was evaluated using faecal flotation and a commercial PCR assay panel.

Owners recorded faecal consistency daily for the duration of treatment, and follow-up phone interviews were conducted five to 10 days after initiation of treatment to assess the dogs' improvement. Further follow-up interviews were conducted six months after treatment ended to determine whether additional diarrhoeic episodes had occurred.

**Key results:** There was no statistically significant difference in the time taken to achieve acceptable faecal consistency (ie, scoring 3 or less on the Waltham faeces

scoring system) between the dogs given a placebo and those given metronidazole. After adjusting for factors identified as possibly influencing the results (eg, history of previous diarrhoea, dietary indiscretion), there was still no statistically significant difference in time taken to achieve acceptable faecal consistency between the two groups.

**Study weaknesses:** This study involved a relatively small number of dogs. Although the authors did carry out a power calculation, it was based on a mean and standard deviation obtained from another study. It should also be noted that the question being investigated in this evidence evaluation was not the primary aim of the study.

Eligibility for the study was at the discretion of the attending vet, and other treatments (eg, fenbendazole) could be administered as a way of maximising client enrolment. Additionally, a financial incentive was provided to owners to participate in the study, and this could have biased the sample population.

Faecal consistency scoring was carried out by owners, but it is unclear whether owners were given any training in how to score faecal consistency beyond being provided with a chart. Furthermore, there was no mention of whether there were differences in breed, sex or neuter status between the groups of dogs before treatment was initiated, and results pertaining to the impact of breed, sex or neuter status on the outcome of interest were not reported.

**Paper 2:** Metronidazole treatment of acute diarrhoea in dogs: a randomised double-blinded placebo-controlled clinical trial<sup>2</sup>

**Patient group:** A total of 31 dogs presenting at the Michigan State University teaching hospital with acute diarrhoea were included in the study. These dogs were randomly assigned to receive either oral metronidazole (n=14) or a placebo (n=17) twice daily for seven days.

**Study type:** Randomised controlled trial.

**Outcomes:** Fresh faecal samples were obtained from all dogs at enrolment

## EVALUATING THE EVIDENCE

and after seven days of treatment. Antigen testing for *Giardia* species and canine parvovirus was performed using commercially available point-of-care ELISAs. Faecal flotation and microbial cultures were also performed.

Owners also maintained faecal scoring logs using the Bristol faecal scoring system, with diarrhoea being considered resolved once the animal had two consecutive faecal scores of 4 or less. Dogs in the control group with persistent diarrhoea at day 7 were treated with metronidazole for an additional seven days, and owners continued to keep faecal scoring logs during this time.

**Key results:** Dogs in the metronidazole group took a mean of  $2.1 \pm 1.6$  days to achieve resolution of diarrhoea, compared with dogs in the control group who took a mean of  $3.6 \pm 2.1$  days ( $P=0.04$ ). Neither age, sex, bodyweight, concurrent maropitant citrate treatment, baseline faecal score nor requirement for fluid therapy had an impact on the time taken to achieve resolution of diarrhoea.

**Study weaknesses:** The sample size is small for a randomised controlled clinical trial, and different results might be obtained with a larger population. It should also be noted that the faecal scoring system used in this study has been validated in peoples but has not previously been used in dogs, which may have affected the results obtained.

For most factors, the two treatment groups appeared to be comparable at enrolment. However, breed and neuter status do not appear to have been reported. The decision making concerning the extra treatments that could be prescribed at the clinician's discretion (eg, fluid therapy, maropitant citrate) is also unclear.

The data relating to the time taken to achieve resolution of diarrhoea in the dogs receiving metronidazole appeared to be skewed by an outlier. It is unclear whether this outlier was excluded from the analysis



and, if not, whether it had an influence on the distribution characteristics of the data.

The study was funded by Zomedica, who produce a preparation of metronidazole targeted at acute diarrhoea in dogs. It is unclear whether the company's preparation was used in the study.

### Comments

If the aim of a research trial is to demonstrate equivalence between interventions, then the trial needs to be designed in a different way to one where superiority of one intervention over the other is the aim. The absence of statistical differences in the two studies evaluated could be due to their small sample sizes, which may have caused the studies to be underpowered. Further research with larger sample sizes would provide more certainty.

However, thought should also be given as to whether using antimicrobials and antiparasitics is warranted, justified or appropriate in cases of acute idiopathic diarrhoea, particularly where animals appear clinically well at presentation.

**Roger Holden**, Vets4Pets, Farnham, UK

**Marnie Brennan**, School of Veterinary Medicine and Science, University of Nottingham, Sutton Bonington, UK

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The 'Evaluating The Evidence' section of *Vet Record* aims to answer specific clinical questions using a systematic approach to identify and succinctly summarise the relevant evidence from the scientific literature. The shortcomings of this evidence are also taken into account, thereby enabling vets to incorporate the best available evidence from the literature when making clinical decisions. Please contact us at [vet.research@bvajournals.com](mailto:vet.research@bvajournals.com) if you have an article you would like us to consider for publication in this section.



# Selected highlights from other journals

## ACCURACY OF COMPUTER-AIDED ECG ANALYSIS IN DOGS

AH Estrada, A Spake, ME Kleman and others

Journal of Small Animal Practice (2020)

doi: 10.1111/jsap.13267

### • What did the research find?

When compared with the ECG interpretations provided by a panel of cardiologists, the sensitivity of the ECG analysis algorithm for detecting arrhythmias in dogs was 99.7 per cent, and its specificity was 99.5 per cent. However, the performance of the algorithm was significantly poorer when attempting to detect any ECG anomaly (including abnormal wave measurements), with a sensitivity of 71.3 per cent and a specificity of 35.1 per cent.

### • How was it conducted?

The P wave amplitude and duration, PR interval, R wave amplitude, QRS duration, heart rate and mean electrical axis of 399 canine ECG recordings were evaluated by three cardiologists. The same parameters were also evaluated using a computer-aided ECG analysis algorithm. The algorithm results were then compared with the cardiologists' findings, and the sensitivity and specificity of the algorithm for detecting arrhythmias and all ECG anomalies (including arrhythmias) were calculated.

### • Why is it important?

ECGs are routinely performed in veterinary medicine, but interpreting them can be difficult and time consuming. Vets are increasingly adopting computer-aided ECG analysis algorithms to help them in their clinical decision making, but little information is available regarding their diagnostic accuracy. The results of this study suggest that, although these algorithms may be a useful tool in the triage of the ECG workflow, they should not be relied upon to produce a definitive diagnosis.

## SALIVARY TOTAL ESTERASE IS ASSOCIATED WITH LAMENESS IN COWS

M Contreras-Aguilar, PV Mateo, R Želvytė and others

Animals (2020) 10

doi: 10.3390/ani10112078



**Intra-incisional application of medical grade honey during colic surgery reduces the risk of horses developing postoperative infections**

### • What did the research find?

Of the 21 salivary analytes evaluated, only lipase and total esterase showed significant differences in activity between the time of lameness diagnosis and when the lameness lesions were resolved, with the activity of both analytes being higher at the time of diagnosis ( $P < 0.001$  and  $P = 0.034$ , respectively). However, only total esterase activity was significantly higher in lame cows than healthy cows ( $P = 0.004$ ). Total esterase activity was found to be positively correlated with lameness severity.

### • How was it conducted?

A total of 11 lame cows and 11 healthy control cows were included in the study. At enrolment, all cows were scored for lameness using a five-point scale. Saliva samples were also taken, and the activity of a panel of 21 salivary analytes was measured using an automated analyser. The lame cows were treated as necessary, and, 20 days later, lameness scoring and salivary analyte measurement were repeated. Spearman's rank correlation was then used to identify any associations between lameness and the activity of the salivary analytes.

### • Why is it important?

Lame cows are most commonly detected by visual inspection, but this method is subjective and time consuming. As such, there is increasing interest in the development of more objective detection methods. The findings of this study indicate that lame cows have higher total esterase activity in their saliva than healthy cows and that this activity decreases after treatment. This suggests that salivary total esterase

activity could be a promising biomarker for both detecting lameness in cows and measuring treatment response.

## APPLYING HONEY REDUCES INCISIONAL INFECTION IN HORSES UNDERGOING COLIC SURGERY

K Gustafsson, AJ Tatz, RA Slavin and others

Equine Veterinary Journal (2020)

doi: 10.1111/evj.13407

### • What did the research find?

Horses that received an intra-incisional application of honey following colic surgery had a significantly lower rate of incision site infection than those that did not ( $P = 0.02$ ). Risk factors associated with infection included younger age and diarrhoea within 48 hours of surgery. The protective effect of honey had a calculated adjusted odds ratio of 0.2, with the number of horses required to receive treatment to prevent one case of infection being calculated as 4.7. No adverse effects were observed.

### • How was it conducted?

A total of 89 horses that underwent colic surgery and survived to discharge were included in the study. In 49 of these horses, medical grade honey was applied to the incision before closure. All horses were monitored for postoperative complications at one, two, five and 14 days after surgery, with follow-up information collected after three months. Incision site infection rates were then compared between those that received honey and those that did not, and any protective effect of the honey was calculated using logistic regression modelling.

### • Why is it important?

The prevalence of incision site infections following colic surgery is reported to be up to 39 per cent. Antimicrobial drugs are often administered prophylactically in an attempt to prevent infection, but increasing antimicrobial resistance means that alternatives to blanket antimicrobial use are required. This study demonstrates that applying medical grade honey in the abdominal incision during colic surgery is safe and may significantly decrease the prevalence of incision site infections.

# Letters & Notices



## ENVIRONMENT

### Change needed in approach to antiparasitics

In recent years the routine and frequent year-round prophylactic use of antiparasitic agents in small animal medicine has become widely accepted as good clinical practice, in spite of a surprising paucity of sound epidemiological evidence to suggest this is necessary or free of consequences.

Both internal parasites, such as *Toxocara* species, and external parasites, such as *Ctenocephalides* species, are common in dogs and cats, particularly in warm countries, and there is no doubt that these parasites pose some zoonotic risks, both in themselves and as vectors of other diseases. However, personal experience and published evidence suggests that most adult dogs and cats in the UK do not harbour these, or other, parasites most of the time.<sup>1,2</sup>

Moreover, when parasites are present, they are often found in small numbers and represent a nuisance rather than a serious threat to health, either of the pets or of their carers. For instance, the zoonotic conditions visceral and ocular larva migrans, caused by *Toxocara* species, are described on the official NHS website as rare. Disposal of fresh canine faeces by 'bagging and binning' removes the risk from faeces because even if *Toxocara* eggs are present in large numbers, they are of no threat to human health until embryonated, which occurs two to four (or more) weeks after the faeces have been voided.

Residues and metabolites of fipronil and imidacloprid have been found in high concentrations in English rivers, particularly downstream from sewage treatment works, implicating that they have come from household waste water and originated from small animal flea treatments.<sup>3</sup> Many other antiparasitic drugs are used in small

animal patients in huge quantities but there is virtually no published data to explain the fate of these agents, the persistence of the drugs or their metabolites, and the effects of these agents in the wider environment.

Are they contaminating our homes? Are they contaminating the soil and the water of our streams and rivers, gardens, farms and parks? If so, they will be killing insect life and robbing fish and birds of food. This is ecocide.

What are the long-term effects of these chemicals? The experiences from farm and equine veterinary medicine show that parasite resistance soon follows if drugs of this sort are used willy-nilly in large volumes.

We call on all parasitologists and educators to reconsider their advice on the use of these agents. All veterinarians should follow the precautionary principle; like other potent and persistent drugs, these antiparasitic agents should be used only where there is a high clinical suspicion that their use is indicated and when they are deployed they ought to be used only for as long as necessary. We believe that all products of this type should urgently be reclassified as prescription-only medicines – veterinarian (POM-V).

We also call on the Veterinary Medicines Directorate to immediately take steps to ensure that where our knowledge of the metabolic and environmental effects of these agents is incomplete, these defects should be immediately addressed. The drug companies that develop and sell these products should be expected to pay for this work.

**Allan Adams, Colin Hair, Alex Briault, Stephen Blakeway, Sarah Morgan, Christopher Little**, practitioners

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**There is virtually no published data to explain the fate of these agents**

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## EXOTICS

### Are we letting our reptile patients down?

KARLIEN Heyman (VR, 28 November–12 December 2020, vol 187, p 457) asks if the UK veterinary profession is letting its reptile patients down by most vets having little interest/expertise in these species. The answer is, unavoidably, 'yes', because of the numbers involved.

The 2020 Pet Food Manufacturers' Association survey estimates there are about 700,000 pet reptiles in the UK.<sup>1</sup> There are also reptiles in zoos, rescue centres, breeding facilities and laboratories. So let's round it up to a million.

Of around 25,000 UK practising vets,<sup>2</sup> about two-thirds are in small animal practice,<sup>3</sup> giving roughly 60 owned reptiles per small animal vet. Most healthy reptiles never visit a vet, and there is reason to believe many ill reptiles never do either. So, the average number of reptiles visiting a vet per year will be much fewer than 60, many of which will go to that



relatively small proportion of vets with specific interest/expertise in reptiles.<sup>4</sup>

The average number of reptiles presented to practices without vets that have a specific interest is probably very small, perhaps a handful per year.<sup>4-6</sup> Given the variety of even the most commonly kept reptile species, and their varied husbandry requirements, it would be difficult for vets in such practices to become competent even in their basic care and maintain the relevant knowledge.

If many such vets spent time learning about reptile care for the very small number they see (beyond the requirement to be able to administer emergency first aid and euthanasia), that might do more harm than good overall, because that time could have been spent, perhaps more productively in terms of improving average standard of care across all their patients, learning about additional aspects of the care of the commonly presenting species.

Thus, practices without vets that have an interest in reptiles may be doing the best thing by – as many do – explaining to owners that they do not feel sufficiently informed or experienced to treat reptiles, and advising them to find a vet that does. That there are relatively few vets with such interest/expertise is one of the many health and welfare misfortunes afflicting the UK's pet

reptiles. However, there are just not enough reptiles being brought to vets, or sufficient client spend per reptile, to give large numbers of vets the experience to become competent in the care of such varied species, so there cannot be large numbers of practices competent in dealing with reptiles.

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There cannot be large numbers of practices competent in dealing with reptiles

#### ANIMAL WELFARE

### Regulating research on client-owned animals

THE media coverage of the Covid-19 pandemic has exposed the general public to different perspectives of medical research. Ethical considerations such as the potentially premature use of unproven interventions have also been put under scrutiny. This may put the population at risk as evidence-based medical advice is not always given due regard in comparison to these unproven approaches.

There are parallels to these issues in companion animal clinical practice. Changes imposed by the pandemic are likely to further compromise the quality and integrity of veterinary research, as ambiguous, incomplete and ineffective welfare guidelines continue to be applied. This is especially concerning given the long-standing recognition of the limitations of many of these guidelines.<sup>1-10</sup>

In the era of coronavirus, veterinarians have to adapt to briefer appointments, sometimes conducted with clients separated from their animals, limiting patient assessment and complicating further decision-making – including the provision of informed consent. Suboptimal consultations lead to greater difficulty in establishing the balance between harm and benefit of treatments offered, and so identifying humane endpoints, monitoring the safety and efficacy of treatments and effective recording of outcomes all become more difficult.

A timely review of the legislative framework for animal research in the UK has been published recently in *In Practice* (November 2020, vol 42, pp 488–496). It offers important information for all veterinarians and particularly those who purport to advance veterinary healthcare through the use of ‘innovative’ treatments on clients’ animals. There are described paths for departures from standard (or recognised) veterinary practice, several of which, incorporate decision trees that allow

for subjective interpretation. These less well-defined paths represent loopholes in measures aimed to safeguard companion animals from becoming unregulated 'research' subjects. Unfortunately, a sustained representation to the RCVS has not been successful in closing these loopholes.

We believe, with the exigencies imposed by the current pandemic and the current recommendations of the RCVS legislation working party ([www.rcvs.org.uk/news-and-views/our-consultations/legislation-working-party-report](http://www.rcvs.org.uk/news-and-views/our-consultations/legislation-working-party-report)), which would require opening up of the Veterinary Surgeons Act to allow amendment, that the time has come for clear and unequivocal clarification of what can and cannot be carried out on client-owned animals in the name of innovation.

This should be treated as a matter of urgency by the RCVS in order to preclude further unregulated research that erodes the very foundations of evidence-based medicine and is often contrary to the veterinary surgeon's promise that 'Above all, my constant endeavour will be to ensure the health and welfare of animals committed to my care.'

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**These less well-defined paths represent loopholes in measures aimed to safeguard companion animals from becoming unregulated 'research' subjects**

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## RESEARCH

### Acceptable limits for publishing animal research

I WELCOME the article written by Tom McNeilly and Alastair MacMillan (*VR*, 25 July/1 August 2020, vol 187, pp 64–65) in which they clarified the

guidance on what is an acceptable publication regarding the use of animals for research submitted for *Vet Record*.

As they discussed in their article, animals have made an invaluable contribution to scientific research; for example, they mentioned the inclusion of animals in the development and validation of vaccines.

The Covid-19 pandemic has demonstrated that regulatory change in this field is possible; currently, it is regarded as sensible and expedient to proceed with human testing with regards to developing a Covid-19 vaccine, thus reducing and avoiding testing these particular vaccines on animals.

Data so far appear to show some of the vaccines developed are safe, and this does suggest that animal-free research is increasing.

The utilitarian approach suggested in McNeilly and MacMillan's article (ie, that *Vet Record* will only aim to publish research where the overall benefit to all animals is far greater than the harm caused to the experimental animals), which underpins the European Directive 2010/63/EU, certainly has many weaknesses and may be regarded as flawed; this has been powerfully and eloquently argued in various publications.<sup>1–3</sup>

Research should be underpinned by our ethical values, rather than just good animal welfare. There is no overarching international legislation to protect animals, and in fact many experimental animals are excluded from legislation altogether.

Likewise, McNeilly and MacMillan suggest that alternatives to animal experimentation should always be explored where possible in line with the 3Rs (replacement, reduction, refinement) principles for animal research. However, this, although influential, would seem problematic.

A new and more comprehensive ethical framework has been suggested to counter the deficiencies of the 3Rs,<sup>4</sup> recognising the need to update, broaden and address the moral principles of animal research.

The framework aims to address the recent scientific concerns, and any

Letters are not peer-reviewed, unless stated

ongoing public concerns, regarding the use and translational value of animal models, while bridging the gap that exists between those involved in animal research and those dedicated to animal protection.

I would like to suggest that, as a profession, we should be promoting research publications that rely on animal-free research technologies, rather than those that rely on animal experimentation.

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#### TOM MCNEILLY AND ALASTAIR MACMILLAN RESPOND

WE welcome Jane Sansom's comments on our article on the use of animals in research (*VR*, 23 July/1 August 2020, vol 187, pp 64–65) and wholeheartedly agree that wherever possible, alternatives to animal experimentation should be used.

Unfortunately, this is not possible in every case (as the author concedes, even human vaccines need to be tested on 'human animals' to determine safety and efficacy). As the author rightly points out, the 3Rs principles are not perfect; currently there is a specific emphasis on the welfare of animals undergoing scientific procedures, rather than the wider concepts such as the basic needs of the research animal outside of the actual procedure (eg, housing, feeding, companionship) and the magnitude of the societal benefit the research is likely to achieve.

Therefore, more comprehensive guidelines on animal experimentation, such as those proposed by DeGrazia and Beauchamp,<sup>1</sup> which take into



account both societal benefits and animal welfare, are to be welcomed.

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#### WORKPLACE

### Challenging a hostile work environment

I AM writing in reply to Peter Harlech Jones and his debate 'We need to do more than just stick the Good Veterinary Workplaces policy up in practices' (*VR*, 28 November/12 December 2020, vol 187, p 456) as I felt it highlighted an important issue.

I am a newly graduated vet and as a student I had the privilege to work in many different practices and often made it my mission to choose varied options from further afield to gain a greater breadth of experience. Unfortunately, I often found the working environment at these practices challenging and hostile for not only myself as a visitor, but also the staff. Jones' article showed me that I am not alone in feeling the need for practices to embrace a more constructive and open environment that is both welcoming and provides a supportive work culture for staff and students.

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**I often found the working environment at these practices challenging and hostile for not only myself as a visitor, but also the staff**

Improving the working environment for students has been a passion of mine since my first placement and I'm keen to help find solutions for staff and students alike. I am pleased that the BVA is combating this issue and Jones is progressing the concept further.

Moving forward, a focus on student placements should be one of the most important factors in resolving this issue, as this is where prospective vets get to learn about the working environment they will emulate in the future. This cycle potentially propagates a negative work culture unless veterinary practices improve student and staff wellbeing.

I'm excited to hear more on this matter in the future and I would love to be able to help the BVA with their mission. Thank you for publishing this debate.

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#### DEATH NOTICES

**Calvert** On 15 May 2020, David John Calvert, BVM&S, MRCVS, of Milngavie, East Dunbartonshire. Mr Calvert qualified from Edinburgh in 1960.

**Duncan** On 27 December 2020, Walter Donald Duncan, BVM&S, MRCVS, of Rafford, Moray. Mr Duncan qualified from Edinburgh in 1961.

**Lang** On 23 December 2020, David Christopher Lang, BVetMed, MRCVS, of Lewes, East Sussex. Mr Lang qualified from London in 1959.

**Malone** On 25 November 2020, Joseph Malone, BVSc, MRCVS, of Neston, Cheshire. Mr Malone qualified from Liverpool in 1961.

#### HOW TO SUBMIT A LETTER OR NOTICE

If you would like to send us a letter or notice, please send it by email to: [vet.letters@bvajournals.com](mailto:vet.letters@bvajournals.com). We are currently unable to accept letters submitted by post. Letters should not usually exceed **400 words**. Titles, references (which are restricted to 10) and address details are not included in the word count.

# 'A sustainable future isn't vegan, it's flexitarian'

**Jude Capper**, a livestock sustainability consultant, argues that adopting a vegan diet isn't a sustainably viable option for the future, and that it is better to encourage UK consumers to buy locally produced goods and follow a flexitarian diet.

IT'S often suggested that a sustainable future is only possible if we all cut out animal products and adopt vegan lifestyles. It is true that our lifestyle choices certainly have considerable economic, environmental and social consequences, but I think it is over-simplistic and misleading to claim that veganism is the ultimate solution. I would instead argue that flexitarianism – a diet that is not prescriptive, but is founded on plants, dairy and eggs with reduced meat consumption – is the way forward. This already appears to be growing in popularity with consumers.

The definition of a flexitarian diet is variable – it can involve anything from a conscious decision not to eat meat at every meal, to giving up meat one day per week or eating a primarily vegetarian diet, augmented with the occasional meat burger. Ironically, this means that, at present, the majority of people could be classed as flexitarian, even if they do not necessarily use or welcome that label.

The considerable publicity associated with the annual Veganuary campaign – a crowdfunded challenge that runs during January to promote veganism – could lead to the supposition that the entire population is adopting vegan lifestyles. In 2020, a total of 402,206 people from 192 countries<sup>1</sup> signed up to participate in Veganuary. However, when we put that into context, that total is approximately equal to the population of Coventry spread across the world, or just 2095 people per country. Furthermore, only 38 per cent of people who signed up to take part in 2020 were formerly carnivores, with 19 per cent already being vegan. Indeed, fresh meat and poultry sales declined by only 0.8 per cent



**Moving to a flexitarian rather than a vegan diet allows for British food production to be suited to the constraints of our land and climate**

during Veganuary 2020, suggesting that there was no wholesale rush to abstain from meat consumption. If we look specifically at the UK, a recent study by YouGov reported that only 1 per cent of people surveyed considered themselves vegan, with 3 per cent vegetarian and 14 per cent flexitarian.<sup>2</sup>

The study reported that one of the primary motivations for reducing or eliminating meat consumption was concerns over animal welfare. However, a less tangible, yet pervasive and persuasive factor was guilt, with 66 per cent of carnivores and flexitarians who intended to give up eating meat agreeing that, 'I sometimes feel guilty when consuming meat and dairy products', compared to 25 per cent of the national population.

The market for plant-based meat/dairy alternatives has increased considerably over the past decade, with Tesco recently committing to boosting sales of meat alternatives by 300 per cent by 2025. It sounds like a big increase, but the ambitiousness of the target is somewhat lessened by using a 2018 baseline, and also putting it into perspective – a 300 per cent sales increase in a sector that has, for example, a 1 per cent market share, is still a very small proportion of the total market. Granted, many fast-food and chain restaurants have developed their vegetarian or vegan offerings in recent years, and over 50 per cent of consumers (across all lifestyles) still think that there should be more vegan/vegetarian options available. But, I question whether this desire and increasing range of meat alternatives is actually replacing animal-based foods, or just simply catering for our love of dietary diversity and the flexitarian market.

We must also remember that in the UK, over 60 per cent of agricultural land cannot be used to

grow arable crops and instead it is ideally suited to producing high-quality animal proteins through grazing livestock. This also allows for improved biodiversity, carbon sequestration, soil quality and the maintenance of traditional rural landscapes. Although we must accept that changes in food availability, government directives and societal pressures may affect future dietary preferences, consumers moving to a flexitarian rather than a vegan diet allows for British food production to be suited to the constraints of our land and climate. I believe that if, as a nation, we all adopted a vegan lifestyle, it would have negative effects on sustainability, particularly given that we'd have to heavily rely on overseas imports to meet demand for many plant-based alternatives that we cannot produce here.

Adopting a flexitarian diet should be a deliberate choice rather than a way to slowly reduce meat consumption and ultimately convert to vegetarianism or veganism. But, to help consumers comfortably make this choice, they need continuous reassurance that meat is a sustainable food choice. Veterinary professionals are well-placed to help mitigate animal health and welfare concerns and inform on sustainability issues through consumer outreach and discussion. Messages such as 'Eat less and better' may gain significant traction in alleviating guilt by promoting the consumption of British meat, milk and eggs, and ensuring high standards of animal welfare, low carbon footprints and excellent traceability. Just as a sustainable business is both adaptable and resilient, I believe our future sustainable dietary choices would be served much better by being neither prescriptive nor prohibitive, but flexible. •

1 Veganuary. Trustees' report and financial statements. For the period ended 29 February 2020. <https://bit.ly/2Xdzk2M>. (accessed 5 January 2021)  
2 YouGov. Is the future of food flexitarian? 2019. <https://bit.ly/3ogFB9K>. (accessed 5 January 2021)

# Regulation is vital to improve welfare

THE introduction of the Animal Welfare (Licensing of Activities Involving Animals) (England) Regulations (LAIAR) in October 2018 was the biggest overhaul of animal welfare legislation in England since the Animal Welfare Act was introduced over a decade ago in 2006 – a similar legislation is now being considered for Wales. Based on the latest understanding of animal welfare, the LAIAR legislation places animal welfare and the five welfare needs at the heart of the licensing regime.

The specific activities covered by these regulations are dog breeding, dog boarding (including commercial kennelling, home boarding and day-care), cat boarding, pet vending, horse-riding establishments and performing animals. Although the regulations, coupled with the effective enforcement of them, are a hugely positive step forward for animal welfare, the RSPCA is disappointed that the regulations don't cover activities of dog walkers, pet groomers, trainers and behaviour therapists. This omission has resulted in an inconsistent approach to safeguarding the welfare of dogs. As a result, some dogs are undoubtedly at risk and we believe that it is vital that the LAIAR is reviewed and updated to include such activities.

Currently, there is no regulation of the pet grooming profession. Likewise, although some dog walkers may have a licence, this depends on the requirements of the local authority within the area in which they operate. Even then, the requirement to obtain a dog-walking licence won't necessarily guarantee the protection of a dog's welfare.

The Animal Behaviour and Training Council (ABTC) is the regulatory body that sets the welfare standards that people practising in this area should adhere to, and also maintains the national registers of appropriately qualified animal trainers and animal behaviourists. However, currently, the ABTC is a voluntary regulatory organisation and there is no legal requirement for those who practice in this field to register with the ABTC or maintain their standards.

In the absence of proper regulation of animal



**Samantha Gaines**

Samantha Gaines is head of the companion animals department at the RSPCA



**Without the addition of statutory regulation we are left with an overwhelming number of service providers with varying levels of qualifications, experience, knowledge and skills**

behaviour therapy, the ABTC was created to raise behaviour therapy standards across the board. Another example of an alternative measure that has been put in place to fill the LAIAR gap is the Professional Dog Walkers' Guidelines. These were developed by Dogs Trust, the Pet Industry Federation and the RSPCA to set standards and expectations of dog walkers.

Without the addition of statutory regulation, we are, however, left with an overwhelming number of service providers with varying levels of qualifications, experience, knowledge and skills. This has created a minefield for owners who face a whole myriad of different terms describing the provider's 'ethos', 'approach', 'methods', 'techniques' and 'equipment.' Some methods and techniques are outdated and potentially even dangerous and misleading, placing a dog's welfare and owner safety at risk. Furthermore, some people are able to offer services without adhering to any regulation at all. For example, some groomers appear to be offering anaesthesia-free dental procedures, which present a significant welfare risk.

Introducing a system where all service providers must meet strict standards of competency and ensure that their services align with the five animal welfare needs in order to receive a licence would go a long way to protecting dogs and their owners.

Defra is due to review the LAIAR legislation within the next year to look at its efficacy and discuss any services that were initially omitted from it. The RSPCA will be making the case that dog walkers, groomers, behaviour therapists and trainers should also be covered by LAIAR. Inclusion of these additional service providers would help to ensure that dog owners could trust that they are not only up-to-date and evidence based in their approach, but also work in ways that safeguard the welfare of the dogs in their care. •

## Colin Richard Quinton Barton

A wonderful ambassador for the veterinary profession; he was a modest man who was kind, patient and compassionate to everyone he met.

C. R. Q. Barton – Dick, as he was universally known – qualified from the Royal Veterinary College in 1954, when it was situated in Streatley, on the banks of the river Thames. Having already completed National Service, he took a job in a predominantly cattle and equine practice in Cheltenham, Gloucestershire, working for Jack Brain. It was here that he met his wife, Karin, and they married in 1956.

Dick much preferred working in farm practice and moved to South Molton in North Devon where he joined David Harkness in rural farm practice. A few years later he became a partner and remained there until he retired in 1993.

Dick was the most charming and courteous man I have ever known. Unfailingly polite, he never lost his temper and was a constant support in all the years I worked alongside him.

As far as his veterinary work was concerned, his modus operandi was

Colin Richard Quinton Barton, MRCVS, (b) 1929, (q) London 1954. Died 14 November 2020.

‘cool, calm and collected’ – enviable qualities when working in farm practice.

Along with a colleague in a neighbouring practice he produced a paper that was published in *The Veterinary Record* on myopathy in young cattle fed mainly barley through the winter months. They showed that barley with added ‘Propcorn’ markedly reduced the uptake of selenium, which in turn depressed the uptake of vitamin E. As a result, when these cattle were turned out in the spring, their muscles were unable to support them and they collapsed, not able to rise.

As a keen naturalist and ornithologist, he liked nothing better than wandering the hills and mountains of Wales, particularly

the Brecon Beacons. He did, however, reach greater heights during retirement when he took two trips to trek in the Himalayas. He continued to take a daily walk almost up to his last days – his mantra being ‘use it or lose it’.

Just for good measure, he also wrote poetry, painted and sang with a local choir. I, along with many others in the community, will miss him a great deal. He had a wonderful ability to befriend everyone he met.

He is survived by his wife Karin, his three children, Ruth, Sarah and John, and his grandchildren.  
**John Hulme**



“  
**He had a wonderful ability to befriend everyone he met**

## Richard Henry Hiscock

The son of a farmer, he had a natural respect and love of domestic and wild animals.

RICHARD Henry Hiscock was brought up in a farming family in the chalk valleys of Wiltshire in southern England.

He proudly served with the Royal Engineers in Burma during the Second World War, where he fell in love with the country and

Richard Henry Hiscock, MRCVS, (b) 1924, (q) Edinburgh 1952. Died 14 March 2020.

its people. He often reminisced about his time in Asia. While he was there, he adopted various stray dogs, many of which featured in his photographs of the time.

After the war he returned home and retrained, graduating from the Royal (Dick) School of Veterinary Studies, Edinburgh, in 1952.

After qualifying he worked in Alnwick, Northumberland, where he met his wife to be, Wendy. They moved to the south west where he became a partner of the Veterinary Surgery, Shaftesbury, Dorset, and here he was respected by both

colleagues and clients.

He was rightly proud to use MRCVS for over 68 years. The son of a farmer, he had a natural respect and love of domestic and wild animals, and would often bring home injured native birds and mammals that he would carefully mend and release back to the wild.

Loved and loving husband of Wendy, he was a devoted father to David (deceased), Sarah, Duncan and Charles, and adored ‘gramps’ to his nine grandchildren.

Richard was a gentle, caring man with a mischievous sense of humour. He will be sorely missed by his family.

**Sarah Samuels**

“  
**He was proud to use MRCVS for over 68 years**

### OBITUARIES

Vet Record is keen to pay tribute to the life and work of members of the profession who have died.

If you would like to share your memories of a colleague or a family member who was a vet, please email: [vet.obits@bvajournals.com](mailto:vet.obits@bvajournals.com)

# BVA News

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## Your chance to influence BVA's response to the RCVS Legislation Working Party



BVA head of policy and governance **Amelia Findon** provides an update on how

BVA is preparing its response to the recommendations for legislative reform made by the RCVS Legislation Working Party.

WORK continues apace on the development of our position on the recommendations from the RCVS Legislation Working Party (LWP). There's a vast range of proposals up for discussion, from mandatory practice regulation and powers of entry to changes to the standard of proof for disciplinary cases, potential revalidation requirements for vets, additional tasks to enhance the role of veterinary nurses (VNs), and further development of the way in which allied professions are regulated.

To tackle the wide-ranging proposals we put together five working groups made up of BVA members and other stakeholders from appropriate backgrounds and with relevant expertise. You can find out more about those taking part, and take a look at the minutes from their meetings, by visiting [www.bva.co.uk/working-groups](http://www.bva.co.uk/working-groups). The five groups are considering:

- Embracing the vet-led team;
- Enhancing the VN role;
- Assuring practice regulation;
- Standard of proof and fitness to practise;
- Modernising RCVS registration.

All of our groups have been considering what 'modern' regulation and best practice looks like for the veterinary profession and where changes can and should be made for the benefit of animal health and welfare, vets and the vet-led team, clients and veterinary businesses. They've also

been looking at how the recommendations interlink, how a package of changes might be more appropriate than a piecemeal approach and the importance of the chronology of change.

All of the groups have produced a 'themes' document that summarises their thinking to date and will form the basis of our response to the College. The themes are being shared with our Policy Committee and Council members, and we're making the documents available on the website so all our members have an opportunity to see the direction of travel.

We appreciate the long list of recommendations in the LWP report can feel a bit overwhelming and it's hard to know where to start – that's why we held our recent webinar, in partnership with

The Webinar Vet, which is now available to watch back at <https://bit.ly/3gVANUp>. The webinar, 'Modernising regulation – what do the RCVS recommendations mean for you?', provides an overview of what's happening, which recommendations we think we can support, and those areas where we're concerned or think more work is needed.

The consultation closes on 27 January, which means time is running out for you to influence the position we take on behalf of the profession. We strongly encourage you to take a look at the web pages and get in touch with your comments via our dedicated email address: [LWP@bva.co.uk](mailto:LWP@bva.co.uk)

Don't miss your last chance to influence the way forward on this once-in-a-lifetime shake-up of your profession.

### Why you should vote in the upcoming regional representative elections

BVA Council plays a key role in helping us to achieve our mission as the leading body representing, supporting and championing the whole UK veterinary profession. Our regional representatives are integral to the activities of Council – contributing to effective horizon scanning on matters of veterinary policy and providing an informed steer to BVA's Policy Committee.

With an increasingly complex veterinary landscape and a wide range of issues and potential outcomes for animal health and welfare and the veterinary profession, it's essential that members have the best person to represent them at the highest level within BVA.

Voting for regional representatives in four of the 12 regions of the UK opens on

18 January and runs for four weeks. We're inviting members to vote for their preferred representative in:

- Scotland (where four candidates are standing);
- North West (four candidates);
- East of England (two candidates);
- South East (four candidates).

• **All BVA members based in the region, and with a valid email address, will receive an invitation to vote online. You can take a look at each candidate's manifesto at [www.bva.co.uk/council](http://www.bva.co.uk/council). If you don't receive your invitation, or would like to pose questions to the candidates before submitting your vote, please get in touch via [council@bva.co.uk](mailto:council@bva.co.uk)**

# Personal and professional development in a good veterinary workplace

BVA policy officer **Megan Knowles-Bacon** introduces our Good Workplaces campaign theme for January.

THIS month, we're highlighting resources and promoting key messages from the personal and professional development section of our good veterinary workplaces policy position.

Having clear opportunities for progression helps to keep careers rewarding and diverse, which in turn helps team members to feel motivated and satisfied at work. Unfortunately, there are many barriers that may prevent individuals from progressing, which organisations need to be aware of and work to reduce.

The importance of professional development and training is generally well understood throughout the profession, recognising that this is important for team members to gain the skills required to progress their career, as well as bringing new skills into the workplace. However, personal development is also an important factor for satisfaction, motivation and productivity, but is often undervalued.

Our core principles are that all good workplaces should:

- encourage career progression for all team members, with regular mentoring and appraisals;
- have clear career pathways that are



attractive, accessible, and attainable;

- recognise, reward and encourage both personal and professional development, including non-clinical skills.

January is a time when many of us make resolutions, thinking about how we want to grow as individuals or make positive changes to our lives. It's also a common time for annual reviews at work, when we consider training and opportunities we are interested in for the coming year.

Progression can come in many forms and will be different for every team member, so it must be driven by individuals. Everyone

must take responsibility for their own progress, and that starts by recognising where you have already developed. We often overlook skills we have improved, or new responsibilities we have taken on. So, this January, take the time to look at your role description and consider not just what you want to improve, but what has already changed – it may surprise you!

Good workplaces help to facilitate and encourage both personal and career development. Employers and managers should support team members by making the time to talk through their progress and plans, remembering that there are many different types of development, all of which could bring benefits for both individuals and the organisation. It's also important to make sure everyone knows how to seek out opportunities, and to be transparent about those that do arise.

This month, take a look at pages 41 to 48 of our policy position, which you can download along with our voluntary code workbook and poster at [www.bva.co.uk/goodworkplaces](http://www.bva.co.uk/goodworkplaces). We'll also be sharing more tips, resources and case studies on our social media channels this month using #GoodWorkplaces.

## Young Vet Network

### Take some time to think

YVN representative **Alice Moore** introduces the concept of 'sankalpa' and explains why this approach might be useful when considering your career aspirations.

January is a famously good time of the year to start thinking about one's goals and aspirations, and with the prospect of a world post-Covid on the (perhaps still somewhat distant) horizon, January 2021 feels especially momentous.

We are all inclined to take different approaches when it comes to planning (or indeed not planning) our future. Personally, I find New Year resolutions best avoided; the slightest deviation can feel like failure

and subsequently make you give up what might have been a very worthwhile intention. Instead, I choose to set myself a 'sankalpa'.

Sankalpa is a Sanskrit term in yogic philosophy that refers to an intention or resolve to bring about a positive change in your life. Unlike a goal or resolution, the concept of sankalpa does not require an individual to accomplish something specific and therefore avoids overattachment to a particular end result. Sankalpa allows us to learn from our detours without judgement – we simply notice we're deviating from our intention and redirect ourselves in order to get back to it.

As part of its good workplaces campaign, BVA is encouraging members to set aside

some time this January to think about their career aspirations and how they might go on to achieve them. Like New Year resolutions, we can often focus on a binary 'upwards' move, such as a promotion or a pay rise, when we consider our careers. To me, progression is a mindset, just like sankalpa. As long as you are spending more of your time doing the things you really care about, whether that is diversifying into a different role, achieving a better work-life balance, or specialising into your favourite clinical niche, then that is progress. Time is our most precious commodity – so take some time this January to think about how you want to spend yours.



# BVA's end of transition period report

With the Brexit transition period now over, BVA policy officer **Michael McGilligan** highlights some of the areas that BVA is continuing to lobby on.

ON 27 November 2020, we launched a report that assessed the UK's readiness for the end of the Brexit transition period. The report raised serious questions around veterinary capacity and infrastructure and warned of the combined impact of Covid-19, Brexit and exotic disease on veterinary capacity.

BVA has called on the government to clarify the full-time equivalent number of Official Veterinarians that will be needed to certify export health certificates, and to identify where in the country they will be needed.

The report also raises questions about preparations for pet travel and equine movements. We are asking the UK government how veterinary diagnostic and research samples for CITES-listed species can be moved in a timely fashion between UK and EU diagnostic laboratories.

The launch of the report coincided with BVA President James Russell appearing on the BBC's flagship Newsnight programme to set out the profession's concerns. The detailed analysis found in the report has allowed us to intensify our engagement with governments and industry.

• **The end of the transition period is now a reality. We want to hear members' experiences as we continue to engage with governments and industry. Please email [policy@bva.co.uk](mailto:policy@bva.co.uk) if you would like to share your thoughts.**

# Vetlife unveils its new website

**Eve Ritchie**, Vetlife communications officer, introduces the charity's new website.

VETLIFE, the charity that provides support to the veterinary community, has launched a new website. The refreshed website, built by award-winning creative agency Genium, enables the veterinary community to browse useful information and mental health resources, and learn more about the support available to them. It is much more accessible and easier to navigate than the previous site.

The website provides information across a range of different topics, including mental health and self-care. It also provides details of Vetlife's three support services:

- Helpline;
- Health support;
- Financial support.

There are pages on veterinary-specific mental health topics written by experts. Users can access free resources for practices such as downloadable posters, fundraising packs and stickers. Applying for financial support and to volunteer has been made simple with new online forms.

Since the Covid-19 outbreak began, the Vetlife Helpline has experienced a nearly 30 per cent increase in contacts compared to 2019. The website launch comes at a



time when there are so many more people within the veterinary community seeking support, and the charity hopes the new website will help signpost them more

easily to the support and resources they need.

• **Visit the Vetlife website at [www.vetlife.org.uk](http://www.vetlife.org.uk)**

## Carpool Cases set to rev up again!

BVA Carpool Cases, hosted by BVA President James Russell in conjunction with the Association of Veterinary Students and the Farm Animal Veterinary Society, were created in 2020 to give students the opportunity to have the informal conversations and case discussions they would normally have with veterinary professionals in the car or at quieter moments during their EMS. The cases proved extremely popular with students and universities so new sessions are being planned for 2021. Information about the new dates and access to previous recordings can be found at [www.bva.co.uk/carpool-cases](http://www.bva.co.uk/carpool-cases)

# Picture perfect: BVA launches its 2021 photography competition

**Deborah McSkimming**, BVA communications manager, invites entries to the 2021 BVA photography competition.

THE 2021 edition of BVA's very popular photography competition is here! This is the opportunity for our members to show their creative and observational skills with a camera – whether it is on a smartphone or the latest, most high-spec model.

The competition has three categories and there is a £250 John Lewis voucher for the winner of each category. The winning images, together with the highly commended entries, will be displayed at BVA Live at the NEC, Birmingham, which will be held on 24–25 June 2021.

The three categories are:

- A vet's life in lockdown: images that reflect the extraordinary circumstances we were all thrust into during 2020;
- All creatures great and small: an opportunity to look at the vast diversity of the animal kingdom – domestic, agricultural and all aspects of wildlife;
- Happy pets that make us smile: the joy of a happy, contented animal.



One shot, two lives: the winning image from 2019's competition

Sponsored by IM3, the competition will be judged by BVA officers and professional photographers. Entries open on 11 January and will close on 8 March. The winners will be announced on 26 April.

• The competition is open to all BVA members. Photos must be original and entrants must hold the copyright. For full terms and conditions and details of how to enter, visit [www.bva.co.uk/photo-comp](http://www.bva.co.uk/photo-comp)

## Book early for exceptional CPD in 2021

New Year, new resolutions – so why not resolve to get your CPD organised for 2021? And what better than to combine your CPD with a great event – BVA Live? To be held on 24–25 June at the NEC, Birmingham, there will be a wealth of CPD sessions on offer in two theatres each day, combined with a full careers stream in another theatre – all complemented with a full exhibition of the latest services, products and suppliers to the industry.

The final programme and speakers will be available in a few weeks, but to whet your appetite we can announce some of the subjects that will be covered by some of the country's best speakers:

- Ophthalmology;
- Managing senior cats;



- Teletriage;
- Toxicology;
- Raw food dietary issues.

In addition, you will have the chance to meet BVA officers and staff and discuss and debate

the vital current issues facing the profession.

You can rest assured that we will continue to monitor the current regulations and take all the precautions necessary to ensure your and all participants' safety, so you can relax and enjoy the event with fellow veterinary professionals.

The earlier you book, the better the ticket prices, and as a BVA

member you will get 15 per cent off the cost of a ticket. So make it your New Year resolution to book your ticket for just £211+VAT before the price rises on 26 February.

• To book, visit <https://bvalive.vetshow.com> or call 02476 719687.

# Careers

## An unconventional route to specialisation

**Tom Cardy** is a specialist in neurology and co-clinical director at Cave Veterinary Specialists.

HAVING done poorly in my A levels (after good GCSEs), I went to Reading university through clearing.

I obtained a good degree in zoology and really enjoyed the research element of the course. I then applied for a PhD in pharmacology at Cambridge university and was lucky enough to be granted a place.

All of my friends were either going to be lawyers or management consultants, so after my PhD I took the same path. I became a management consultant working on product strategy in the pharmaceutical industry with a focus on nervous system diseases. I managed eight years before the city started to take its toll.

I had always harboured a secret desire to work with animals or become a vet. Consequently, I decided to take an alternative career path and qualified as a marine mammal trainer, spending the next three years working with dolphins at Dolphin Quest in Bermuda and Hawaii. The job was fantastic but the side of it that really interested me was the medical care of the dolphins.

After a little research I discovered there were places available for mature students at the Royal Veterinary College (RVC). I sat my entrance exams and one vet degree, one internship, a three-year residency and some very hard exams later I became a European specialist in veterinary neurology. It has been hard work and an extremely unconventional career path but I have no regrets and love the job I do.



**I had always harboured a secret desire to work with animals or become a vet**

give my own CPD and continue to publish in my speciality area. Having a good reputation is essential in my field as it is a small community and word will soon spread if your standards drop.

### MY CV

1991–1994: BSc in zoology from the University of Reading

1995–1998: PhD in pharmacology at the University of Cambridge

1998–2006: Management consultant in the pharmaceutical industry

2006–2008: Marine mammal trainer in Bermuda and Hawaii

2008–2011: BVetMed at the Royal Veterinary College (RVC)

2011–2012: General practice in Hertfordshire

2012–2013: Rotating internship at the RVC

2013–2016: Residency in neurology and neurosurgery at the RVC

2016–2018: Lecturer in neurology and neurosurgery at the RVC

2017: Gained European College of Veterinary Neurology diploma

2018–present: Neurology specialist and co-clinical director at Cave Veterinary Specialists

### When did you decide that you wanted to specialise?

I decided to specialise when I was working as a rotating intern at the RVC. The neurology team there was fantastic and I loved the beautiful simplicity of neurology. Dogs and cats are really just a large collection of sensors and wires attached to a central computer. Once you accept that concept, the rest is easy.

### What commitment is involved in becoming a specialist?

The personal commitment is colossal. Because of the hours I worked during training, I lost contact with large groups of friends, family and, in some instances, partners. The desire to learn and treat the animals became all-consuming.

### How do you maintain specialist status?

It is essential that I continue to be active in CPD. I am required to attend conferences, present at conferences,

### Private practice or academia?

I have worked in academia as a lecturer at the RVC and as a specialist in private practice. There are pros and cons to both roles but I have enjoyed all the centres that I have worked at.

### How do you maintain your work-life balance?

My work-life balance has been appalling. I've started early and finished late, and even found myself dreaming about work at night! But I am working hard to change this now as I have a young child and I wish to put my family first.

As specialists, you work extremely hard to achieve your status and continue to work hard to maintain it. You are proud of the high-quality care that you give, and always try to ensure you do the best for your patients. It is an emotional and stressful job but if you get it right it is astonishingly rewarding to be able to help someone's pet walk again!

## VMG launches framework for vet leadership standards

THE Veterinary Management Group (VMG) is supporting leadership and

management across the vet sector with the publication of a leadership standards framework.

The new framework supports initial training as well as CPD for those working in, or aspiring to, leadership roles.

The VMG recognises that leadership roles have become more diverse, offering opportunities for career advancement to a wider range



of veterinary staff. However, it says that because many new leaders have had only basic training to equip them

for new responsibilities, some find the adjustment challenging.

The framework is based on three areas – professional values, behaviours and practices, and knowledge and skills. Each of these areas is divided into a range of competences and the VMG makes recommendations as to the level of understanding and responsibility expected at each of five seniority

tiers, together with the evidence required to demonstrate success.

Organisations can use the framework to structure, evaluate and reward leadership roles, while individuals can use it to identify training needs and create tailored career development plans.

A new suite of accredited qualifications in veterinary business, leadership and management will be launched this year, the VMG says.

The framework can be downloaded at [www.vetmg.com/leadershipstandards](http://www.vetmg.com/leadershipstandards)



**Leadership roles offer career advancement across the vet sector**

### COURSE: CANINE ARTHRITIS MANAGEMENT

Hannah Capon is a first-opinion vet with a special interest in osteoarthritis in pets. Recognising the welfare issues surrounding arthritis led her to create an online advisory service – Canine Arthritis Management (CAM) – to build awareness of the condition and offer education to improve the quality of dogs' lives.

She has now developed a course for vet nurses, dog trainers, groomers and dog walkers, as their advice is often sought by pet owners. The course – CAM advocate level 1 – aims to increase awareness of canine osteoarthritis and help participants adopt an evidence-based veterinary approach to the advice they give. The course involves 11 hours of video lectures (and another 20 hours of optional viewing), with multiple-choice quizzes at the end of each module to help participants check their understanding and learning, and a suggested reading list.

For more information about CAM and its work, or to book a course, visit [www.camonlineshop.com](http://www.camonlineshop.com)



### ONE-DAY EXTRAMURAL STUDIES EVENT FOR VET STUDENTS

The British Small Animal Veterinary Association (BSAVA) is holding a one-day virtual conference for its student members on 23 January 2021. BSAVA Student Focus aims to support students preparing for a career in small animal practice through a fun, interactive day of clinical and non-clinical content, offering six hours of extramural studies. Bonus content will be available the day after the event, in the form of webinars on cardiology, exotics, surgery, nutraceuticals and how they are used in practice, and customer care. Registration costs £12; more information about the event and free student membership can be found at [www.bsava.com](http://www.bsava.com)



### FINANCIAL SUPPORT FOR CPD IN SCOTLAND

Scotland's VET Trust offers financial awards to those undertaking CPD in veterinary medicine and surgery. Applications are particularly welcome from vets in remote areas of the country and those returning to practice following a career break. Awards may support the cost of a place at the Trust's Stirling 2021 CPD conference (being held on 8 and 9 June) or attendance at other suitable CPD events. Application forms are available from the secretary by emailing [admin@vettrust.co.uk](mailto:admin@vettrust.co.uk) or downloading the forms from [www.vettrust.co.uk](http://www.vettrust.co.uk). Completed forms must be received by 31 January 2021 for consideration by the Trust's directors.



### AWARDS: VET TRUST WINNERS

More than £7000 was raised for Vetlife at the Vet Trust Awards, held on 26 November 2020. The awards, which shine a light on the people and companies who made a positive contribution to the vet community during the past year, are organised by Vet Dynamics and The Webinar Vet. The winners were announced at an online event. Among them were: Most admired animal charity – **Street Vet**. Vet personality of the year – **Julian Norton**, author and TV personality on the Channel 5 TV series The Yorkshire Vet. Vet of the year – **Cornel Igna**, an educator at Banat University of Agronomical Sciences and Veterinary Medicine, Romania. Sheridan award – **Village Vets**. Locum impact award – **Natalie Scroggie**, emergency and critical care vet and 'This vet runs' blogger.

# VetRecord Careers

For further information on placing an advertisement, telephone: **Alain Chong** on **+44 (0)1243 684 011**

Advertisements should be emailed to **vetrecordadvertiser@wiley.com**

Copy deadline is noon, Tuesday four days prior to publication. **vetrecordcareers.com**

## JOBS OUTSIDE THE UK

### **Veterinary Specialists** Small Animal Specialist Hospital

The Small Animal Specialist Hospital (SASH), is located in sunny Australia and is the largest Veterinary hospital in the Southern Hemisphere. We provide a complete range of clinical services to our patients with over 15 departments working collaboratively together around the country. Some of our services include internal medicine, neurology, surgery, oncology, cardiology, ophthalmology, dermatology, radiology, anaesthesia, 24 hour emergency and critical care and rehabilitation.

A number of our hospitals are currently going through major upgrades with brand new dedicated specialist units, full service in-house lab, Ultrasound, CT scanner, high-field MRI, digital radiography, Linear accelerator, laparoscopy, endoscopy, and much more.

447533-0

To apply please email: [employment@sashvets.com](mailto:employment@sashvets.com)

## VETERINARY JOBS

# Neurology Specialist

Permanent Position or Maternity Cover

We are looking for an additional Specialist in Neurology to join our current team of 4 neurologists.

The position could be permanent or a 12-month maternity cover contract depending on the requirements of the candidate. The successful candidate is expected to hold a relevant diploma (ACVIM or ECVN) or to have completed an ECVN, or ACVIM approved neurology residency.

Experience of neurosurgery is preferable. The position will be remunerated in line with other Specialist-level positions.

NDSR is an established multi-disciplinary referral practice with 27 recognised Specialists in soft tissue surgery, internal medicine, dentistry, oncology, cardiology, anaesthesia, diagnostic imaging, ophthalmology, orthopaedic surgery and neurology.

Facilities include onsite 1.5T MRI, CT scanner, electrodiagnostic suite and extensive neurosurgical equipment including ultrasonic surgical aspirator, disc prosthesis and locking plate systems.

Please send a CV and covering letter to either Josey Killner [josey.killner@ndsr.co.uk](mailto:josey.killner@ndsr.co.uk) or contact Rodolfo Cappello at [rodolfo.cappello@ndsr.co.uk](mailto:rodolfo.cappello@ndsr.co.uk) or call **01883 741440** for an informal discussion.

Closing date: 25th January 2021

Friesian Buildings 3 & 4  
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Bletchingley  
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[www.ndsr.co.uk](http://www.ndsr.co.uk)

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- Use of Vehicle (New 3 Seat Van.)
- Calm+Cosy Place to Sleep/Stay (Pleasant Onsite Flat.)
- Picturesque Countryside with wide variety of activities (Rutland Water+Other.)
- Lovely Town
- Lovely Job

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**Penbode**  
Pet Vets

## Small Animal Vet

### North Devon and Cornwall Coast

[www.penbodevets.co.uk](http://www.penbodevets.co.uk)

Opening for a dedicated, enthusiastic, small animal vet to join the experienced, supportive Penbode Pets Vets team. We are looking for someone with a caring, compassionate approach, to help us deliver an excellent, client focused service. Good communication skills, being a team player and the ability to maintain a sense of humour an asset. We would consider any level of experience.

We have four, newly refurbished and well equipped branches. We run our own 24/7 emergency service with nurse on site. This full time post is a 4 day week with equal share of Saturday mornings, nights and weekend work, working out at approximately a 1 in 7 rota, giving plenty of opportunity to make the most of this beautiful part of the world. We actively support clinical progression, 5 days paid CPD annually and certificates encouraged.

**If you would like to know a little more, please ring informally and confidentially; Claire Davies 07961 499523 or Mark Banks 07973 448053. To apply, please send CV and covering letter to [theresa.pyke@penbodevets.co.uk](mailto:theresa.pyke@penbodevets.co.uk)**

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## Building the best place to work means investing in the development of our people.

### Veterinary Surgeons and Mobile positions are available across a range of practices and locations

We're investing in building the best place to work in the veterinary industry – bring your talent to Medivet and help us build it together.

We have built a strong network of over 300 practices and 22 state-of-the-art 24-hour centres that are all home to a community of exceptional, passionate professionals. Our unique “hub and spoke” model enables collaborative working and ensures everyone is supported both clinically and personally.

As a Veterinary Surgeon with Medivet, you will deliver exceptional care to all our patients, putting our clients and patients at the centre of every decision you make. We would love to hear from you if you have already gained valuable experience in small animal practice

and are looking to join a group that will support you in your career progression and development as a clinician.

We actively support and encourage CPD to certificate level. All clinicians have access to a large support network of often multi-certificate holding veterinary surgeons, with considerable experience. In addition, you'll have access to the latest diagnostic facilities, including advanced imaging within our main centres.

We have a broad range of clinics so it's likely that we will have an opportunity that's a perfect fit for you and your skills and, most importantly, that fits what you're looking for from your career and your employer.

**Contact our specialist recruitment team to find out more about the opportunities available. Call 01923 920890 or email [recruitment@medivet.co.uk](mailto:recruitment@medivet.co.uk)**

[www.medivet.co.uk/careers](http://www.medivet.co.uk/careers)





## Experienced Veterinary Surgeon - London

**Do you love being a vet but feel tired with the lack of progression, clinical and emotional support and gratitude?  
Are you nothing more than a payroll number?**

As an independently owned Veterinary Team in London and Kent, we hold quarterly reviews with a Director to look at all aspects of your progression and role within our team - there's no 'once a year' feedback at DNA. We value our vets immensely and go above and beyond to keep you supported from the very top.

The rota - ever wished for 'time out' following a weekend of intense cases? Our weekends are well structured, not as heavily featured as many corporate ventures and allow a 2.5 day week to follow.

If you long for colleagues to converse about complex medicine cases, surgical opinions and high level imaging requirements then look no further. A vast proportion of our outstanding team are certificate holders, certificate studiers, CPD fanatics or just simply hardcore first opinion practitioners who have remained with us through many years. Our team looks to welcome new vets who not only bring something to our already immense team, but can learn from our genius too!

Equipment - Ever had a 'wish list'? Tired of just wishing? Our animal hospitals and surgeries are supported with the latest progressive equipment to ensure you can do as much as you feel comfortable to treat on site, without the need to wave off those exciting surgical or imaging cases to a lucky team who are miles away!

Support teams - yes, we have the best nurses and customer service ambassadors in the business! Why and how? Our independent group attracts the very best in advanced nursing teams who thrive on being led by the vets they support. We encourage growth for all of our valued staff and the attraction to be praised, recognised and rewarded in our industry ensures it's a pleasure to encourage the cream of clinical and customer service support to join and remain with us.

A real team! Events for all of our independent group including a Christmas Awards Ceremony on the Thames with champagne, glitter and laughter. Vet of the Year, Surgical Case, Medicine Case, Colleague of the Year - we like to praise our team and congratulate them all on their successes and advancement.

In the summer we look forward to a team event held for all to enjoy! Rounders match, cricket, a picnic with Prosecco followed by an evening of dancing (energy permitting!).

If the above description of our Independent Team intrigues you, send through your CV to begin to talk to one of our industry experienced Directors

**Applications: Claire Baker (claire@dnavetcare.co.uk)**

447636-0



### Veterinary Surgeon Independent Small Animal Practice

Fantastic, close knit-team require a seventh vet to join our growing, independent small animal practice. For the right person we are offering great salary (up to £50k), 5 weeks holiday + extras for a four day week in a beautiful part of the country. Achieve that balance you have been longing for!

We can be flexible on hours and experience. We have a purpose built premises with all the equipment (digital x-ray including dental x-ray, ultrasound, endoscopy, tonometry, BP analyser, IDEXX analysers all linked through our PMS) and are well served by referral centres, as well as the back-up of our experienced nurses and support staff.

We are lucky to have really friendly, well insured clients to allow you to work up cases fully. We want you to become an integral part of the team and the community, with your own patients and cases as well as developing yourself professionally. We can provide support as needed and are willing to fund certificates etc.

As a bonus how many other practices offer the opportunity to care for local grey and common seals, penguins, otters and sharks?!

445169-1

See our website at [www.coastalvets.co.uk](http://www.coastalvets.co.uk) and email [chris@coastalvets.co.uk](mailto:chris@coastalvets.co.uk) or ring 07507661747



### NORWOOD VETERINARY GROUP EAST YORKSHIRE

We are looking for a caring, motivated vet to join our friendly, independent small animal practice situated in the heart of Beverley, a beautiful East Yorkshire town, close to the coast, Yorkshire Wolds and city life. You will be part of a team committed to providing a high level of patient care and a welcoming client- focused service.

Our spacious, well equipped Tier 2/VNTC practice will enable you to investigate and treat a diverse medical and surgical case load, giving you the opportunity to develop in your areas of interest.

We have a strong ethos of mutual support within our experienced team of 7 vets and 10 nurses (7 RVNS).

**We offer:**

- 4 day week
- 1:5 OOH rota
- CPD encouraged and funded
- Professional fees paid
- Salary commensurate with experience



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If you would like to apply, please email us at [vets@norwoodvets.co.uk](mailto:vets@norwoodvets.co.uk) or telephone 01482 882613 to speak to John, Pablo or Jill for further information.

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## EQUINE VET

### NORTH DEVON / CORNWALL

Friendly, supportive 7 vet equine team seeks an enthusiastic colleague. We work to high clinical standards with good client care, whilst making time to enjoy the beautiful local beaches and moors. Ideally you will have at least two years' experience in equine practice, however confident new graduates will be considered.

Ambulatory and clinic based work. High quality portable equipment including video gastroscope and endoscopes, two Cuatro Slate Hub DR units, digital ultrasound scanners and shockwave. Newly refurbished operating theatre and lameness diagnostic facilities. New Leonardo Dual 45 diode laser BEVA approved AI with onsite stocks, stabling and paddocks.

Responsibility for your own cases including work ups at the clinic. Working alongside experienced colleagues. Regular clinical club meetings and mentoring. Frequently visited by external specialists in all spheres.

Remuneration according to experience. Genuine flexible 1 in 6 rota.

Call 01409 255549 for an informal and confidential chat with David Rowlands or Hermione Jane.

Please send your CV and covering letter to [theresa.pyke@penbodevets.co.uk](mailto:theresa.pyke@penbodevets.co.uk)

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## FARM VET

### DEVON/CORNWALL

Penbode Farm Vets are looking for an **experienced Farm Vet** to join our growing, friendly and enthusiastic team of dedicated Farm Vets, TB Testers and VetTechs **close to some fantastic North Devon and Cornwall surf beaches!**

The practice is **dairy focused**, but we do have **beef and sheep clients** too. You will enjoy clinical freedom with areas of special interest. **We offer a competitive salary and generous CPD allowance.**

To apply email your CV and covering letter to [theresa.pyke@penbodevets.co.uk](mailto:theresa.pyke@penbodevets.co.uk) or for a chat call Dan Forrester on 01288 353766.

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[www.penbodevets.co.uk](http://www.penbodevets.co.uk)



## St. Boniface Veterinary Clinic

Opportunity for team focused individual to develop in SA role, with potential to participate in equine work. Independent, progressive mixed practice. Beautiful mid Devon near Exeter, moors and coasts.

Excellent small animal facilities, supportive friendly team. 15 minute appointments with emphasis on exceptional care.

4 day week, 1/6 rota with accommodation available for on call duties. On site dedicated night nurse team.

Generous CPD/ XLVets development programme

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Apply with CV to [marie@stbonifacevets.co.uk](mailto:marie@stbonifacevets.co.uk)



## Large animal vet

### Tethera Veterinary Services Ltd, Appleby-In-Westmorland, Cumbria

Full time position available due to retirement and expansion. Keen and enthusiastic team with a good mix of dairy, beef and sheep farms including plenty of routine scanning work etc. Proportion of first opinion equine work available if wanted.

- 4 day week 8.30-5 with 1:5 out of hours rota equally shared.
- All kit that you would expect- easi scan ultrasound, digital xray, inhouse lab, fertility testing kit etc.
- Salary dependent on experience, CPD encouraged and funded, RCVS and VDS paid for. 5.6 weeks holiday.

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Please apply via email to [directors.tetheravets@gmail.com](mailto:directors.tetheravets@gmail.com) or call for an informal chat on 01768351819 with Helen, Ruth or Sophie

## Small Animal Vet - Gloucester

We are an independent small animal practice who are looking for a colleague to join us in our well equipped practices in Gloucester.

Excellent medical and surgical facilities including ultrasound, laparoscopy and well equipped lab. The days are structured to allow good case continuity and ample time for case discussion with experienced colleagues. Would suit anyone looking to develop either as a GP or in any specific field.

Four day week, 1 in 5 weekends, no OOH. 5 weeks holiday plus bank holidays. Opportunity for part time would be considered.

Contact Neil 07795 262254 or [neil@brambles-vets.co.uk](mailto:neil@brambles-vets.co.uk)



0-86214



A thriving independent genuine mixed practice (45FA/10EQ/55SA) seeks an additional, preferably experienced colleague. We have modern well equipped premises, are Tier 2 RCVS accredited across all species and we are a VN training practice.

Located in Ellesmere on the Shropshire - North Wales border we have an established, loyal client base and a supportive practice team.

There is flexibility within the veterinary team to support and promote individual interests and we are open to embrace new ideas. There are genuine long term prospects for the right candidate.

1:5 OOH rota, with backup always available, 4.5 day working week, 1:10 long weekend.

A generous salary package according to experience which includes memberships and fully funded CPD.

Please send applications via email to [directors@blakemerevets.co.uk](mailto:directors@blakemerevets.co.uk)

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AVS SENIOR VICE PRESIDENT  
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British Veterinary Association

# Financial Support

Throughout the course of our lives, many of us will experience financial difficulties. The causes are varied, but may include a health problem that leaves you unable to work, an accident, the breakdown of a relationship or the loss of a spouse.

Vetlife Financial Support can provide grants to assist with primary living costs – food, shelter, utilities and basic transportation – in situations where state benefits do not sufficiently safeguard a veterinary surgeon from poverty. Every individual's circumstances are different so please get in touch with us to discuss your situation in confidence.

## What sort of help is given?

- Immediate emergency assistance
- Regular monthly grants
- One-off gifts
- Professional advice on State benefits and debt management
- CPD provision
- Accommodation



To apply and for  
further information  
visit [www.vetlife.org.uk](http://www.vetlife.org.uk)  
or call 020 7908 6374

