HOUSE OF LORDS

Environment and Climate Change Committee

Corrected oral evidence: Pet parasite medication

Wednesday 17 June 2026

10 am

Watch the meeting

Members present: Baroness Sheehan (The Chair); Lord Ashcombe; Lord Jay of Ewelme; Lord Krebs; Lord Lennie; Baroness McIntosh of Pickering; Lord Rooker; Lord Trees; Baroness Whitaker.

Evidence Session No. 3 Heard in Public Questions 26 – 42

Witnesses

Dr Donal Murphy, Deputy CEO, Head of International and Regulatory Affairs, National Office of Animal Health (NOAH); Dr Ian Wright, Chairman and Director, ESCCAP; Dr Jacqui Skelly MRCVS, Head of Veterinary Technical Services, Elanco. 1.

Examination of witnesses

Dr Donal Murphy, Dr Ian Wright and Dr Jacqui Skelly MRCVS.

Q26 **The Chair:** Good morning and welcome to the Lords Committee on the Environment and Climate Change. Today we will be continuing with our inquiry into pet parasite medications, hearing from representatives of the pet health industry.

Before we start, I remind everyone that the session will be webcast live and that a transcript will be taken and made public. Witnesses will have an opportunity to review the transcript and, if necessary, make very minor amendments. Members are reminded that they should declare any relevant interests the first time they speak, and I stress that this applies equally to all witnesses. I take the opportunity here to say that I am a director of Peers for the Planet.

I start by extending a very warm welcome to our panel of expert witnesses this morning, representatives from the pet health industry. May I ask each of you to briefly introduce yourselves?

Dr Ian Wright: Thank you very much. Thanks for the invite. I am a veterinary practitioner, parasitologist and researcher. I work and co-own a practice in Fleetwood, a beautiful, idyllic town on the Lancashire coast. I am also chair of the European Scientific Counsel for Companion Animal Parasites—ESCCAP. We give parasite advice and supply materials in relation to parasite control. I need to declare that ESCCAP is a body funded by diagnostic and pharmaceutical companies, and I have done talks and written articles for a myriad of people, including diagnostic companies, pharmaceutical companies, BSAVA and the BVA, among others.

Dr Donal Murphy: I am a vet by background. I worked in clinical practice for a number of years. For the last 17 years, I have been employed by NOAH, which is the trade association for the UK animal health industry. In terms of declaring an interest, NOAH is entirely funded by the animal health industry, the companies that manufacture and market licensed veterinary medicines here in the UK. My organisation represents 25 member companies ranging from small UK-based companies to global multinational companies. They produce and market a range of licensed veterinary medicines, including pharmaceuticals, parasiticides and vaccines. Some companies will also have other products in their portfolio, such as feed additives and diagnostics, but the main portfolio of the companies I represent is licensed veterinary medicines.

Dr Jacqui Skelly: I am a veterinary surgeon by background, with a clinical past in companion animal practice both in private practice and the charity sector. I now work for Elanco Animal Health, which is one of the largest dedicated animal health companies on a global scale. We have a wide range of products in a whole host of disease areas for both companion and farm animals. Within that broad portfolio, we have products that treat parasites in companion animals and some products do

contain imidacloprid, which is one of the molecules that have featured in your discussions to date.

Q27 **The Chair:** Before asking the first question, I would like to say a few words on why we have asked you here today. In the previous two sessions, we have had laid out to us concerns about the use of two commonly used chemicals, fipronil and imidacloprid, to treat fleas and ticks on our pets, mostly dogs and cats. The first belongs to a class of chemicals known as PFAS, also known as forever chemicals, and the second is a neonicotinoid. Both were banned about 10 years ago in agricultural use, since when their use has increased progressively as PPMs—pet parasite medications.

The question that is of interest is whether responsible pet owners are getting the right information about these substances. There is quite a lot to unpick there, and there may be some things you wish to challenge. Let us make a start. What are the most widely used pet parasite medication products in the UK? How has that landscape changed in the last decade?

Dr Ian Wright: It is important to say that I do not have any figures on this at all, so it would just be a broad feeling from me.

The Chair: Why do you not have figures?

Dr Ian Wright: My field is parasite control and not sales, marketing per se.

The Chair: Does your organisation, ESCCAP?

Dr Ian Wright: It is not for profit. We do not sell parasiticides and we are Europe-wide, so we do not have a focus on the UK itself.

The Chair: Do you have a curiosity as to how many of these chemicals are out there and how much are sold?

Dr Ian Wright: It is fair to say that quite a lot of them are out there but, from our point of view, not specific figures.

The Chair: That is something that we have come across a lot—nobody seems to have figures—but, nevertheless, carry on.

Dr Ian Wright: It may be because they do not exist, or because different organisations have different perspectives on the information they can access.

The Chair: So nobody has figures, but they sell these things?

Dr Ian Wright: Yes.

The Chair: They make profits from them but they do not know how much they sell and who they sell them to. They have no marketing information.

Dr Ian Wright: As a veterinary practitioner, I sell—

The Chair: These are things we really would like to get to the bottom of. Where is this information? I interrupted you and I am sorry that I did, so do carry on.

Dr Ian Wright: I sell these products as a veterinary practitioner, but my view of what is being sold is going to be somewhat skewed by the fact that I am selling them through a practice. Over the past 23 years that I have been practising, there has been a significant shift in practice from the sale of fipronil- and, to lesser extent, imidacloprid-based products because new products have become available: selamectin and then a range of isoxazoline-based drugs.

The shift has been more towards prescription-only medicine sales through veterinary practices. When I first graduated, that was very much not the case. Fipronil was widely sold, and there were still some limited sales of Nuvan Top. People were still chasing their cats around with cans of organophosphates. Things changed rapidly with the introduction of fipronil and imidacloprid, but since then we have moved, as a profession, more towards isoxazoline-based sales. There are still very significant sales of fipronil and imidacloprid through non-POM-V channels. It is just that, as veterinary practitioners, we may sell less—I may be corrected on this—than those lower prescription routes.

Dr Donal Murphy: My organisation does not hold data on what products are being sold in terms of the different anti-parasitic medicines for companion animals and which channels they are being sold through. We do not hold that data.

The Veterinary Medicines Directorate, the regulatory authority, will receive data as part of pharmacovigilance reports about different products. Pharmacovigilance is a system by which the regulatory authority monitors the safety, efficacy and quality of products through companies submitting data about any suspect adverse event reports that have been reported to them. Any suspect adverse event data needs to be given context in terms of the number of reports versus the number of doses of the product that are sold. That type of data will be sent to the regulatory authority. It is being collected for pharmacovigilance purposes; it is not being collected for the purposes of collation and comparison of what types of anti-parasitic medicines are being produced and sold through what channels.

In response to one of the questions you posed to Dr Wright, companies will know their own sales but it is normal commercial practice that they do not release commercially confidential information about their businesses to a wide range of people and organisations.

The Chair: I am sure we will come back to where we can find this information. It would be very helpful given these chemicals are of environmental and possibly human health concern.

Dr Jacqui Skelly: I can talk to the big picture. Ian summed it up quite well in terms of what we have seen over the last 10 years or so. Back in

the 1990s and 2000s, we would have seen products such as imidacloprid and fipronil hold the predominant market share because they were the most effective compounds that we had available and really the only effective compounds that we had available. Over the last 10 to 15 years, we have seen the emergence of the isoxazoline class, which has very much changed habits and sales patterns, particularly within the veterinary channel because that is primarily where those products are sold.

We do put out some figures. There is a peer-reviewed paper on imidacloprid, which was published a few months ago, where imidacloprid figures are found. We are submitting that as supporting evidence.

I would challenge the statement made with regard to veterinary imidacloprid increasing since the agricultural ban. The broad picture is that sales are static to declining with regard to that particular molecule, which is the one that I can comment on.

The Chair: Last week, Dr Mullineaux said that manufacturers could make their sales data available so that the sector had a better idea of the main products being sold. Given that these are not inert products, it would be very helpful and in the public interest to support research into the quantities of PPM used. We have received quite a lot of contradictory evidence about the damage these chemicals do to the environment. The quantities that are present in the environment and the routes by which they got there are also under contention. It would really help to understand how many of these products are being sold, how much is being used, and how many are being thrown away.

Dr Jacqui Skelly: I would say from the outset that the industry is very open to collaborating across the sector on what can be shared and discussed that would be helpful. It is important for us that it is done in a useful way. It is not as easy as it perhaps sometimes seems because there are all sorts of different figures and routes to market that come from different organisations. We are very much open. What we want as an industry is a collaborative approach right across the sector. We are absolutely open to discussions about what we can do that will help. As long as we are clear on the goals, we can work together in a way that is useful. It is just not always as easy as it perhaps would seem on the face of it.

Dr Donal Murphy: I agree with Jacqui's comment that the industry would be open to working with other organisations about how such a system could be developed. Points that need to be considered are how the data can be gathered and how it can be given context against the pet population. There are many other elements to it that would need consideration, as well as the purpose of having granular data in terms of what it could tell us and what subsequent steps it would inform.

The Chair: Which organisations would you be willing to work with?

Dr Donal Murphy: There is a range of organisations that have a key role to play in this discussion; clearly, the British Veterinary Association. The most important actor would be the Veterinary Medicines Directorate. There are other organisations that represent professionals, known as suitably qualified persons, who are permitted to prescribe and dispense some products. There are also organisations that represent the pet retail sector where some products are also available for consumers, and a final key one would be the pet charity sector. That is an overview.

Q28 **Lord Krebs:** Thank you to our witnesses for coming along. What we have just heard reflects so much of what we have heard in this inquiry; there is a great deal of opacity. We simply cannot get facts. I want to ask you about one fact where we have had two completely contradictory accounts, which is about the prevalence of parasite infections in companion animals.

Imperial College told us the figures for fleas: one in 85 cats and one in 400 dogs. For ticks it is one in 625 cats and one in 150 dogs. However, NOAH tells us that one in four cats and one in six dogs is infected with fleas. These are widely different estimates, so who is telling us the truth?

Dr Ian Wright: There I can help. Nobody is lying to you. These figures are taken from two very different studies so if I have a little time—

Lord Krebs: Which one is more reliable? I gather that the Imperial one involves 7 million animals and the NOAH one involves 1,500 animals, so which is more reliable?

Dr Ian Wright: I can explain the methodology between them and then you will see, I hope, that they both have something to offer. The true figure lies somewhere in-between the two. We do not know where.

Lord Krebs: It is a pretty big gap in terms of orders of magnitude.

Dr Ian Wright: It is a pretty big gap. The Big Flea Project was carried out in 2018. It asked vets to randomly select pets in their practice and actively look for fleas. If they found fleas, they submitted it and a prevalence was worked out on the basis of the percentage of dogs and cats where fleas were found. We know from studies that are carried out in this way that they tend to be somewhat overestimates, not because vets are looking to mislead anyone but because they are enthusiastic. If they find a flea on a pet, they think the researchers will like it and they send it in. It can be very difficult to pare that out. As that research was carried out, one in four cats and around one in seven dogs was found to be positive for fleas.

The other study was by SAVSNET, which is not actively telling vets or nurses to do anything. It was just looking for fleas in the records. Just as the authors of the Big Flea Project acknowledge that theirs was likely to be an overestimate, the authors of the SAVSNET paper acknowledge that theirs was likely to be a significant underestimate. That is because vets and nurses are not actively looking for fleas every time a pet comes into a consulting room. They are not looking for fleas at all on many of those

pets so those figures are, by definition, going to be a significant underestimate.

It would be useful to have a controlled study for prevalence. I have asked for that, and ESCCAP has asked for that. To recruit practices, to have oversight and to analyse that data costs a significant amount of money. If I could have the research of my choice, another prevalence study of fleas would be very useful.

The authors of the SAVSNET paper emphasise that it was a significant underestimate of the numbers. What the SAVSNET paper showed was that flea exposure happens all year round, and the nature of the flea life cycle is such that any pet could be exposed to fleas. Once fleas establish in the home, it often takes at least two to three months to eliminate them. We can look. European-wide, ESCCAP has a list of risk factors that pet owners and vets should consider before deciding where flea treatment should be initiated as a preventative. We really do not have any large-scale data on what those risk factors might be for the UK with a humid climate and centrally heated homes. We need more research into risk factors and prevalence. There is a lot of debate about the extent, for instance, that indoor cats are exposed to fleas so more information in these areas would be really useful. I do not know if you want me to go on and talk about other parasites at this stage.

Lord Krebs: That is fine. Would Dr Murphy or Dr Skelly like to add anything?

Dr Jacqui Skelly: I am happy to add the perspective from practice. I appreciate that robust evidence-driven papers are what we would like to see but, from my own clinical experience and the experience of my team who speak to vets and practitioners in day-to-day practice every single day, fleas are a very real daily problem still encountered in the UK. One of the educational services that we have is an advice line. We have a contact email address for people considering or wanting to use our products so they can reach out to us and get advice on fleas, the correct use of our products, and things in general. The advice lines receive hundreds of calls per month, even in the depths of winter. It peaks at around 500 or so through the summer. It is a very real issue that vets are dealing with on a daily basis and something that owners are concerned about as well.

From my own experience, I worked in charity practice and have watched kittens die in front of my eyes from something as simple as an overwhelming flea burden and the ensuing anaemia that comes from that. It is devastating to see. While I appreciate that we would like to have more data, I do not want to move away from the fact that it is a very real everyday problem in UK practice at the moment.

Lord Krebs: That is in spite of the fact that all these flea medications are being sold. Are they not doing their job?

Dr Jacqui Skelly: No, not everybody is accessing them. It is not necessarily in relation to the efficacy of the product. We know there are a lot of pets out there that do not receive flea treatment at the moment. My biggest concern is that we do not keep this in proportion and end up with fewer medicalised pets and more problems.

Lord Krebs: What proportion of cats and dogs receive flea treatment?

Dr Donal Murphy: A recent paper, included in our submission, demonstrated that about 30% of dogs and 20% of cats were receiving flea coverage year round. There are a lot of pets that are not receiving treatment all the time. That is a point that has been put forward, but the evidence we have seen would demonstrate that it is not the case.

Q29 **Baroness Whitaker:** Good morning. Thank you for coming and assembling all this evidence. To continue this search for evidence, what are the implications of parasite prevention for human health? Is the prevalence of vectors that pass on such zoonotic diseases changing?

Dr Ian Wright: There are three big distinctions here, three broad areas. There are endoparasites: the threats that worms pose to human health. There are ectoparasites: the fleas and ticks that are present in the UK. There is also a fascinating array of exotic ticks and worms that are being seen in imported pets. Of those, echinococcus multilocularis, which is a tapeworm present on the continent, is not present in the UK. There is a major concern that it might establish itself in the next few years, depending on what preventive measures are in place. I mention that because echinococcus multilocularis is a severe zoonosis. If it established in the UK it would change this argument completely, certainly in terms of tapeworm control.

Baroness Whitaker: I am not quite clear from what you said how many of these exotic new parasites are coming in. Is there any data on it?

Dr Ian Wright: Sadly, no. There is no compulsory recording system. There is understandable criticism about disease rates in people, and the fact that we do not have recording prevalence data for a lot of parasites. It is because a lot of these parasites and diseases are not reportable or notifiable diseases. It would be very useful if they were, but they are not. We have to work with what we have. It means there are very large data gaps in what I am going to discuss. That is not because anybody is trying to cover anything up; it is simply because nobody reports infections. For many, there are no central databases in which they can be recorded.

Baroness Whitaker: It sounds like an interesting area for further research.

Dr Ian Wright: Absolutely. If we take toxocara, which is the most common intestinal roundworm in cats and dogs in the UK, it is a zoonosis. It can cause ocular problems, particularly in young children, and it can cause a wide variety of chronic illness, such as chronic fatigue and pain. There have been associative links with cognitive dysfunction, epilepsy, asthma and dermatitis, so a very wide range of signs.

Baroness Whitaker: How much?

Dr Ian Wright: I am coming to that. It is not a reportable disease or a notifiable disease; it is a disease that is not often diagnosed at all in the human population. There are a handful of ocular cases in humans reported each year but in all the other cases you have to decide to go to your GP.

Baroness Whitaker: I have been aware of the risks to children since my own children's childhood, which is a very long time ago. When they used to walk to school, they would scuff up dog dirt in the park they walked through, which had to be scraped out of their hair. There was a lot of publicity about toxocara.

Dr Ian Wright: There is still a lot of publicity because it is inherently linked to dog fouling and anti-dog fouling campaigns. With the wide range of clinical ways it can present, people often do not go with the symptoms or they are not diagnosed. If they are diagnosed, it is not reported.

What we do have is soil study data from around the UK. In 2022, Airs et al looked at toxocara eggs, which are potentially infective to people, in public parks around the UK. They found that 86% of public parks in the UK had toxocara eggs that could infect people. A similar study carried out in the East Midlands in 2022 by Kaul et al found 74% of public parks to be positive. There is certainly the potential for exposure.

It has been argued that foxes may be contributing to that environmental load, but excellent modelling by the University of Bristol suggested that was not the case because of the low number of foxes compared with the large number of domestic and stray dogs and cats in the UK. There is certainly the potential for exposure there.

For fleas, it was 11% in the Big Flea Project. However those fleas were collected—it is still a percentage of the fleas collected—they were found to be positive for bartonella, which is a significant zoonosis to people but also not reportable or tested for in the UK. We do not know what the human prevalence background of that is. Some 5% of fleas were found to be positive for rickettsia felis, which is a significant zoonosis. Bartonella is transmitted through flea dirt in the home. If we lose control of fleas in the home, potentially people will be exposed. For bartonella, the greatest risk group is the immune suppressed. For toxocara, the most at-risk group would be young children or the immune suppressed.

There are then a wide variety of tick-borne pathogens that are zoonotic in the UK, such as Lyme disease, anaplasmosis, and tick-borne encephalitis virus, which is an example of an exotic pathogen recently established in the UK. Dogs and cats do not represent a direct zoonotic risk, but if ticks do not fully attach to pets and drop off in the home, or people live a similar lifestyle to their pets, then there is a possibility of communal exposure.

Baroness Whitaker: Before I ask the other two whether they have

anything to add, could you broaden it a little? Human health is not only affected by zoonosis. We have some evidence that it is affected by the substances excreted by the preventive measures into the water system. Do any of you have information about that where human health is a concern?

Dr Ian Wright: The studies I have read—and I am not a human doctor—in terms of study design have been of a relatively small sample with a relatively weak correlation. Correlation does not imply causation, but even where it does the authors conceded that that correlation was quite weak.

Baroness Whitaker: It is a question really of finding out how much is known.

Dr Ian Wright: Yes, that is what I was going to come to. It is a phrase you are probably fed up with hearing, but it is an area where a lot more research is needed. Unlike zoonotic risks from parasites, a definite link has not been established between the use of these products and effects on human health.

Dr Donal Murphy: I mentioned earlier the pharmacovigilance system but, in the initial regulatory and authorisation process for veterinary medicines, user safety is a key consideration by the regulator. It considers whether the user, as in the person administering the product or the person who is going to be in contact with the treated animal, faces adverse risks to their health from the product. That is a key question considered as part of the authorisation process, here in the UK, in Europe, and essentially everywhere in the world. It is one of the cornerstones of the regulation of veterinary medicines.

Baroness Whitaker: That is good to know. Could you just outline, perhaps in writing later, what the measures are to establish the risk? How do they measure it? What do they come up with?

Dr Donal Murphy: They will look at things such as the characteristics of the compound, how it could impact on human health, and the likelihood of exposure. I can follow up with more detail to the committee about that.

Baroness Whitaker: Please do and thank you very much.

Dr Donal Murphy: I would just like to go into a little more detail about the post-authorisation assessment of these products, both here and elsewhere, through what is known as the pharmacovigilance system. Reports of adverse impact on human health must be submitted to the regulatory authority if a company receives reports of that nature. The regulators look at that data on an ongoing basis across the many doses sold throughout the world and consider what impact it is having and whether changes are needed.

Alongside those reports, regulators are required to assess and consider things such as new and emerging scientific literature of the nature you

referred to and whether that in any way alters the benefit-risk balance of the product and any risks to human health.

In summary, I am not aware of any global regulator that has looked at this subject, which they are required to do to fulfil their obligations, and reached the conclusion that there are human health risks arising from the use of these compounds. It is part of the regulatory system, both before and after entry into the market. The compounds involved have been widely used around the world for decades, and I am not aware of any global regulatory view that they pose a risk to human health.

Baroness Whitaker: Do you have anything to add?

Dr Jacqui Skelly: I have nothing to add to that.

Baroness Whitaker: I will leave it there but I am sure there is more to explore. Anything you can tell us about the depth and reliability of evidence would be very helpful.

Q30 **The Chair:** Before we move on to the next question, I want to ask a few further questions on the zoonotic risk. The NHS hospital diagnosis report, *NHS England 2023-2025*, suggests that the incidence of zoonotic infection remains low. For bartonella-spread diseases the incident rate is one in 6 million. The PREPP team at Imperial College, which I am sure you are familiar with, notes that the risk is so low that "none of the potential pet ectoparasite-associated zoonoses are currently listed on the UK Health Security Agency … or Animal and Plant Health Agency … zoonosis surveillance reports". Dr Perkins also pointed out that a type of bartonella can also be spread by head lice, yet we are not proposing to systematically treat all our children with any of these chemicals. I wonder whether I can have a comment from each of you on that, starting with you, Dr Skelly; otherwise, it seems as though some scaremongering, almost, is going on from written comments we have received from NOAH and ESCCAP.

Dr Jacqui Skelly: I am sure Ian will have lots to say on this topic but I am happy for you to start with me. That is absolutely fine. The challenge is that this parasite is not widely looked at. We simply do not know what the real rate of it is in the population because it is not routinely screened for. Some conditions that it causes are general malaise, fatigue and running a fever—things we experience that may cause significant economic loss because people take a few days off work, et cetera—but we simply do not have a route to achieve a definitive diagnosis in most cases.

We know from incidence rates that the parasite is out there. Ian mentioned the levels of it that we see in fleas in the UK. We know that people suffer from illnesses all the time. We know it has the potential to become serious, but the steps a person would have to go through to actually achieve a diagnosis are difficult. I know veterinary clinicians who have been suspicious from their clinical science and history that bartonella could be a consideration for them, who have really struggled to

get GPs to consider it and run the necessary tests via the medical routes, which I presume have a cost associated with them. We need to be very careful. It is back to a space where it would be lovely to have better work on this. It is something that is challenging to do because it relies on doing testing in humans. It requires a lot of investment. We need to be careful that—

The Chair: Thank you. Time is short, so I will move on to Dr Murphy.

Dr Donal Murphy: I would echo a lot of what Jacqui has said and say that there is no collation of data about these zoonotic diseases, both bartonella and toxocara. The fact that there is no large body of evidence about the risk does not mean that the risk is not there. Within the global veterinary medicine community, they are recognised as meaningful zoonotic disease risks for people.

The Chair: We do not have the evidence.

Dr Ian Wright: The best way to not have a disease is not to look for it, and that is what is happening with bartonella and toxocara in the UK. You get really low incidence if you do not test for it, even if relevant signs are there. That is no criticism of the NHS. It has limited budgets and GPs have limited time.

The Chair: If people were seriously ill with these zoonotic diseases, we would all be very aware of them.

Dr Ian Wright: That is an interesting assumption. A lot of people are chronically ill without diagnosis, so that is a big assumption to make, and testing is not being done. If I could just address these points—

The Chair: Please do but also address the point that we have been told that there are serious consequences of not treating pets and that responsible pet owners should routinely treat their pets, otherwise they will get these diseases, and yet the evidence does not seem to be there.

Dr Ian Wright: It is not framed in quite that way. There is an unquantified risk and people are not testing for it. That is the situation. We have found it in a lot of fleas. I am not a human doctor. I do not know in what rates it has been found in head lice but head lice can be controlled in other ways that fleas cannot. They have completely different life cycles.

I do not think it is scaremongering to be concerned about disease risks that are unquantified. After all, it is essentially the same situation on the environmental side. Environmental impacts have not been quantified, effects on human health have not been quantified and effects on ecosystems have not been quantified, but we are all concerned about it because it is a possibility. No one is accusing anyone in those areas promoting those concerns of scaremongering. Scaremongering is extremely unhelpful as a term.

The Chair: It is something that representatives of the pet health

industry, who are promoting these messages, really need to be on surer aground with. They are powerful representatives.

Dr Ian Wright: We can all raise concerns in a responsible way, just as people are with the environment, without being accused of scaremongering.

The Chair: Are these concerns being raised, that the evidence gaps need to be filled? Who are you raising these concerns with?

Dr Ian Wright: We are raising these concerns with all veterinary bodies and human medical bodies. We would like more research to be done with pharmaceutical companies. It would be good to get more research. There is only so much that the veterinary profession can do because we do not have access to human research. Where there is unquantified risk, it is reasonable to explain those risks to human health, veterinary, and environmental—that is a one-health concept to pet owners—so they can make an informed choice.

Lord Krebs: In the last half-hour, you have raised a number of times the need for more research on virtually everything we have talked about. My question to you is: how much money is the industry that is making hundreds of millions of pounds out of these products putting into research to resolve some uncertainties?

Dr Donal Murphy: You are seeking a precise figure about industry funding? I do not have that information.

Lord Krebs: Can you send it to us?

Dr Donal Murphy: In relation to your earlier questions around flea prevalence, we recognise the lack of certainty around what the levels are. As part of NOAH's commitment to try to build the evidence base, we have commissioned research with a university, which will start in September, about the levels of flea prevalence in the UK. It is going to take more than a year for us to get the findings, but it is an example of the type of work that we are going to undertake.

If I could reference one of your comments about the industry being worth hundreds of millions, I want to make the point that the animal health industry is actually a small industry. We are between 2% to 3% of the size of the human medicines industry here in the UK and that figure is replicated globally.

In relation to the question that was asked earlier in terms of sales, the whole industry across livestock and companion animal has sales of about £800 million annually.[1] That is across all medicines and all species. I want to put it into context; our sector is a small sector.

Q31 **Baroness McIntosh of Pickering:** I declare my interest: I am an honorary fellow of the British Veterinary Association, so I welcome the

[1] Note by the witness: The precise figure is £870 million.

opportunity to question you on the issues today. Can I briefly return to what Dr Skelly said in response to a question from the Lord Chair about sales being static of pesticides after—

Dr Jacqui Skelly: Imidacloprid specifically, which was the figure that was initially raised.

Baroness McIntosh of Pickering: More generally, if these pesticides were banned for use in agriculture, would you not have expected to see a dip in their sales?

Dr Jacqui Skelly: Pet sales are static to declining. Agricultural use and total use have declined substantially since peak sales in around the mid-2000s, just to be clear on that.

Baroness McIntosh of Pickering: Have pet sales not increased?

Dr Jacqui Skelly: Not in imidacloprid.

Baroness McIntosh of Pickering: Of the pesticides that were banned for use in agriculture, have sales increased for pet medication use?

Dr Jacqui Skelly: I can talk only to imidacloprid because that is the molecule we have in that space. Fipronil is not mine to comment on. For imidacloprid, total sales have fallen dramatically if you consider the past use in plant protection products. There is considerably less used in the UK, full stop. Use in pets is static to somewhat declining. We have no figures available for some other uses such as biocides.

Q32 **Baroness McIntosh of Pickering:** Do any of the other panellists want to comment? If you have any information, it would be useful to have it in writing.

My questions are similar to the ones we heard on human health and trying to establish what research has been done, both pre authorisation and post authorisation, for these substances which I find very difficult to pronounce.

Most of the public are aware of what is required for the sales of products for medical use. As a doctor's daughter, I am very aware of what is allowed and how it is marketed, particularly labelling. The drift of what we have heard this morning, and evidence from previous sessions, is that the information is simply not there. For example, the VMD said that each authorised veterinary product meets the required standard of safety, efficacy and quality. However, it does not elaborate on what studies are required to establish that. We seem to be a bit in the dark.

We heard from Professor Woodward that direct toxic effects to species, as well as indirect effects through the food web, are major sources of concern. However, they are not addressed in any depth in any of the regulatory build-ups, the release of these chemicals, and particularly their longer-term effects. He added that laboratory studies tend to focus on short-term trials that ignore chronic exposure. He mentioned in particular the resilience of certain species, such as the daphnia magna water flea

that is used in trials.

We then heard from Matt Shardlow that for most chemicals used in these medicines, unless they are pesticides such as fipronil and imidacloprid, there is no data on their environmental toxicity, and that the process that pesticides in agriculture are required to follow, such as lab tests, assessments predicting environmental impact and developing environmental quality standards for acute and chronic harm, do not apply to pet medications. Could you satisfy the committee: what is the authorisation process for pet parasite medications? What information is required during pre-authorisation assessments? What is required in post-authorisation monitoring?

Dr Ian Wright: It is not my area of expertise; I am not directly involved in licensing.

Baroness McIntosh of Pickering: Help is at hand; Dr Murphy?

Dr Donal Murphy: I am happy to give an overview of the regulatory process. First, in response to Baroness Whitaker's earlier question, we will provide more detail on the user safety element.

The framework for regulation of veterinary medicines is overseen by the Veterinary Medicines Directorate. It implements the veterinary medicines regulations and, within those regulations, sets out the data packages that companies are required to collate and submit in order to apply for an authorisation to market and sell those products. That is the overview of how it is set out.

The VMD, in turn, is implementing the approach that has been agreed by an organisation called VICH, which is a bit of a mouthful. It is the International Cooperation on Harmonisation of Technical Requirements for Registration of Veterinary Medicinal Products. It is a global organisation involving the US, Japan and the EU as the main—

Baroness McIntosh of Pickering: But not the UK?

Dr Donal Murphy: If I could just expand, those are the founding members. The UK, since exit from the EU, is now what is known as a standing committee member, which is basically observer status. The UK has been implementing VICH guidelines through part of its membership of the EU, which is where the history of these products lies. You heard about this in earlier evidence sessions, there is a two-tier assessment process of the products.

Professor Boxall, in one of your earlier sessions, referred to a decision tree whereby companion animal products generally do not progress to the second tier of the assessment process. I want to make it very clear that, within the VICH guideline, there is something that is referred to as the 'however clause'. What it means is that, if the regulator is of the view that a substance has particular characteristics meaning it should be subject to a more in-depth assessment, it has the ability and power to ask the applicant, the company, to progress that. In the years when

these products were authorised, they were not required to do that. The view of regulators was that it was not necessary.

I would also add that, as an overarching principle, the benefits of these products versus the risks are kept under constant review. Regulators in the UK and elsewhere have the power to ask for new data in order for the company to prove that the benefit-risk balance of the product remains positive and that it is suitable for the product to remain on the marketplace.

Q33 **Baroness McIntosh of Pickering:** That leads neatly to the next question. Regulators have the power to revise the assessment when new evidence is available, but they have not yet done so. I am going to ask a couple of questions. Is there no new evidence available? Why have they not chosen to do so? Should they not do so from the point of view of public trust so that the public know? It just seems curious that a lot of the vets are not applying this to their own pets. I will just leave you with that thought.

On the post-authorisation statement, should we not be adopting a more precautionary approach? If it seems, as in the evidence we have heard, that these substances are appearing for one reason or another in the environment and in our watercourses and we see what other jurisdictions have done and are wondering why perhaps we have not done that here, should we not adopt a precautionary approach in that regard? What is the process of ongoing benefit-risk assessment to which you referred for pet parasite medications once they have been approved for use? Should these assessments account for possible risks to biodiversity and the environment more generally?

Dr Donal Murphy: The first question that you were asking, should they be seeking more evidence based on what they have seen, yes? The evidence that has been developed in recent years has caused regulators to look closely at this topic. That is part of them fulfilling their duty. New literature emerges and they look at that as part of reviewing the ongoing safety of the products.

I believe the conclusion is that at the moment they do not believe that the evidence base has been sufficiently strong to justify taking the steps that you describe. Over the last couple of weeks you have heard that there is uncertainty around many elements of the evidence. As of now, regulators globally have not taken the step to require more evidence regarding the products. What was the second part of your question?

Baroness McIntosh of Pickering: Should we adopt a precautionary approach given that there is no evidence?

Dr Donal Murphy: I do not think that there is no evidence; there is uncertain evidence. As to whether there should be a precautionary approach taken, we need to recognise that these products do have many benefits. These benefits were considered when the products were first authorised and they continue to be considered.

I know we have discussed the uncertainties around different parasite levels and so on, but let us be absolutely clear that they do have benefits. There is a danger that these products could become victims of their own success. They prevent and treat parasites and then the view develops that there are no parasites because the products have prevented them in the first place. They do have benefits and those benefits outweigh the risks, which is why I do not believe a precautionary approach is the appropriate one at this point.

Baroness McIntosh of Pickering: You mentioned the benefit-risk assessment. What should that cover and should it look at the risks to biodiversity and environment?

Dr Donal Murphy: First, at VICH—the global network—this was considered as to whether changes needed to be applied. There was no global consensus among regulators that changes were needed at this point. At an EU level, the European Medicines Agency Committee for Veterinary Medicinal Products is progressing with the development of a guideline on a methodology for assessing environmental risk from companion animal parasiticides.

Baroness McIntosh of Pickering: Will we be bound by the guidelines?

Dr Donal Murphy: That is a European Medicines Agency initiative that is progressing. I understand that it plans to have the new guideline in place in 2029 or 2030. The reason it takes that long is that this science is very complicated and needs to be carefully considered in terms of what methodologies will answer some of these questions.

Q34 **The Chair:** Before we move on to Lord Trees's question, you mentioned the VICH, which is a global-ish body that sets standards for the industry in the partner countries involved. I am a little puzzled. Our two representatives are the VMD and NOAH. Do you think it is appropriate for NOAH to represent the industry at a body responsible for setting standards? Is there not a conflict of interest?

Dr Donal Murphy: There are a couple of things I would like to say about VICH. First, it is not a regulatory decision-making body.

The Chair: It is more of a trade body that sets trade guidelines, is it not?

Dr Donal Murphy: No, it is not a trade body either. It is where regulators and industry consider how to develop a format for data collation for the application of veterinary medicinal products globally. The companies that produce licensed veterinary medicines are playing a very positive role globally in treating and preventing animal diseases, preventing zoonotic diseases and—

The Chair: We do not need to go into exactly what the VICH does. What I really want to know is whether the representatives from these other countries' industry bodies are representing industry interests?

Dr Donal Murphy: The different members of VICH will have both regulators and industry present.

The Chair: That is all I need to establish. I do not think we are going to get an indication from you whether that represents a conflict of interest or regulatory capture, but I will leave that question hanging. If you would like to write in to give clarification on that, that would be very welcome. We would love to hear from you.

Q35 **Lord Trees:** Thank you very much for coming. I have a declaration of interest: I am a veterinary surgeon and I worked for Elanco for three years but a long time ago, way before any of these products that we are interested in were available from anybody.

We know that there are two phases in the impact assessments for veterinary products but pet products do not have to have a phase II environmental risk assessment. What do you think would be the downside of automatically requiring—for any pet products, really—a phase II environmental risk assessment, particularly for the substances we are discussing, imidacloprid, fipronil and so on, which have obvious hazards?

Dr Donal Murphy: Are you asking me what the downsides would be of requiring it?

Lord Trees: Yes. What would be the impact? What would be the negatives of requiring a phase II environmental assessment, as would be required if they were livestock products? The only reason they are not done is that historically we felt the volumes were not consequential. I think we would all agree now that the volumes of use in pets are quite substantial and obviously traces are being found in the aqueous environment.

Dr Donal Murphy: The first point I would say is that, as you say, there is currently the second-tier environmental risk assessment that is applied to livestock products. Obviously, companion animals are not livestock; the way they are kept and the husbandry systems are very different. The development of such an assessment system would need careful consideration to ensure that it was going to be science based and appropriate for the species and products being developed and used. I mentioned the EMA guideline. The Committee for Veterinary Medicinal Products is going through the process of considering that as part of its work.

Were the UK to go down that road also, as an industry, the companies that I represent and NOAH would engage in discussions about that and look at how such a system could be developed. A principle that applies to many comments—including the earlier reference to VICH—is that when products are being developed, the companies will be required to develop that data. As a result it is appropriate for them to be able to give their views on how such data could be developed into a format and what way trials should be done in order to prove the various points that they would

like to make. That is where industry dialogue and views should form part of the discussion and I do not believe it represents regulatory capture. We will follow up, as you requested.

Lord Trees: Jacqui, do you want to add anything as a manufacturer?

Dr Jacqui Skelly: I am not a regulator but in my experience as a clinician, and as Donal has pointed out, we will comply with what the experts set for us. If you increase the regulatory burden before bringing a product to market, it is inevitable there will be speed and cost impacts that will ultimately play through in terms of the viability of bringing things through. We will work with the associations and regulators as needed on that area in the future.

Lord Trees: Could I just follow-up? There are obligations from the VMD for pharmacovigilance and so on, which would refer to whether there are ill effects happening to the target species, the dogs and cats in this case. Can you confirm there is no requirement by the VMD for monitoring of environmental consequences in the use of such products?

Dr Donal Murphy: Environmental safety and reports form part of pharmacovigilance assessments by the VMD. If the VMD is made aware of environmental concerns, it is part of its pharmacovigilance system to consider those and to keep the ongoing benefit-risk balance of these products under review. The environmental aspect does form part of pharmacovigilance.

Lord Trees: That is a very important point. Could you elaborate a bit on that? How is it gathering that information? Is it proactive or reactive?

Dr Donal Murphy: Pharmacovigilance will primarily be driven by reports that are made either to manufacturers or the regulator, but it also involves considering the scientific literature.

The Chair: Is it NOAH's view that the emerging evidence of environmental harm resulting from PPMs specifically is inconclusive? That is what you have sent us in writing.

Dr Donal Murphy: That is our position. We believe that the evidence presented to date is inconclusive. There are many uncertainties around the different contributing sources of what has been detected and the relative contribution of veterinary medicines.

The Chair: I just want to be clear that that is your view. You would not be recommending that environmental risks be assessed in benefit-risk assessments, given that you do not believe that the evidence exists?

Dr Donal Murphy: The environmental risk assessment process is set out by the regulator and it already has the ability to request more data. It has overarching powers that allows it to do that, and, within the VICH guideline, there is what is known as the "however" clause, where it can ask for more data and a more in-depth assessment. The NOAH position and the position of the member companies that I work for is that, where

regulators reach a view that there is conclusive scientific evidence that more information is needed, then of course the companies involved will comply with what is expected of them.

The Chair: You expressed your own view that you do not think the evidence is there.

Dr Donal Murphy: At the moment I do not believe the evidence is conclusive.

The Chair: We will not go into the arguments as to what the evidence is; that was laid out and received in written evidence very clearly. I have to say that, from where I am sitting, it looks fairly conclusive that environmental harm is happening. We can see the impact on invertebrates, fish and birds; it is fairly conclusive. Please write to us if you think there is anything to add.

Dr Ian Wright: You made some bold statements there. Again, a correlation does not infer causation. A lot of fipronil and imidacloprid—

The Chair: We will not revisit the arguments. Your arguments have been laid out in written evidence, as have the concrete arguments.

Dr Ian Wright: I would just like to very briefly say that—

The Chair: We understand the correlation and the causation.

Dr Ian Wright: The effect on vertebrates is—

The Chair: I am going to go first to Lord Trees, then Lord Krebs and then Lord Jay.

Q36 **Lord Trees:** I have a slightly different question. There is some discussion and disagreement about the source of the residues of imidacloprid and fipronil that we are finding in aqueous environments and where they are coming from. What alternative sources could there be, other than from companion animal use?

Dr Jacqui Skelly: I am happy to start here with regard to imidacloprid. We have a paper that has been submitted as part of our evidence by Brown et al from a few months ago that is helpful. Using the Environment Agency's own data, what this is showing is that the overall picture is a positive one with time. Levels of imidacloprid are falling, despite the fact that veterinary sales, as we have already discussed, are static to slightly declining.

The overall picture appears to be that, the further away we get from the agricultural cessation of use of that product, the less of an impact on our waterways that agricultural picture is having. The half-life of the product can be very protracted under different environmental conditions but, as we move further away from that, the overall picture is one of decline.

We do not dispute that veterinary medicines are a plausible route through which some chemicals can enter the environment. We are not arguing

about that, and the industry wants to do everything within its power to minimise any contribution that is coming from veterinary medicines. There are different figures in different papers but the literature agrees that veterinary medicines are likely to be a minor part of the national picture. The plant protection historical usage is probably still a very big part of it.

Although it is not sold for horticulture anymore, we know that people retain products—amateur gardeners, et cetera—for a long period of time and it is likely that use still goes on. We know that there are authorised and registered biocides that contain these products for which no sales data is available. There are multiple sources. That does not mean we want to downplay the role of veterinary medicines or that we absolve ourselves of any responsibility to make the picture as positive as we can. It is certainly a multifaceted picture for many reasons, but, overall, a positive one with a trend of decline over time.

Lord Trees: They have been banned for 10 years. Are you suggesting this is residues that have persisted and are continuously leaching into aqueous environments?

Dr Jacqui Skelly: Yes, in some cases. It is not my area of expertise and I would refer everybody to the paper that we have submitted, but in summary yes.

Lord Trees: Do we have that paper?

Dr Jacqui Skelly: Yes.

The Chair: Fipronil was never approved for agricultural use in the UK and we are seeing these things in urban water systems where there can be no agricultural input. I just make that point. I will go to Lord Jay now.

Q37 **Lord Jay of Ewelme:** Thank you very much for being with us today. We have heard quite a lot in our inquiry so far about a so-called risk-based approach to using pet parasite medications. I wondered if you could say what you understand by that and whether you think it is a helpful approach for vets in looking at prescribing medicines.

You are nodding, Dr Skelly, so perhaps you will go first.

Dr Jacqui Skelly: There is lots of agreement that that is a correct approach. There is a lot more alignment between different stakeholders than sometimes meets the eye and than would maybe come across from some previous witnesses. Veterinary surgeons do and should assess the needs of individual patients. Their lifestyles vary widely and it is very important that they take the time to assess and consider that and to prescribe appropriately for the patients that they have in front of them.

We hear the term blanket use. No one has really defined that but, from the BVA's perspective, I take it to mean doing the same thing for every animal, regardless of its lifestyle. I completely agree with the BVA that that is not the right approach.

Lord Jay of Ewelme: Who thinks that is the right approach?

Dr Jacqui Skelly: Not many, and I do not see many practitioners who adopt that approach. There is lots of suggestion that people are very uniform in the way that they approach things but that is not the reality that I experience when I go out and speak to practices. Owners want their pets to be understood as individuals and to have a treatment programme that is right for them, and vets are very much open to that and proactively working with them in order to do that. Most practices will have a range of formulations and different treatment regimes, depending on the lifestyle of the patient. The industry is doing everything we can to speed up the process of helping them understand that as quickly and effectively as possible.

Where there are perhaps some differences of opinion between your previous stakeholders and us is whether risk-based should ever include preventive treatment. Our view is that it should for higher-risk animals, because, often by the time you detect a problem it is too late to protect against the consequences of that problem. I do not support a move to reactive treatment only, but a lifestyle-based risk approach is what we should be doing.

Dr Donal Murphy: I echo everything Jacqui said, only to add from personal experience that I have a dog that I walk in the woods most mornings, and in the last couple of months he has come back with ticks on several occasions. I believe that a pet such as my dog will need preventive treatment, especially at this time of year. His lifestyle is very different from a cat that lives in a flat and rarely goes outside. Clearly, those two different animals would need very different approaches. That is how I would understand a risk-based approach.

Lord Jay of Ewelme: Do you think most veterinary practices would agree with you and accept that approach?

Dr Donal Murphy: I believe that, over the last few years, there has been an awful lot of discussion about this topic in the veterinary community. At veterinary continuing professional development events, there are discussions of this nature going on. There is a very good level of knowledge about this topic and the need to consider these questions.

Dr Ian Wright: A risk-based approach is lifestyle factors and geographic factors. Take a parasite such as angiostrongyliasis, which is very focally prevalent across the UK; some practices will not see any but, down the road, they will see quite a few. Local case knowledge is very important as well.

The vast majority of vets want to do this and understand the need to do this. Time is a huge factor in limiting them doing it. It would be very easy for us all sitting around this room to say, "Well, they should make time. They have a responsibility to do this", but they have a lot of competing responsibilities, often in very limited time. Vets are keen to work with industry and with bodies such as the BVA and BSAVA to put a risk-based

approach in place but they also need help. They need tools and education on how to do that effectively, often in quite a short space of time.

Lord Jay of Ewelme: If vets understood what you have just said and such a risk-based approach were more widely accepted, do you think it would lead to a lower level of prescription of pet medicines than is now the case?

Dr Ian Wright: It depends on the parasite and the region. For parasites such as Toxocara, frequent testing might be a good alternative that some practices might adopt. Some parasites, such as tapeworm, are very regional. If a strict risk-based approach were taken, urban dogs and dogs on cooked diets with good flea control might not be on a tapeworm treatment at all. The elephant in the room, as I have said before, is that any dog or cat could be exposed to fleas.

Lord Jay of Ewelme: I like the idea that the elephant in the room is a flea.

Dr Ian Wright: Absolutely. Any cat or dog could be exposed and infestation in the household could occur. To a certain extent, it is about how much risk an owner is prepared to accept. It is a case of informed consent and saying that, if you do not have year-round flea treatment, there is the possibility that infestations will occur and that it may then take some time to eliminate them".

Q38 **The Chair:** I have a quick follow-up question, indicated by the clerk, and it is a good one. Dr Murphy, you talked about going for a walk with your dog and him coming back with fleas. How do you treat your dog and did your dog get ticks despite being treated?

Dr Donal Murphy: My dog was treated with a product that will work when the tick bites my dog. The tick will then die, so it does not latch on and thrive and grow. You will find it on the pet but you can simply sweep it away then. The fact that he comes back with ticks does not demonstrate that the product is not working.

The Chair: Do you treat your dog regularly?

Dr Donal Murphy: Yes. My dog walks in the woods every day.

The Chair: On the very last point about having to use insecticide household sprays if you get a flea infestation, last week, Dr Mullineaux said very clearly that the newer medications are far more effective at treating fleas than in the past and the advice should reflect that; just a drop will sort out the problem. She added that there is therefore no longer a need for household sprays when a pet gets fleas.

Dr Jacqui Skelly: As I mentioned, we have a team of vets and nurses who support owners with flea infestations. It is true that there is data that shows that, particularly if using the isoxazolines—the newer class of compounds—with their good effect you can get on top of a household

infestation with time, but it still takes several weeks to months. Again, this comes back to what the general public are willing to put up with.

Through the team that speaks to people with flea infestations in their home, I can assure you that the general public is generally not willing to tolerate a flea infestation in their home for long, and the desire and need for household treatment is still very much out there. Industrial pesticide firms still deal with fleas on a daily basis.

Q39 **Lord Lennie:** You seem to paint a very different picture from the one we have heard before. How do you engage with vets and suitably qualified people on advice for the appropriate use of pet parasite products? Would a move towards prescription-only treatments for pet parasites improve the advice given to pet owners?

Dr Jacqui Skelly: Most of our products are sold through prescription routes. The majority are in the vet channel but we sell some through SQP. General sales is a much more minor route for our company but we engage at every level.

We provide education and resources for vets and they have to undertake compulsory CPD. We have specific programmes that are designed around correct and appropriate use of parasite control. That has been a very big source of investment for us for a long time and will continue to be. We also take part in SQP training and education. We have reactive phone lines, email and contact points. Our goal is to have a close relationship with all stakeholders in that prescribing space.

We also produce consumer-facing resources, both physical and online, to help pet owners' education. We have a website called My Pet and I, which is a consumer-facing website that has a very high level of traffic. We have all manner of pet education pieces on there, including, for example, articles on how to treat your pet appropriately with a topical product, the importance of disposing of faeces, et cetera. As an industry, we really want to amplify this. We recognise that there are still significant education gaps and that we need to keep doing that, but we are proactively doing a lot already and hope to do more in the future.

Dr Donal Murphy: There are a couple of points I would like to make on this. With regard to instructions and the packaging of products, that is part of the regulatory system. Companies do not get to decide what goes on the product packaging; there is absolute regulatory oversight about instructions for owners on the correct use of the products.

As part of your question, you referred to potentially moving the products to prescription-only status. There are a couple of points I would like to make in response to that. First, there is a percentage of pets that do not register with vets and owners who struggle to access veterinary care. Their needs need to be considered. Other routes, other than prescription-only products, are necessary for those owners.

Secondly, for context about what happens elsewhere, the products that have been the main topic of discussion here today are classed as over-

the-counter products in all the EU with the exception of two EU member states. I do not think the UK's approach is an outlier in regulatory thinking about these products.

You will have heard reference at various points to the Competition and Markets Authority inquiry into the veterinary practice sector. It made points about the need to consider reclassifying products away from prescription-only status. It is not our position that that is always going to be appropriate but I want to give the context that there is a view that having products available through channels other than prescription-only has a place. A final comment—I know we are tight on time—is that the vast majority of licensed veterinary medicines are prescription-only.

Dr Ian Wright: CPD for vets, SQPs, nurses—there is a wide variety of channels, and a lot available from different providers, such as pharma, diagnostic companies, ESCCAP, BVA, BSAVA and Vet Sustain. There are lots of different groups and lots of information out there for vets.

For pet owners, there is a gap with over-the-counter sales. A lot of pet owners buy products without advice. It is my experience that that creates a problem, certainly in compliance and endpoint efficacy. They may have bought the product but not necessarily know how to apply it, how frequently to apply it or how to dispose of the packaging, and they may not know not to shampoo, if it is a non-systemically absorbed product. There is an issue with the fact that a lot of these products are bought without any advice at all, which creates problems.

Lord Lennie: We heard from one witness that, to become a veterinary nurse, you just have to put a uniform on, call yourself a nurse and that is it. There is no regulation about that person having had any training in any product information at all.

Dr Ian Wright: There is a lot of debate, as there should be, about the quality of advice that is being given to pet owners, but a lot of people are not meeting anyone in any uniform of any description. They are going on Amazon or equivalent and buying it without any point of contact. In my experience they are often then imaginative in its application and what they do with it, which is a significant issue. Essentially, we need advice at the point of sale, however that is achieved, and that advice needs to be of a reasonable quality. SQPs do an excellent job in that regard through non-POM-V channels at the moment.

Dr Jacqui Skelly: I really feel the need to stick up for registered veterinary nurses here. It is true that there is no protection currently in legislation for the title of veterinary nurse but we have fantastic accredited veterinary nurses. They are RVNs registered with the RCVS, and are phenomenally knowledgeable on this topic and do an amazing job in educating pet owners around this subject. I want to stick up for that community.

Dr Donal Murphy: One solution to the issues we are talking about here would be for greater, better, more prolonged communications to end-

users about proper use of the products. NOAH has had a campaign on this called Use It Right, Treat Them Right. The VMD has also launched the Be Spot-On Aware campaign. I see a place for prolonged ongoing communications to end-users, but we need to keep in our minds the question of access to products for those who may struggle.

Q40 **Lord Rooker:** Thanks for all the evidence and information you have given us this morning. Dr Murphy, you just answered a point that I was going to ask about who is responsible for the packaging guidance and leaflets. You have confirmed it is actually the product manufacturer that puts it to the VMD when the drug itself is regulated. They do not have a free hand, if you like, or they do have a free hand and then the VMD probably rubber stamps it.

Last week, we had a good deal of evidence about misleading and contradictory advice on packaging—for example, guidance on not bathing pets for four days is accurate given evidence that suggests that spot-on treatments persist on the skin for up to 28 days. There is a dispute about the level of guidance. Notwithstanding that people might not follow it, is the guidance clear and is the regulation of the guidance clear? Does the guidance apply to all the £800 million-worth of drugs that your members are selling, whether they are prescription or over the counter?

Dr Donal Murphy: The packaging requirements apply to all licensed veterinary medicines, regardless of the different classification they fall under, whether they are prescription only or general sale. The packaging is overseen by the regulator and, once again, the same system applies in other countries.

As to your specific question regarding the warnings that are included on the product literature, as I outlined earlier, the companies will have submitted their application many years ago to the regulator and that will inform the contents of the packaging. What you are referring to is new evidence from the scientific literature over the last year or two. As for whether it is misleading, the companies are putting the information in the literature that has been agreed with the regulator.

The question then is whether the regulator views the evidence and makes a decision that they would require the company to change their product literature. That has not happened. It is not that there is misleading information; the current position is that the product literature is as it should be.

Product literature changes over time, and this applies to all licensed veterinary medicines. I referred earlier to the pharmacovigilance system and the way new evidence is assessed and reviewed by regulators. When regulators do that, if they believe that that means that changes are needed to the products and indications for use—to the contraindications or warnings—they will require the companies to do that.

Lord Rooker: In that case, why has the VMD been so lethargic on what you have just said? That the evidence has changed in the last couple of

years and you've just said the VMD has not taken account of that and gone to the companies and said that they need to update their leaflets.

Dr Donal Murphy: Clearly, I cannot speak for the VMD. I want to be clear. New science emerges, which is assessed by regulators. They assess that science and decide whether or not changes are needed. Individual papers will have their findings, and will need to be reviewed and have their various merits considered, but it does not automatically follow that, as soon as a new paper is published, it will lead to immediate changes. It will be reviewed by regulators here in the UK and elsewhere, and, when they believe the evidence base is strong enough to warrant a change, they will make that happen.

Lord Rooker: Do you have an example of one of your members actually approaching the VMD, on the basis that there has been new evidence, and asking whether it thinks they should change it, and the VMD has said no? Has that happened, or is the VMD going to turn up next week and say, "Oh, nobody ever told us about it"?

Dr Donal Murphy: I do not have any specific examples. They are going to be specific to companies and I do not think it is my role to go into individual products and companies. I can say that, over the years, you will frequently see changes to the product literature for a range of products. I am making a point that is wider than parasiticides. There will be evidence that emerges about different products and things will be identified that lead to changes in product literature.

Q41 **Lord Ashcombe:** I have one quick follow-up. How effective do you think the literature is that comes with any veterinary medicine, be it prescribed—where I hope the vet would say what is going on—or not prescribed? What you get on the box is very small and an awful lot of small print on a fairly long leaflet. Whether it is the regulators or the company that put it there, who reads it and how effective is it? I would suggest it is not effective.

Dr Ian Wright: Have I ever read a data sheet for my own medication? I could not possibly comment. In the case of a lot of my clients, they probably have not read the data sheets.

An advantage of giving advice at the point of sale is to be able to highlight key issues. I appreciate the point about data sheets changing and the speed at which they change. Most vets, nurses and SQPs, I hope, would be aware that regularly shampooing a dog that has had a fipronil and imidacloprid treatment is not a good idea; it is not a sensible marriage, and they would pass that information on. That is where there is an advantage in personal communication, email or website information, as opposed to saying to someone that they should read the data sheet—we all know that is going to be hit and miss at best.

Lord Ashcombe: What do you think is the best way of getting that across? If people are not going to go to the vet—I am sure many do not—how do you get it across?

Dr Jacqui Skelly: This is a huge topic because we have to have the regulatory source of truth. The way the system is set up is that that is the data sheet, but we are aware that some people say it is not a user-friendly way. The industry is working really hard to look at all the other ways that we can reach people in this digital age.

We do that through education of the prescribers and also through direct education and resources that are accessible to owners. That is something that we are continuously trying to amplify, using behavioural science principles, if you like, to try to put things out there that people will actually understand and engage with. We do that as an individual company, and through NOAH, and the VMD is also working to do that. There is a lot of focus in that area. It is something that we need to stay joined up on.

Lord Ashcombe: As a general member of the public, I do not see that guidance—whatever you might call it—coming into the real world. It may be in the veterinary press but it is not in the public press.

Dr Jacqui Skelly: It is. I do not know if you are a pet owner. If there are education campaigns through social media, they will be targeted at people who, through their interests, are known to be pet owners. There is a degree of targeting out there.

Could it be better and more visible? Absolutely. That is something that we all remain focused on. But it is happening and it is something that all NOAH members I know are fully engaged with and trying to make better. It is not an easy thing to do effectively. Getting people to follow instructions in any walk of life is always a challenge, but we will continue to invest in that and to collaborate to get that as good as we can. It is a real focus for us.

Dr Donal Murphy: The only other thing I would add is that packaging is a heavily regulated area as I have mentioned. Companies do not have a free hand to make changes to the approach. Something we would hope to see in the future is that regulators here in the UK and elsewhere would be open to things like scannable barcodes, which would help give information to end-users on correct use. Things such as that could form part of how there is better communication with end users.

Q42 **Lord Krebs:** I have two tiny questions. First, Donal said that a significant number of pet owners do not have access to vets. I wonder if you could explain to us very briefly why that is. Secondly, Donal said that the pet medication industry is small. I looked up the figures and it seems that the current estimate is that, in the UK, it is worth £440 million a year, growing at 9% per year. Is that the figure that you recognise?

Dr Donal Murphy: That is not a figure I recognise. The figure we have for the size of our industry is that the sale of all licensed veterinary medicines for all species is about £870 million per annum. If you search the sizes of many different industries, you will find that it is a small sector

in comparison to many—it is somewhere between 2% and 3% of the size of the human medicines industry.

Lord Krebs: You have answered a slightly different question, because you talked about the total animal health industry of £870 million. I am talking about the pet medicines industry, specifically £440 million and growing at 9% a year. Are you saying that is wrong?

Dr Donal Murphy: Sorry, I did not hear that. I have not heard that figure specifically.

Lord Krebs: Could you give us the correct figure in writing?

Dr Donal Murphy: Okay. Briefly, of the sales of veterinary medicines, around 60% are for companion animals and 40% for livestock, so that sounds broadly similar to what you have quoted. Sorry, I did not know the source.

Lord Krebs: It is in the region of half a billion a year.

Dr Donal Murphy: Yes, correct.

Dr Ian Wright: I work in a relatively poor socioeconomic area and coming to a vet and paying for a consult now—because prescription medicines for fleas and worms require a consult—is difficult, and often transport fees are difficult. Some people are disabled and genuinely have difficulties getting to a vet in person. While we need to look at the advice that is being given at the point of sale and how that might be addressed, making these products POM-V only would be a price-restrictive issue for many pet owners.

Dr Donal Murphy: If I could add to the question you asked me, the figure I quoted of 17% not being registered with a vet was based on PDSA data from one of its annual reports, and I think it is for many reasons that Ian has outlined.[2]

The Chair: It is 11.34 am and it is time to say thank you very much to our panel of witnesses today for the time they have taken to be with us. It is much appreciated.

[2] Note by the witness: 'I have since been informed that there is a more recent PDSA 2025 PAW report, which states that 10% of dogs and 15% of cats are not registered with a vet. The source for this information is page 18 in the following link - PAW Mini Report 2025.'