



Northern Ireland
Assembly

Committee for Agriculture and Rural
Development

OFFICIAL REPORT (Hansard)

Test and Vaccinate or Remove (TVR) Exercise:
Department of Agriculture and Rural
Development Briefing

24 June 2014

NORTHERN IRELAND ASSEMBLY

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Members present for all or part of the proceedings:

Mr Paul Frew (Chairperson)
Mr Joe Byrne (Deputy Chairperson)
Mr Thomas Buchanan
Mrs Jo-Anne Dobson
Mr William Irwin
Miss Michelle McIlveen
Mr Oliver McMullan
Mr Ian Milne

Witnesses:

Mrs Kate Davey	Department of Agriculture and Rural Development
Mr Colin Hart	Department of Agriculture and Rural Development
Mr Nigel Trimble	Department of Agriculture and Rural Development

The Chairperson: I welcome Kate Davey, grade 7 principal officer; Colin Hart, grade 5, deputy Chief Veterinary Officer; and Nigel Trimble, grade 7, divisional veterinary officer. You are very welcome to the Committee, as always. It is good to have you here again to talk about an issue that has been in the mind of the Committee for many months and, indeed, years now. Members have already had an opportunity to read your papers. Please take 10 minutes to brief the Committee on any additional information that you may have. Following that, we will go into questions.

Mrs Kate Davey (Department of Agriculture and Rural Development): Thank you very much, Mr Chairman, for the opportunity to provide the Committee with an update on the test and vaccinate or remove wildlife intervention research project or TVR, as we refer to it.

As you say, I have with me Colin Hart the deputy Chief Veterinary Officer and Nigel Trimble, who is probably new to the Committee. Nigel was our divisional veterinary officer for the Newry and Mourne area and is now the project manager for TVR. His excellent knowledge of that area leaves him ideally placed to undertake his new role in the Banbridge area.

When we attended the Committee on 8 April, I advised you that the TVR project was a cross-cutting issue and, in compliance with the ministerial code, Executive agreement was required before the project could be progressed. I am happy to advise, as you know, that the Northern Ireland Executive agreed on 1 May to the test and vaccinate or remove wild life intervention research project proceeding this year, in a single 100-square kilometre area between Banbridge and Rathfriland. By way of background, you will recall that, on 3 July 2012, the Minister announced that she had tasked her officials with developing and costing a specific test and vaccinate or remove research project that

would involve the testing of live badgers, vaccinating and releasing the test-negative badgers and removing the test-positive badgers. To help formulate the project design, modelling work and badger sett survey work was undertaken in two 100 square kilometre areas of County Down, in Banbridge and Castlewellan. Over 80% of the respective areas were surveyed. Using that information, officials undertook a detailed analysis and developed a number of possible models for the research project.

The Minister chose that intervention-type research project, which is based, where possible, on scientific principles, in one of the two areas where the sett survey work had been undertaken. That was done on the basis of the benefits that will be accrued from the project and its affordability. As I said earlier, it was approved by the Executive. The aim of the TVR research project is to describe the effects of implementing a test and vaccinate and release or remove approach on badgers in an area of high cattle TB prevalence. The outcomes from the project will add greatly to the Department's knowledge base and provide currently unknown information on badgers and, specifically, on TB in badgers.

TVR is made up of several interlinked project strands that together ensure that the very best use is made of this valuable research opportunity. It will provide information to monitor the effects of TVR on badger infection prevalence and cattle TB herd breakdowns over time. The data will help us improve the accuracy of our TB modelling applied to Northern Ireland's disease situation in cattle and wildlife by collecting specific data on parameters such as badger TB prevalence and demographics here. Mathematical modelling is a tool that is increasingly being used in the assessment of different intervention strategies for disease, particularly where wildlife intervention is involved, as field trials can be prohibitively expensive. So, it will greatly add to our knowledge in that area. Ecology data on badger populations and movements within an area, in conjunction with genetic profiling, will serve as indicators of change in ecologies such as movement patterns, family relatedness and social behaviour in badgers. Data on *M. bovis* isolates from badgers and cattle in the area will allow detailed examination of genomics-modular types of *M. bovis*. Importantly, that will assist our understanding of how TB spreads over time in a geographic cluster of breakdown herds and in the badger population in the locality. Last but not least, it will provide information on the logistical issues and costs relating to large-scale implementation of any wildlife intervention strategy here and should assist in indicating how such intervention could be implemented in the most economical and competent way.

The Banbridge area was selected for TVR intervention as it had a higher TB herd incidence over the past five years than the Castlewellan area. Castlewellan and a number of other areas will be included in the project as non-intervention control areas. Those areas will be closely monitored for any change in incidence of TB in cattle herds for comparison with the Banbridge area. Since 1 May and the Executive approval, substantial work has been completed to obtain the necessary licences from DOE and DHSSPS and to procure all the vehicles and equipment to implement the project on the ground. Implementation of the TVR project is being undertaken by the Department and the Agri-Food and Biosciences Institute (AFBI). The Department's staff will manage the project and undertake all fieldwork, while AFBI will provide the expertise and laboratory testing.

TVR work started on the ground on 27 May. It will run for five years and require the capture and testing of badgers between May and June through to November each year. It is estimated that the project will cost £7.5 million over five years. TVR will involve the testing of live badgers for bovine TB, vaccinating and releasing the test-negative ones and removing the test-positive ones. In addition, all badgers will be microchipped, and GPS collars will be attached to 40 badgers.

For the first year only, badgers will be blood-sampled, vaccinated and released. No badgers will be removed. Each year thereafter, all badgers that test positive will be removed. As I said, no badgers will be removed this year. That is to allow essential monitoring work to be completed and to establish baseline data on how far badgers normally roam. That will help us identify whether removing test-positive badgers from next year onwards changes those movement patterns. A leading British expert has advised that, as we are not removing badgers in year 1, the prospect of getting before-and-after data on the remaining individual badgers is very exciting and could make a strong and unique contribution to worldwide knowledge in the area.

In addition during year 1, we will evaluate the badger TB test in both field and laboratory conditions to provide sufficient assurance that the test is effective and healthy badgers will not be removed. That means that, until all laboratory tests are completed, the disease status of individual badgers will not be known. So, when they are released, we will not know whether they are positive or negative. The fact that, this year, all captured badgers will be vaccinated will build up some immunity to bovine TB in the badger population in advance of removal next year, thus helping to mitigate the effect of any change in

movement patterns following removal of diseased badgers from year 2 onwards. Test results from this year's work will also establish a baseline of disease in the badger population in the area.

TVR presents an exciting opportunity for landowners in the Banbridge area to take part in what is a unique research project that has generated considerable interest worldwide. I therefore ask Committee members to encourage all landowners in the TVR area to give permission for DARD staff to implement the project on their land for the next five years.

Mr Chairman, I trust that that provides the Committee with a good overview of where the Department is with this exciting and unique project. Before I finish, I extend an invitation to the Committee to visit the project on the ground and to observe, at first hand, the logistics involved in implementing this major project. I am very happy to take questions.

The Chairperson: OK, Kate. Thank you very much for your presentation and information. Members, it was remiss of me not to say that, at a previous meeting, I asked the question around the impact of the allocation of £7.5 million of funds over five years for the TVR project and that the answers to that are contained in your tabled papers.

It would be good if we could take up your offer —

Mrs Davey: We are very keen that you do.

The Chairperson: — to see the practicalities of the project on the ground. That is something that we can explore in the near future. We would not want to get in anybody's way, but it would be very good for the Committee to see it.

Mrs Davey: I agree. I have been out on the ground once. It is fascinating to see. It is not just as easy to describe the complexity of it as it is to see it when you are out there. We definitely encourage that, and Nigel and Colin will definitely facilitate it in time, at your request.

The Chairperson: OK, that is brilliant. We will liaise with the staff and see what we can do.

The most obvious point for me to make is that this is something that we have been pushing and pushing to get in operation on the ground very quickly. At times, we have been frustrated with the speed and research element of it all. We find out again that no badgers will be removed until the second year. There may be good rationale for that — you have tried to explain to us why it is the case — but are we not missing a trick? You are going to all that trouble to capture the animal, but, when you find out that it is diseased, you are letting it go, which could lead to an outbreak in future.

Mrs Davey: I take the point that you are making. However, we will not know initially whether that badger is positive or not. The crucial thing for the research project is to establish baseline data. One of the key factors of our baseline information is the question of what normal badger movement is. If we go in this year and remove badgers, we cannot observe what normal badger movement is. That is crucial to allowing us in years 2, 3 and 4 to monitor whether, by removing diseased badgers, we change that pattern.

We understand that catching badgers and testing badgers does not cause any sort of adverse badger movement. In the first year, even though we are doing all that hands-on work, we will not disturb their normal movement pattern, but we will have a GPS collar on 40 of those badgers and will be tracking them. We will do other monitoring of droppings to establish what badgers are related to what badgers that we catch from the setts. There will be a raft of baseline data collected this year to allow us to progress and maximise its use in future years. If we do not do it, and we remove badgers this year, we will be missing a major trick. In fact, we would be missing half the valuable information that would come out of the project.

As I said earlier, there are experts saying that the very fact that we are going to monitor before and after removal provides a unique contribution, to not just Northern Ireland information but worldwide information. It is crucial that we do it. We have explained our approach to the farming unions, and they do understand it. Although, initially, there is an element of irritation from it, they can appreciate just what it will do to benefit the project overall. It is a crucial issue for the project.

The Chairperson: The other question that I have is on the practicalities of the area that you picked, because perhaps not all farmers are sold on it. Obviously, the question that follows on from that is this: are we looking at this with too narrow a view? Should we not have expanded the area?

Mrs Davey: To answer both questions, we feel that farmers are very receptive. As you know, over 80% of farmers signed up to our badger sett survey work. We have adopted a slightly different approach this time when dealing with farmers. We wrote to all farmers — farmers who signed up to the badger sett survey work and those who did not — in the Banbridge area and told them what we are doing. We said that we would have someone go out to talk to them, rather than have them just send a form back to us. This time, we have Nigel's staff on the ground talking to farmers. Around 92% of farmers are signed up to it in the area that we are covering, and we are working our way through that area. There is a great deal of acceptance there, and farmers do want us to be out there. We do not anticipate major problems. Yes, there will be farmers who do not want the work to be done on their farm, but, because we are there in person, we can provide an assurance and answer their concerns.

You asked whether we are missing a trick by not extending the TVR intervention area. It would have been lovely to have done this in a bigger area, but it is costing £7.5 million. The wider the area, the more money it will cost. It really was a case of trying to ensure that we could do an area and secure the funding for the five years so that we are not going to have to worry in year 2, 3 or 4 that we are going to run out of money. It was about picking a project area that we could afford to cover and doing it right through, and that is why we did not extend the area.

Mrs Dobson: Thank you for your briefing. The Chair touched on my question about the accuracy of your results. How do you factor in the pockets of areas in the TVR catchment area where you have not received permission to enter a farmer or landowner's ground? On communication with farmers, I was encouraged when you said that you are now going door to door with those who have not provided permission. Do you not agree that that is something that you should have done from the beginning? I declare an interest because my husband is a beef and cereal farmer. Many farmers are naturally suspicious of letters that come from the Department, so surely it would have been better to have made that personal contact with farmers and landowners from the very beginning. Is that a lesson that you might learn from the exercise?

The Chair also touched on the fact that the Banbridge area has a higher incidence of TB. How can you be sure that the project does not result in the further spread of TB, affecting wildlife in the surrounding areas?

Mrs Davey: You make a number of points. There may be badger setts on land that we do not have permission to go on to, but the badgers do not necessarily stick to those boundaries. We will set traps adjacent to land, on badger runs. That is the best that we can do. If farmers or landowners refuse us permission to go on their land, we will not be able to go on to it, but we expect a large percentage of farmers and landowners to be in favour. Setting the traps on runs outside the land that we are not allowed on will capture some of the badgers whose setts are on that land.

I will ask the others to give you some further information on that, but I will cover your other points first. On your point about personal contact with farmers, we really felt that we had listened to people's views when we did the badger sett survey. We did a lot of work to get support. This time, we felt that farmers would have a lot more questions. It is fine to ask farmers whether you can look at the setts on their land, but we are doing something different so felt that the personal approach would be better.

Mrs Dobson: Surely you should have done that from the start.

Mrs Davey: We got an over 80% success rate in Castlewellan and Banbridge. We were never going to get 100%, so it is questionable whether the extra spend would have justified an increase of 1% or 2%.

Mrs Dobson: But you are doing it now.

Mrs Davey: We are doing it now because the folk are already out there on the ground.

Mrs Dobson: Do you realise the importance of the personal approach?

Mrs Davey: We feel that, in this instance, the importance of that personal contact and providing reassurance to landowners is crucial. We are very supportive of that.

Your point about how we ensure that we do not spread TB goes back to the issue of perturbation. As I said earlier, we are not taking badgers out in year 1. We are taking some steps to collar badgers, monitor their movement and provide some vaccinations. Although vaccination will not cure TB in badgers, it will slow down its development. We are trying to do those mitigating things. We do not know whether perturbation is going to be an issue, and no one really knows. We will acquire that knowledge from the exercise and will constantly monitor it.

I should have said earlier that we have given an undertaking, and the Minister has given an undertaking to the Executive, that we will look at the TVR exercise at the end of each year and consider whether we need to review it in any way or address anything. So, there is an opportunity to learn as we go along and address those issues.

Colin, do you want to add anything, particularly on the first question about the land coverage?

Mr Colin Hart (Department of Agriculture and Rural Development): Kate, I will start with the possible perturbation issue. I think that you covered most of the points.

We are taking steps to try to minimise the risk of perturbation by improving the resistance to TB in the badger population with the year 1 vaccinations before we remove any badgers. We are also looking at what we call the "metrics of perturbation" as part of the project design. Kate mentioned the collars and the 40 badgers. Those collars will be attached not just in the first year. We will replace collars and add new collars in subsequent years and will be able to see whether the movement patterns of the badgers are different in the preliminary year from subsequent years.

We place microchips in every badger that we capture. If we capture those badgers subsequently, we will be able to see where exactly, in a geographical sense, we have recaptured them and, as such, will know whether they are being captured outside of their year 1 territorial area.

We will also take hair samples to look at the badgers' DNA. Through that process, we will be able to tell whether a badger has come into a sett with which it does not have a family relationship. The DNA will also be quite a key part of the process.

We have tried to design a project whereby we use this unique opportunity to test in field conditions the extent to which perturbation is an issue. The Food and Environment Research Agency (FERA) helped us with the design of the project, and we presented a paper to you on that. At that stage, FERA pointed out that it had modelled TVR with perturbation turned fully on, which is what it described as being the equivalent of what it saw with the randomised badger culling trial (RBCT), or fully off. We do not know whether perturbation will lie between one or other of those extremes or whether it will occur at all. Our colleagues in the South of Ireland say that they do not recognise perturbation as an issue. I think that a lot of valuable information can be gained out of the TVR project on that front.

Mrs Dobson: Will the failure to achieve permission from 100% of the farmers and landowners in the catchment area affect the accuracy of the overall results?

Mr Hart: Jo-Anne, thanks for reminding me about that part of the question. It will certainly affect it below a threshold. At the moment, if we can maintain a level of 90%-plus of landowner buy-in, we should not have any real issues. As Kate pointed out, a badger territorial area will probably cross several farms. If the neighbour has given permission, we can set our cages on the runs where badgers come out of the property of the landowner who does not want to take part. So, we will still be able to capture a significant part of the badger population even if not all landowners sign up. Hopefully, in that way, we will make sure that we meet the target for the areas.

Mrs Davey: In the badger sett survey work, we had a target of 70% of the land, and that carries across to the main survey. We really feel that we will exceed that target, as we did in the badger sett survey work.

Mr Irwin: I also thank you for your presentation. Speaking as someone on the ground and looking in from the outside, given that this was launched two years ago, it seems to me to be a very slow process. Have AFBI and the Department worked out who has the lead on this, or has the lead changed from the start of the process?

Mrs Davey: No, the lead has not changed. It was always the Department's project. We have a project team that includes AFBI, scientists and a range of other people. What has changed in the project is that the badger sett survey work was undertaken by AFBI staff whom it had employed for the purposes of the badger sett survey work. We then looked at how we could continue to implement this major project — a project that was going to cost a lot — with limited new money. That is where the change lies. We then said that we would look at using veterinary service staff deployed on their normal summer work programme. It does not change the cost of the project, but it does change the new money that comes into it. The project team, the design and everything else is still very much a joint effort led by the Department, as it was at the outset, but the fieldwork will now be undertaken by departmental staff, and AFBI will do all the laboratory work. It is still very much a joint effort.

Mr Irwin: That was similar to my understanding.

I also have been told that, because of the way in which this has been dragged out, a considerable number of TB vaccines for badgers had to be destroyed because they became out of date. Is that right or wrong?

Mrs Davey: At this point, no vaccine has been destroyed. We have actually had an extension. The UK put an extension on the expiry date, and that has been allowed here by the veterinary medicines directorate. So, the expiry date of the vaccine has now been extended for the whole of the UK.

Mr Irwin: In other words, it was out of date, but the date was extended. Is that what you are saying?

Mrs Davey: Yes.

Mr Irwin: OK. My information was partly right.

Mrs Davey: Just not quite up to date.

Mr Hart: The veterinary medicines directorate is there to ensure that, although the shelf life has been extended, as it were, the efficacy of the vaccine has not been affected in any way. That is really where the veterinary medicines directorate comes in and gives us its official approval for that.

Miss M McIlveen: Thank you very much for your presentation. You talked about it being a really exciting and unique project that is taking place in Banbridge. That is great, and we look forward to seeing the outworkings; but what comfort does it give to farmers in other areas? I have had the misfortune of having a farmer with me whose family was absolutely devastated by their herd being destroyed. That happened over the Easter period, which, in itself, caused issues, with a delay in the animals going to the slaughterhouse. What comfort can they get from this?

Mrs Davey: While they may not get initial comfort from it, and the benefits at this point appear to be going to the farmers in the Banbridge area, the knowledge will be used to support all farmers in Northern Ireland. We could not do this over the whole Province, but what we will have at the end of it will be of benefit to every farmer. So, while it may appear to be of little comfort at this point in time, there will be a longer-term benefit from it for everyone. We will use the information to inform our future strategies.

There is still all the other ongoing TB work and all the other smaller research projects that, hopefully, will benefit and help farmers who have lost their herds, such as the one you described, which is such a devastating situation. While this specific project will not help them initially, there are other means of doing that through other smaller projects and good biosecurity. That is the advice that we would give to all farmers.

Miss M McIlveen: The difficulty for families that find themselves in that position is that, very often, perfectly healthy animals are being destroyed, yet the badgers are at the bottom of the fields. There is a question about the rationale for that.

Mrs Davey: Without doubt, that is how farmers look at it. However, we also have to be clear that badgers are not the only means of spreading TB. This is about looking at how we deal with that situation. Unfortunately, farmers have got to be patient. Colin, do you want to add anything?

Mr Hart: I know that the Committee looked at this in great detail, but the cattle-to-cattle spread element is still very significant. Although we fully accept that the badger plays a part in the spread of TB, it is equally important that we maintain the cattle-to-cattle controls. Of course, the testing regime generates its own pressure on farming families.

We are trying to develop our strategy for how we deal with the wildlife factor in the future, recognising that we have to deal with it if we are to eradicate TB. However, we must maintain the cattle controls as well. There is no question that it is hard on farming families.

Mrs Davey: We are looking at the next rural development programme and at the funding that could be made available to help farmers improve their biosecurity, such as installing better gates and things like that to badger-proof their farms. These are the things that will be available to everyone, not just to those in Banbridge, once we establish the next programme. We are trying to put in that type of more general control and help for people as we work our way through the project.

Mr Byrne: I welcome the presentation. I fear that we are still only tinkering with the issue. Was any serious consideration given to having a targeted or controlled badger cull?

Mrs Davey: That would have been discussed quite a number of years ago and decisions would have been made then. As a team, we have been tasked with developing a specific research project, and that is what we have done. The cull issue was debated some time ago, prior to the Minister's announcement in 2012, and was not taken forward.

We also have to be mindful of the difficulties that culls are having in England. So, we will be using the information from this research project and from pilots that are happening in England and Wales to inform us of the best strategy in the longer term. We were not tasked with looking at a cull.

Mr Byrne: How much official communication has there been with the Republic of Ireland's Department of Agriculture, Food and the Marine, which does carry out targeted culls? Secondly, why is Scotland officially free of bovine TB?

Mrs Davey: Our contact with our counterparts is on a regular basis but also on a formal basis through one of the North/South working groups on TB. We meet on a formal basis at least three to four times a year, but at veterinary level we would be in contact with our counterparts in the South weekly. It is about learning from each other.

Mr Byrne: Is this issue on the agenda regularly?

Mrs Davey: All TB issues would be discussed. We talk about what they are doing, what we are doing, what the future holds and the difficulties we might have in securing EU funding. There is nothing off the table. Everything that we need to talk about is discussed at those meetings.

I am not sure why is Scotland TB-free. It has probably been before my time. Colin, is there anything you want to add?

Mr Hart: The Scottish situation is maybe unique for the distribution of cattle, which goes along the south of Scotland and up the east coast. There are mountainous areas in the middle. There is a much lower density of cattle in the west. Historically, they have not had the same problem with the disease in their wildlife and badger population. In fact, their badger population could be quite different in some areas because it tends to vary according to the richness of the feeding. I expect that the badger population would be low in parts of Scotland for that reason.

Mr Byrne: We are feeding the badgers too well here.

Mr Hart: We may be.

Mr Byrne: An expensive luxury.

Mr Hart: Certainly, we know that badger numbers in parts of County Down are much higher. I was fortunate to attend the world TB conference in Cardiff last week. Our Southern colleagues made several good presentations at that. That shows that we collaborate closely with our colleagues in the South.

They have had a reactive cull for many years, and some of those reactive cull areas have coalesced because they have covered quite large parts of their country. Given that our TB programme and theirs for the cattle-to-cattle element are similar, and that their herd incidence is a good deal lower than ours now, we are looking at the situation across the border. We are looking at it in the context of what is happening in England and Wales as well. Our long-term strategy needs to be formed from all the current pieces of work that are going on, the pilots and the experimental work.

The South is just about to report on an oral TB vaccine. After administering oral vaccine, they culled the badgers in the area. It will be interesting to see the outcome of that. We are tuned into all the research and pilots across these islands.

Mr Buchanan: Thank you for your presentation. I know that you are only here doing a job that you have been tasked to do but it is little comfort to the farming community when it sees a small area within a small place like Northern Ireland costing £1.5 million a year to do a huge bit of research to form a strategy. That is really what this is. It does not seem that it is really to target the badger. We have a serious problem here but it does not seem as though it is going to be targeting that. It is a bit of research at the minute that is looking to see what we can do to form a future strategy.

Has there been any involvement from the universities? Could this research not have been done by the universities, and a twin-track approach taken by the Department to do a cull at the same time? This is focusing on only a very small part of Northern Ireland. As some of my colleagues said, the problem is across the rest of Northern Ireland and it will stay there or, perhaps, escalate because nothing is being done about it.

We have a five-year research project that we are told will help maybe not only here but across the world. We are not worried about across the world; we are worried about Northern Ireland and how we can eradicate TB here. It is no fault of you folk, but this is of little comfort to the farming community.

Mrs Davey: The debates about a cull took place some years ago. This is what we have been tasked with doing to get an answer to the TB problem. It is not an answer that will just happen overnight. TB has been about for a long time, as have the issues. It is fine to say, "Have a cull", but badgers are a protected species here. We need our stakeholders, other Departments and the Executive onside. The evidence is that we would not have that if we were to consider a cull. We are not worried about TB in other areas; we are worried about TB in Northern Ireland, but we can learn from other areas. That is what we are prepared to do. We are prepared to share. This will give us knowledge that will help us to fight the battle of TB eradication. We have always acknowledged that TB eradication is going to take a long time. In GB, they have issued a 25-year strategy. There are no quick fixes, and there is no quick fix as a result of a cull, either. It is about trying to get an acceptable approach.

As I said to your colleague earlier, there are other things that we will still be doing, such as our own TB programmes. We will be providing advice to farmers. We will be trying to get funding through the rural development programme to give benefits on the ground to also deal with badgers. We have to look at establishing an approach that works and will be acceptable. If we got into the scenario in which we had some part of our community or stakeholders not backing us, we could have more difficulty with implementing anything.

At this point in time, we have widespread support for this approach. We genuinely believe that it will provide valuable information to allow us to effectively move forward.

Mr Buchanan: Let us hope that, when we come to the end of five years, we will have something from the research that will work. If we come to the end of five years and we find that it has not been successful, where do we sit then?

Mrs Davey: As I said, we are taking a year-by-year review of this. It is not a case of doing it for five years and then seeing what has happened. We will be looking at it as we progress. It is not the case that 2018 will be the first time we think about whether it worked. We have also given that guarantee to the Minister, who has given it to the Executive. Things can change as we move through this.

Mr Milne: I have a few wee points that I want clarified. You said that you captured badgers this year and that you did not know when you released them whether they were carriers. You said that you will test them again next year, and, if they prove positive, you will take them out of it. How will you know then if you did not know this year? For long do you have to hold a badger before the test shows up positive, negative or whatever?

Mrs Davey: This year, we are doing something slightly different. As I said, we are evaluating the test against laboratory tests to establish whether it is effective. We will get those two results before we apply a decision and say, "That's a positive badger". Next year, when we have evaluated the test, we will use a pen-side test. We should have the results within minutes. That will allow us to remove the badger quickly, but we are not doing that this year. As I said, there are also other reasons for not doing it this year. It gives us the opportunity to do an evaluation test.

The key reason for not removing the badgers this year, as I explained to the Chair, is to get good monitoring information on their normal movement patterns. I do not know whether you want to add anything, Colin.

Mr Hart: No, I think that you have covered that.

Mr Milne: You said that some farmers do not participate: did they give reasons?

Mrs Davey: They gave some reasons and I will get Nigel to come in on this. I have been asking those questions as well. For some, it is because they misunderstand what we are doing, and some are concerned that we are culling badgers and that there might be repercussions for them. We need to be able to provide reassurances. Some farmers are adamant that we should never cull badgers, believe it or not, and they are worried about the effects of it, but we have been giving assurances. All our stakeholders, whether wildlife stakeholders or the farming communities, see a benefit in removing diseased badgers, so the support is there.

Nigel, do you want to elaborate on any other reasons that farmers have given?

Mr Nigel Trimble (Department of Agriculture and Rural Development): I will not mention specifics, but there is a range of views; some people just do not want us there, full stop, and others have a lack of understanding, as Kate said. Sometimes, when we speak to them, they come round and will give us permission, but there are some who are adamant. As we said earlier, only around 7.5% of the permissions that we have received so far have been refusals, so I am very content with that. Equally, Mrs Dobson asked earlier whether 100% agreement would be preferable: it absolutely would. Logistically, it would make our job on the ground a lot more straightforward without having to try to trap around farms. I think it would benefit the badger and cattle populations in the area if we got as close to 100% as possible, so part of the message that I would like to encourage is that people see the benefits.

Mr Milne: Do you know how many of the 7% have had herds turned down for TB?

Mr Trimble: I do not know off the top of my head.

Mrs Davey: We could do that analysis, but I do not think that it would be helpful. This is about getting farmers' agreement voluntarily. We have no legislative powers, so we have got to respect their wishes. We will certainly set out our case and try to explain that it is not just for their benefit, it is for everyone's benefit.

Mr Milne: The point I am making is that you need the cooperation of farmers also. It is not good enough if some farmers do not want to cooperate and, if their farm is hit with TB, they get 100% compensation. You mentioned benefits being given to the local community. What do you mean by that? Are you saying that we should give farmers more benefits to encourage them to participate or take preventative measures other than what the Department is doing?

Mrs Davey: No, there is no benefit; there are no financial incentives for farmers to participate in this. What I was saying was that, under the rural development programme, we are looking at other measures that we could put in place to provide funding to help farmers improve their biosecurity generally, not specifically within the Banbridge area. We totally accept that 100% farmer participation and landowner participation is what we need. We have been talking to the farming unions and they have agreed that they will encourage their membership to join this. What I said in my opening remarks was that I would ask the Committee to try to spread that message as well, because we really need everybody on board on this. Unfortunately, there will be some farmers and landowners who just will not agree to it.

Mr McMullan: Thank you for your presentation.

The question of cost has arisen today, and it is a big cost, but I think that, as we have discussed here before, doing nothing is not an option. When we look at the amount of money that is paid out in compensation each year for this disease, I think that it is hitting nearly £30 million. Culling, as we have discussed, is not an option either because we would spend our time in court as has happened in England. I believe that they could be in trouble again over there through the courts for their decision. Is this the only path we can take at the present time to make headway into this disease to try and get something out of it, even though the project will have to run for five years or whatever? We have looked at all the options, we have discussed this at length, and the reality is that this is about the only show in town that we can take at this particular time.

Mrs Davey: Without doubt. As I explained to members earlier, before the Minister announced this we had been through the whole debate about the best course of action. The Minister clearly believes that this is the best course to take, and she has the support of the Executive. We need to put something in place that has the stakeholders behind us and allows us to progress. We do not want to end up spending our time in court. At this time, we have all our stakeholders behind us. We now want our farmers and landowners behind us as well.

Mr Irwin: I may have been critical of the time span, but doing something is better than doing nothing. I hope that it will be of long-term value. I think that it will be a slow process, and many farmers would like to have seen action quicker. I certainly wish you well and I hope that, in the long-term, it succeeds in helping to reduce the incidence of TB in cattle.

Mrs Davey: Thank you very much. I will just add that there will be other research that will help us, as we move towards the oral vaccines that Colin mentioned. Those are things that will help us. As we demonstrated, if TVR works and we have an oral vaccine, we will be in a stronger position.

The Chairperson: You talked about the one year of monitoring and the research that would come out of it. You also cited that one of the reasons for that was to try to reassure yourselves about the pen test that you will use the following year. The Committee had concerns about the sensitivity and specifications of the Brock TB Stat-Pak test. What are we using if not that?

Mrs Davey: I will get Colin to cover that in more detail, but my quick answer is that the company that made the Stat-Pak test withdrew it from the market, so it is no longer available. It has replaced it with a new test called a Dual Path Platform (DPP) test, and that is what we are going to use. Colin will want to come in on that.

Mr Hart: Yes. The discussion went along the lines of 50% sensitivity for the Brock Stat-Pak test, and some members raised that issue with us. To focus first on the Brock Stat-Pak test, which is off the market, the 50% sensitivity applied to all stages of infection in a badger, from the very early stages to the terminal stage. Our evidence, and what I think was the evidence we gave to the Committee at that time, was that it could be as high as nearly 80% sensitive. When we say "sensitivity", we are talking about how many infected badgers it is likely to leave behind. The higher the sensitivity the fewer infected badgers are missed by the test. If we are at least picking up on badgers with advanced infection and removing them, we will, it is hoped, be removing a lot of infectivity from the environment.

The specificity of the Brock Stat-Pak test is how accurate it is in identifying infected animals. Its specificity was high; from memory, about 98%. So, with sensitivity and specificity in mind, the question is how the new DPP test will perform. The answer is that we believe that it is better, but we do not have any figures for that in badgers yet. Work has been done in other species, and the indication is that this new generation DPP test that Kate mentioned may be better, more sensitive and specific, than the Brock Stat-Pak test. It is being used on badgers in other parts of the islands. Over the course of this year, between the work that we and Animal Health Veterinary Laboratories Agency are doing, we hope to have a much better handle on this new DPP test. We will also use other tests that are not real-time tests. We will use the gamma interferon test and as many of the samples as we can process. Between those tests and, indeed, in subsequent years, based on what they call the gold standard test, which is the post-mortem of a badger, we will gradually build up information. This year, our target is to get it working under field conditions, because neither the Brock Stat-Pak test nor the DPP test has been used under field conditions, where temperatures could vary. It could be a cold morning or a very warm morning, and the only use so far has been in a laboratory, but, this year, we will do tests in the field on blood and serum and also in the laboratory on blood and serum, and, over this year, we hope to evaluate the test under field conditions. Hopefully that gives you a bit more information about it.

The Chairperson: Are you still able to access the land of farmers and landowners who have not bought into this process but just not lay traps or is it the case that you are not allowed on their land or will not enter their land?

Mrs Davey: We are not allowed on their land, but, as I said, where we see badger runs that are heading onto their land where the setts may be, we will put traps on those runs on other's people land that we can access so that we maximise the cover we can get. Nigel and his team are doing what we call saturation trapping in that we are putting down more cages than there are, we suspect, badgers so that we maximise our opportunities and maximise the trapping levels.

The Chairperson: Are there any areas on that land that are landlocked that you should be getting into but are not because of the landowners not giving you permission?

Mr Trimble: Do you mean any badger setts that we are not able to get to?

The Chairperson: Yes.

Mr Trimble: There are two or three medium-sized farms that have not signed up that have significant land parcels. That is a possibility. Thankfully, a lot of the people who have said no have small numbers of fields, and that is quite easy to work around, but the bigger the farm, the bigger problem it gives us logistically.

Mr McMullan: I forgot to mention that, as we have heard before, we need to get a handle on this disease because Europe is already questioning the amount of compensation we are paying out on a yearly basis and the payments of 100%, and that will come back on the table at some stage. Europe has said that, if we keep paying out 100% and are not getting to the bottom of the problem, it may not go on. It is in everybody's interests to get behind this scheme. Although it may not look good at the minute, I think that it will improve greatly, but if that 100% funding compensation is ever cut, all farmers will really have to roll their sleeves up.

The Chairperson: That is all the questions. No one else has indicated that they want to speak or ask questions. Thank you very much for your time here. Kate, I believe that you are moving on.

Mrs Davey: Yes.

The Chairperson: I will say a big thank you from me personally and on behalf of the Committee and staff, because there has been no doubt that your professionalism, your conduct and your expertise on everything that you have presented to us and led on has been of the highest standard. I wish you well in your forthcoming duties, tasks or adventures. Thank you very much for your professionalism here.

Mrs Davey: Thank you very much. It is really appreciated that you have acknowledged it.