

Progress through partnership

The UK Chief Veterinary Officer's 2009 report on animal health and welfare



Image on page 35 courtesy of Ian Vernon.

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Information about animal diseases can be found in *Defra's A-Z Index of Diseases*, at www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/.

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A PERSONAL INTRODUCTION BY THE CHIEF VETERINARY OFFICER (UK)



I am very pleased to present this report for the calendar year 2009. In last year's edition I said I would consider whether there was still a need for an annual publication, given the wealth of information now available elsewhere, but feedback showed general support for its continuation. I hope you agree that we have increased clarity and readability in this edition.

The report provides an account of our activities during 2009, structured under the reasons for government intervention and highlighting the five strategic outcomes set out in the Animal Health and Welfare Strategy.

It communicates a strategic view of progress made in promoting and protecting the UK's animal health status.

It also sets out my views on the new challenges we may face in the future and how we can respond to these in line with our strategies, within the context of scarce resources.

The reasons for government intervention are:

- to protect public health;
- to protect animal welfare;
- to protect international trade, and
- to protect wider society.

Our five strategic outcomes are:

- working in partnership;
- prevention is better than cure;
- ensuring a clearer understanding of costs and benefits of animal health and welfare practices;
- understanding and accepting roles and responsibilities, and
- delivering and enforcing animal health and welfare standards effectively.

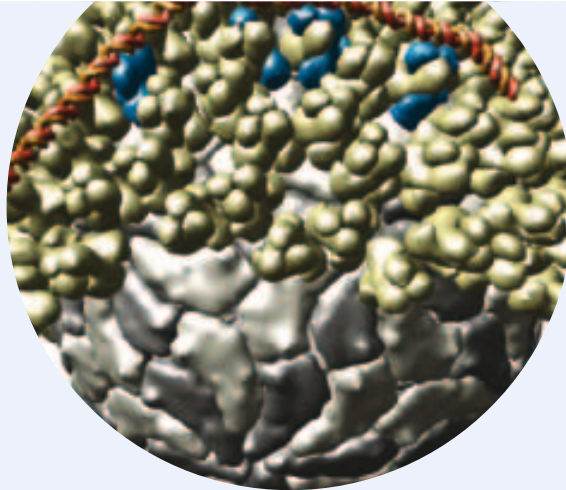
Highlights of 2009

We maintained close working across the UK, to ensure delivery of the best possible outcomes for the whole of the UK through our domestic and international activities. The four administrations worked in partnership with animal keepers, related businesses, non-governmental organisations and other government departments to deliver effective policies and interventions. This has led to improvement in the UK's animal health status and in the welfare of kept animals.

This report contains many examples of successful collaborations by each of the administrations of the UK, but I would like to highlight just a few here:

- The UK retained additional rules under a derogation from the EU Pets Regulation, maintaining our position on rabies and tapeworm control.
- A new EU Regulation on the protection of animal welfare at the time of slaughter or killing was passed on 24 September. This Regulation will come into effect on 1 January 2013 and will also apply to killing for depopulation purposes, including disease control.
- Although the four administrations pursued their own policies on controlling bovine TB, they all worked to disease control principles set out in EU law. Scotland achieved recognition as officially free from bovine TB, while the UK TB Eradication Plan was accepted with EU funding of up to €10 million in 2010 towards compensation for cattle slaughtered and testing costs.
- No domestic case of bluetongue was detected. Northern Ireland maintained its officially BTV-free status, and the results of a targeted survey in Great Britain at the end of the year found no evidence of circulating virus. This builds our case to return to officially BTV-free status after a further year free of disease, provided the threat of incursion from continental Europe is sufficiently low to allow Great Britain to stop vaccinating.
- Our online country-level contingency plans, setting out the operational response arrangements that government will put in place to deal with exotic notifiable diseases, were regularly updated. They were also regularly tested in local and regional exercises, and will be the subject of a Great Britain-wide exercise in November 2010.
- As Head of the Veterinary Profession in government, I am pleased to report our continued success in raising awareness of the importance of veterinary work in public health in its widest sense. This includes population-level disease control, the research on which it is based and the role of veterinary surgeons within government. This was achieved by close working with the veterinary schools and profession – notably the Royal College of Veterinary Surgeons and the Veterinary Public Health Association.

- Stakeholder involvement and consultation in research programmes was further expanded during the year. At EU level, the activities of the Defra-coordinated Collaborative Working Group on Animal Health and Welfare, under the EU Standing Committee on Agricultural Research, continued to expand and deepen (www.scar-cwg-ahw.org). The associated EMIDA ERA-NET project on the coordination of research on emerging and major infectious diseases of livestock, to which Defra is a major contributor, initiated a common call for research with a budget in the region of €20 million (see www.emida-era.net).



The bluetongue virus – one of several global disease risks requiring constant vigilance

Looking ahead

Global issues, such as climate change and the growing volume of international trade and human travel, increase our exposure to exotic and emerging diseases. Last year we saw psoroptic mange re-emerge in UK cattle for the first time since the 1980s, and encountered the apparently new disease of bovine neonatal pancytopenia. Such issues, and the permanent threat to our animal populations posed by global disease risks, will require constant and robust scanning of domestic and international developments in disease dynamics, trade and populations.

We aim to improve the health and welfare of the UK's animal populations in many ways. We evaluate this improvement using specific measures of success for individual initiatives, such as levels of vaccination against bluetongue.

As long as resources remain scarce, we need to prioritise those initiatives that contribute most to the overall improvement of the UK's animal health status. There are three principal ways by which we make these decisions:

- using evidence, gained by means such as surveillance;
- making a systematic assessment of risks, and
- assessing the impact of our actions.

We have excellent teams delivering on these three fronts, and this report contains several examples of the work they are doing.

The current resource constraints will continue in the coming years. They will increase the importance of having a systematic approach to policy design, implementation and evaluation. We will also need to make greater use of robust, risk-based approaches to surveillance, controls to mitigate risks to public health, animal health and animal welfare, and to our monitoring of compliance with controls. The UK must continue to influence EU policy on animal health and welfare legislation so that the Government's response to current and emerging threats is proportionate and based on evidence and risk. This will reduce the burden on taxpayers and encourage industry to share the costs of, and responsibilities for, risk management.

This report demonstrates continuing improvement in the animal health status of the UK

Surveillance and the evaluation of interventions are examples of processes that will benefit from the exchange and systematic pooling of evidence, regardless of source. A five-year delivery plan for our Veterinary Surveillance Strategy is now in the making. It highlights the need for a wide and common understanding of the need for partnership working. During 2009 we introduced new processes for the systematic identification and prioritisation of emerging threats to England's animal health and welfare. We consulted with all UK administrations and with other interested parties, especially colleagues in the human health field, to enable a thorough assessment and communication of risk, uncertainty, and the action to be taken.

In conclusion, this report demonstrates continuing improvement in the animal health status of the UK, including our capacity to detect and respond to new and emerging threats. There will inevitably be future challenges, but we will meet these by working in partnership, both across government and with animal keepers and non-governmental organisations.

Nigel Gibbens

Chief Veterinary Officer (UK)

PART 1: OVERVIEWS

This Part contains an overview of 2009 by each of the UK administrations. All four Chief Veterinary Officers consider the most significant challenges and achievements to have taken place during a year of progress through partnership.



CHAPTER 1: OVERVIEWS BY THE FOUR ADMINISTRATIONS

Animal health legislative powers are fully devolved to the national administrations of the UK. However, certain budgets and responsibilities – such as veterinary surveillance, animal health and welfare research and the funding of delivery agents such as Animal Health – are still held by Defra on behalf of England and Wales or the whole of Great Britain. The Chief Veterinary Officer (UK) serves as the key liaison between departments, regularly meeting with the devolved administrations of Scotland, Wales and Northern Ireland to keep each Department up-to-date on policy issues of mutual interest, so helping ensure a consistent policy approach across national boundaries.

The Chief Veterinary Officer (UK) has specific responsibilities for animal health and welfare issues in England, as well as for overseeing developments in the UK and representing the UK's interests internationally. He is also Head of Profession for veterinary surgeons working in government, and a Council Member of the Royal College of Veterinary Surgeons.

England

In September 2009 the Government announced the dissolution of the England Implementation Group (EIG). Defra is grateful to chair Helen Browning and the members, for encouraging and challenging others and helping deliver the Animal Health and Welfare Strategy. The EIG brought people together to discuss health and welfare, facilitated the development of Strategy Sector Councils and stimulated the responsibility and cost sharing debate. Helen Browning and two other EIG members continue to provide advice as members of the Responsibility and Cost Sharing Advisory Group, chaired by Rosemary Radcliffe. Defra continues to build on the EIG's legacy.

David Eves' December 2008 review of the EIG (www.defra.gov.uk/foodfarm/policy/animalhealth/eig/pdf/david-eves.pdf) made recommendations on how its work could interface more effectively with the responsibility and cost-sharing agenda.

A range of sector-based organisations led work during 2009 to improve animal health and welfare. These include:

- BPEX, which collaborated closely with Defra on the British Pig Health and Welfare Strategy (www.pighealth.org.uk). The first stage of this initiative, Yorkshire and Humberside Health, was launched in July 2009, with Eastern Pig Health following in November;
- the Equine Health and Welfare Strategy for Great Britain (www.equinehealthandwelfarestrategy.co.uk) which covers the UK and fosters collaboration between the diverse agencies promoting the health and welfare of horses;

- the Poultry Welfare Forum, which is currently considering a voluntary system of labelling of chicken meat with information about production methods;
- the Companion Animal Welfare Council, which plays a key role in providing sound welfare input to the companion animal sector;
- the Cattle Health and Welfare Council, which has achieved much in the areas of farm health planning, surveillance, bovine viral diarrhoea and the development of a dairy cow health and welfare strategy;
- the Sheep Health and Welfare Group, whose efforts have concentrated on lameness, mastitis, bluetongue and anthelmintic resistance.



Disease prevention measures – yielding positive results in 2009

We would like to thank all participants in each of these organisations for their enthusiasm and involvement, and in particular their chairs: Stewart Houston (Pig Council), Brigadier Paul Jepson (Equine Health and Welfare Aim Champion), Peter Bradnock (British Poultry Council), Peter Scott (Companion Animal Welfare Council), Tim Brigstocke (Cattle Health and Welfare Council), Peter Baber (Sheep Health and Welfare Group) and David Bassett (British Trout Association).

Although Defra is pleased that no major outbreak of exotic disease occurred during the year, our international disease monitoring highlighted the continuing threat represented by some significant disease risks, while our risk assessments helped to inform our programmes of disease prevention.

A wide range of innovative and risk-based projects have improved disease prevention and emergency preparedness. The threat of bluetongue continued in the form of active infection in France and Germany, while the absence of outbreaks in England was at least in part a reflection of the vaccination campaign – a successful partnership between government and the livestock sector.

The TB Eradication Group

In October 2009 the TB Eradication Group for England presented its progress report to stakeholders (www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/documents/tb-erad091008.pdf). This outlined the Group's progress in developing a bovine TB Eradication Programme for England, the risk-based approach it is taking to identify and assess new policies, and changes following recommendations made to the Secretary of State. These measures were included in England's contribution to the European Commission-approved TB Eradication Plan for the UK, which secured an EU funding commitment of up to €10 million in 2010 towards compensation for cattle slaughtered and testing costs.

Vaccinating against TB

Vaccinating cattle and/or wildlife is an important long-term policy option for reducing the risk of bovine TB in England. As such, Defra, on behalf of England and Wales, has invested in a significant research programme to develop vaccines for cattle and badgers.

Total investment in vaccine development since 1998 has now reached £30 million. The earliest projected date for a licensed oral BCG badger vaccine is 2015, although its use is likely to be strictly controlled and limited.

Work is underway to support the BCG vaccine licence application for use in cattle and to develop and validate a test to differentiate infected from vaccinated animals (known by the acronym 'DIVA'), which is needed because BCG interferes with the tuberculin skin test. The earliest projected date for the use of this vaccine with a DIVA test is 2015.

Improving animal welfare

Defra also introduced a variety of new national measures to improve animal welfare during the year. In particular, under the Animal Welfare Act 2006, we introduced Regulations to protect the welfare of racing greyhounds and published codes of practice for the welfare of cats, dogs, equines, and privately-kept non-human primates. The codes provide owners and keepers with practical guidance on how to comply with the provisions in the Act.

A wide range of innovative and risk-based projects have improved disease prevention and emergency preparedness

A strategy for wildlife health

The England Wildlife Health Strategy was published in June 2009, providing a strategic framework to promote a coordinated, appropriate and proportionate response to wildlife disease issues. It is designed to help with the identification, assessment and mitigation of risks that may threaten public and animal health and wildlife biodiversity.

The strategy captures the aims of the UK Veterinary Surveillance Strategy: strengthening collaboration, deriving better value from surveillance information and activities, and sharing information more widely. Its continuing implementation – to be reviewed in June 2012 – will further these aims, so enhancing our understanding and knowledge of wildlife diseases.

» www.defra.gov.uk/foodfarm/farmanimal/diseases/vetsurveillance/species/wildlife/strategy/pdf/whs-090615.pdf »

Reviewing risks and vulnerabilities

The Veterinary Risk Group was set up in November 2009 in response to a recommendation in Sir Iain Anderson's 2008 report, *Foot and Mouth Disease 2007: A Review and Lessons Learned*, to review the risks and vulnerabilities raised by portfolio managers in the Veterinary Science Team.

Each month portfolio managers submit an Emerging Threats and Highlights Report identifying potential risks to the health status of the UK that have not been previously identified and do not currently have resources allocated to them. The Group reviews the overall risk situation and considers whether mitigating action proposed or being undertaken is sufficient. Its remit includes scientific and technical threats, such as emerging diseases in livestock, and wildlife and notifiable disease outbreaks in trading countries.

The Group can recommend further mitigating action, such as the production of a risk assessment or the meeting of an Exotic Disease Expert Group. These recommendations are then reported to the UK CVOs for their comment.

The approach is being extended to include Wales, Scotland and Northern Ireland by means of those administrations submitting their own Emerging Threats and Highlights Reports and having a presence at the Group's meetings.

Promoting farm health planning

Defra continued to promote the benefits of proactive farm health planning during the year, and to encourage industry to take ownership of the outputs of work in which it invested £2.8 million between 2006 and 2008. The Cattle and Sheep Health and Welfare Councils agreed in the Autumn to take this work forward, with sponsorship from EBLEX and DairyCo.

An independent review of the funding of farm health planning commissioned by Defra concluded on a qualitative evaluation that the project delivers a range of benefits and helps encourage culture change by means of work at farm level. The review also concluded that farm health planning delivers a range of other benefits including tools and templates, increased awareness and skills and networks of veterinary and farmer champions.

» www.defra.gov.uk/foodfarm/farmanimal/fhp/pump-priming.htm »

Meeting the challenge of climate change

Responding to recommendations in the 2009 EU White Paper *Adapting*

to climate change: *Towards a European framework for action*, Defra is developing guidelines and surveillance mechanisms on the health impacts of climate change and prioritising research in animal disease surveillance and control. It has developed a prioritisation tool for animal diseases that may be affected by climate change, which will guide future adaptation policies.

A new focus on responsibility and cost sharing

Summer 2009 saw the Responsibility and Cost Sharing Advisory Group established under the independent chairmanship of Rosemary Radcliffe. Featuring members from the main livestock sectors, the veterinary profession and consumer interests, the Group will report to the Secretary of State by the end of 2010 on a range of options.

Looking at the future of farm vet expertise

In August 2009 Defra and the devolved administrations received Professor Philip Lowe's report on farm animal veterinary expertise in food animal production. Concluding that there is not currently a shortage of expertise, Professor Lowe produced a range of recommendations on promoting the supply of veterinarians and developing the demand for veterinary services.

Defra facilitated the production of the report with the close support of the devolved administrations, veterinary professional organisations, farmers and academia.

The Lowe report – making recommendations on the supply of veterinarians



Welsh Assembly Government

Improving animal welfare

In November 2009 the Minister for Rural Affairs announced a review of legislation and guidance covering the breeding of dogs, based on evidence obtained through the Companion Animal Welfare Enhancement Scheme – a three-year programme launched in April 2008 to provide guidance and education and encourage local authorities to investigate welfare matters of concern. Officials were also asked to consider the benefits of microchipping dogs, and whether this should be made compulsory. The review will be complete by the end of June 2010.

Legislation was introduced to ban the use of electric shock collars on dogs and cats under section 12 of the Animal Welfare Act 2006, following three separate consultations.

A code of practice for the welfare of rabbits was also launched, in November, with guidance to owners and keepers helping to ensure that standards of welfare meet the requirements of the Animal Welfare Act 2006.

The codes of practice for the welfare of cattle and sheep were revised and sent to industry stakeholders for comment between October and December 2009. The final codes will be published in 2010. A code of practice for game birds is being developed for publication in 2010.

Guarding against exotic diseases

With the threat of bluetongue persisting throughout 2009, the message to the livestock industry in Wales was maintained: continue vaccinating. However, government stock of vaccine available in Wales was not taken up in sufficiently high volume, so that 4.16 million of the original stock of 7.5 million doses remained unsold on expiry at the end of August.

During 2009 our officials helped to plan and execute several exercises designed to test response to an exotic disease outbreak, including Exercise Helygen (rabies), Exercise Norton (West Nile virus) and Exercise Onnen (foot and mouth disease).

Wales also took part in several Great Britain Core Groups during the year – classical swine fever, equine diseases and avian influenza – helping to develop disease policy and disease control strategies.

Countering endemic diseases

We continued to work closely with our Animal Health and Welfare Strategy Steering Group, our key stakeholder forum for animal health and welfare. During the year the Group advised on priorities such as bovine TB and Wales' preparedness for tackling exotic animal diseases, as well as considering the potential economic impact of diseases such as psoroptic mange in cattle. A range of organisations, including the Veterinary Laboratories Agency and the British Veterinary Association, attended meetings and played an active part in the Group's deliberations.

The hydatid disease awareness campaign continued with randomly-selected farms sampling their dogs. The data collected will be used for evaluating the pilot year and assessing the effectiveness of providing quarterly, free tapeworm treatment on participating cattle and sheep farms in south Powys. Efforts continue to raise public awareness across Wales of the importance of regular dog worming and good personal hygiene practices.

In May 2009 the Minister for Rural Affairs agreed an action plan to support industry in tackling sheep scab in Wales – a continuing problem for many Welsh producers.

Eradicating bovine TB

During 2009 a total of 16 092 herd tests (including the use of gamma interferon testing) were carried out in Wales, with a total of 1 812 666 cattle being tested. There were 1 175 new herd TB incidents across Wales and over 11 500 cattle slaughtered as a consequence. Compensation in 2008–09 rose to nearly £24 million (from £1.8 million in 2000–01).

An additional £27.7 million of public funds has been made available over three financial years to support the TB Eradication Programme, which the Minister for Rural Affairs launched in April 2008. Significant developments to the programme in 2009 included the following:

- All the cattle herds in Wales were tested to provide a clearer picture of the disease. Called TB Health Check Wales, this testing showed that bovine TB is continuing to spread even in areas previously thought to be relatively disease-free, with 62 new cases in north Wales alone.
- In March 2009 the Minister for Rural Affairs announced that she still held the view, based on available evidence, that a badger cull was necessary in an Intensive Action Pilot Area, and that the area should be in west Wales.
- Following public consultation, the National Assembly for Wales approved the Tuberculosis Eradication (Wales) Order 2009, giving the Welsh Assembly Government the power to use badger culling and vaccination as part of the TB Eradication Programme.
- The Regional TB Eradication Delivery Boards covering all of Wales continued to implement initiatives on improving biosecurity practices, breakdown management and other practical issues.
- In November 2009 the European Commission formally approved the UK TB Eradication Plan, outlining measures to be taken in Wales as part of the TB Eradication Programme.
- Consultation began on new legislation to allow the Welsh Assembly Government to strengthen pre-movement testing regulations and reduce compensation to farmers who do not comply with TB requirements or have overdue tests.

An additional £27.7 million of public funds has been made available over three financial years to support the Wales TB Eradication Programme

Helping honeybees

The Welsh Assembly Government and Defra published the Healthy Bees Plan in March 2009, following consultation with beekeepers and the main beekeeping associations. The plan sets out arrangements for government, beekeepers and other stakeholders to work together to respond effectively to pest and disease threats, ensuring a sustainable and productive future for beekeeping in Wales and England.

In May 2009 the Minister for Rural Affairs announced additional funding for the National Bee Unit to enhance the current bee health programme in Wales. This enabled the Unit to implement the first stages of the Healthy Bees Plan, with a focus on identifying keepers, increasing advisory and inspection visits and improving education in beekeeping.

Researching by-products

The existing Animal By-Products Regulations' stipulation, that fallen stock must be collected and disposed of in line with the Regulations without undue delay, has caused particular problems for sheep farmers. During the year Wales led negotiations regarding amendments to the new Regulations (1069/2009), to allow for on-farm containment.

We continue to support research by Hybi Cig Cymru and Bangor University into an alternative method of on-farm containment of fallen stock. It is expected that evidence supporting this new method will be sufficient, and that a dossier will be ready for submission to the European Food Safety Authority in 2011.

Department of Agriculture and Rural Development, Northern Ireland

All-island strategy achieved

Considerable efforts during 2009 culminated with the North-South Ministerial Council Ministers' agreement on an all-island Animal Health and Welfare Strategy, on 31 March 2010 – a key outcome for the Department of Agriculture and Rural Development.

The strategy is the basis for developing complementary North-South policy and approaches on animal health and welfare, with the ultimate objective of free movement of animals on the island of Ireland. Work in the coming year will focus on activities to improve all-island animal health and welfare.

Preventing and eradicating disease

In the context of an all-island approach, the prevention of epizootic disease during the year was a very positive outcome – in particular the maintenance of our bluetongue-free status despite increasing importation of susceptible species.

Our contingency plans for epizootic diseases comprised two exercises: Exercise Chough tested our strategic response to a notional outbreak of avian influenza, while Exercise Yellowhammer trialled our operational-level response, media-awareness and structures.

There were also successful outcomes in endemic disease eradication schemes, with the granting of EU Annex II status for Aujeszky's disease and EU approval for both the bovine brucellosis and bovine TB Eradication Plans 2010, with the opportunity of co-funding by the EU Veterinary Fund. We achieved a reduction in the herd incidence of bovine brucellosis from 0.87 per cent in 2008 to 0.35 per cent in 2009. The incidence of bovine TB, while not continuing its previous decline, remained relatively static with an end-of-year herd incidence of 5.54 per cent.

Northern Ireland achieved a reduction in the herd incidence of bovine brucellosis from 0.87% in 2008 to 0.35% in 2009

Electronic innovation

We continued to innovate in animal health and welfare service delivery, expanding our electronic Animal and Plant Health Information System to enable the automatic recording of electronic tag numbers at markets and abattoirs as part of our new electronic tagging system for sheep. Electronic delivery of services will be an ongoing theme in the Department's work, helping us deliver our Better Regulation objectives and reduce bureaucracy for the industry.

Legislating for the future

2009 saw the groundwork laid for the new Diseases of Animals Act (NI) 2010, which came into operation on 12 March 2010. This introduced enhanced disease prevention, biosecurity and control measures that will protect our animal health status. It also enabled stricter enforcement checks at ports, compulsory biosecurity measures at all livestock premises and measures swiftly to contain and eradicate disease outbreaks. It will be a powerful tool in the eradication of brucellosis in Northern Ireland.

The Act enables tough action to be taken against those who deliberately cause disease spread, and allows for the introduction of policies reflecting the latest developments in research and technology to trace and combat disease. It also ensures that appropriate enforcement powers are available, and that the rights of farmers are protected.

Agreement has also been secured from the Northern Ireland Executive to progress two new Bills:

- The proposed Welfare of Animals Bill will provide protection for all vertebrate animals under the control of man. It will bring the protection afforded to non-farmed animals, including domestic pets, into line with the higher protection already in place for farmed animals, allowing action to be taken to prevent suffering rather than having to wait until suffering has taken place. It will also introduce new offences and higher penalties.

- The proposed Dogs (Amendment) Bill will update 1983 legislation on dog licensing, control measures and penalties. It will strengthen and improve existing arrangements to address the issues of dog attacks and straying and unwanted dogs, while promoting responsible ownership.

Scottish Government

TB-free status awarded

Scotland's low and stable incidence of bovine TB was recognised in 2009 when the country was granted officially tuberculosis-free status at the September meeting of the EU Standing Committee on the Food Chain and Animal Health.

To protect the country's new status, a working group of officials from all four UK administrations agreed extended pre-movement testing arrangements for Scotland. These changes to our TB controls, agreed with UK stakeholders, will ensure a consistent approach to cattle introduced into Scotland from high-incidence areas in other parts of the UK.

Scotland was granted
officially tuberculosis-free
status in September

Fighting bluetongue

The Scottish Government part-funded a compulsory bluetongue vaccination campaign in 2008–09. There was a high level of compliance, monitored by vaccine sales and serosurveillance. Vaccination became voluntary from 25 October 2009, when the risk of transmission by midges diminished. In addition, keepers of cattle and sheep took a responsible attitude to sourcing animals from high-risk regions. There has never been any evidence of bluetongue virus circulating in Scottish midges.

Preparing for an exotic disease outbreak

A generic contingency framework plan for exotic animal disease was published during the year, with detailed annexes covering the major diseases. Exercises were run to test our response capability, and to train staff. Progress continues to be made on implementing the lessons learned from the Foot and Mouth Disease Review (Scotland) 2007.

Scotland's Environmental and Rural Services has produced a template industry contingency plan and guidance for the outbreak of a notifiable disease. This will help intensive poultry and pig farmers to limit potential harm to human and animal health, protect the environment and improve biosecurity.



Sheep EID – research is helping identify its benefits

Simpler sheep electronic identification

Evidence gathered from the Scottish Government's £4 million electronic identification (EID) research pilot helped inform the simplified sheep EID system introduced in Scotland from January 2010. All sheep born or tagged from that date are to be electronically identified, so helping the efficient operation of markets. The research pilot has been extended and is open to all Scottish farmers, as we continue to assist in the transition to EID whilst exploring the long-term benefits it offers to both industry and government.

Improving animal welfare

In March 2009 the Scottish Government made the Licensing of Animal Dealers (Young Cats and Dogs) (Scotland) Regulations 2009, which require anyone dealing in puppies and kittens to obtain a licence from the local authority. The legislation was brought in to control trade whereby dealers would purchase a number of animals from a breeding establishment and then offer them for re-sale. The new Regulations require examination of young animals by a veterinary surgeon, while the dealer must give their licence number on any advertisement or literature.

PART 2: REASONS FOR GOVERNMENT INTERVENTION

The Animal Health and Welfare Strategy identifies the reasons why government should intervene in the health and welfare of animals. This Part considers the year's activities of Defra and its partners and agencies, grouped under each reason for intervention.



CHAPTER 2: PROTECTING HUMAN HEALTH

The early detection and control of animal diseases that can impact on human health is clearly a high priority for all involved in animal health. Some infectious diseases of animals that can infect people (zoonoses) are notifiable under UK legislation.

This chapter looks at government interventions to protect the health of the public – from programmes to eradicate or reduce the prevalence of endemic zoonotic diseases to measures preventing exotic zoonoses from entering the country.

Keeping *Salmonella* and *Campylobacter* in check

In 2008 *Salmonella* accounted for 12 091 laboratory-confirmed cases in humans in the UK and 131 468 confirmed cases across the EU. This is a fall since 2007 of 8.5 per cent in the UK and 13.5 per cent in the EU.

There has been a downward trend between 2004 and 2007 in numbers of salmonellosis cases in humans both at national and EU level, and these continue to decrease.

During the year Defra and the devolved administrations continued to implement the National Control Programmes (NCPs) to reduce or maintain the low prevalence of *Salmonella* at primary production in specified industry sectors, as required by the EU Zoonoses Regulation (EC) No 2160/2003 and Directive 2003/99/EC (see www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/zoonoses/ncp.htm).

Turkeys

The UK NCP for the control of *Salmonella* in turkey flocks went out for public consultation in July 2009. (See www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/zoonoses/ncp.htm). It came into force on 1 January 2010. The NCP sets out the monitoring and controls that producers must follow to reduce and/or control the prevalence of *Salmonella* Enteritidis and *Salmonella* Typhimurium to 1 per cent or less by 31 December 2012.



Pigs

An EU-wide baseline survey of *Salmonella* prevalence in breeding pigs was carried out in 2008, sampling over 5000 holdings with breeding pigs in 24 EU Member States, plus Norway and Switzerland. Holdings were divided into those housing and selling only breeding pigs ('breeding holdings') and those with both breeding and fattening pigs ('production holdings'). The report on the *Salmonella* prevalence estimates was published in December 2009 and is available on the European Food Safety Authority website at www.efsa.europa.eu/en/scdocs/scdoc/1377.htm.

Salmonella prevalence ranged widely across Member States. In breeding holdings it varied from 0 to 64.0 per cent, and in production holdings from 0 to 55.7 per cent. The UK estimated prevalence for all *Salmonella* serovars was 52.2 per cent in breeding holdings and 44.0 per cent in production holdings – above the weighted EU mean prevalence of 25.8 and 33.3 per cent.

There has been a downward trend in numbers of salmonellosis cases in humans, which continue to decrease

Salmonella Typhimurium, the second most frequent cause of *Salmonella* infections in humans, was isolated in 19.4 per cent of the UK breeding holdings and 9.9 per cent of the production holdings. There was no *Salmonella* Enteritidis, *Salmonella* Infantis or *Salmonella* Virchow detected in any UK samples. *Salmonella* Derby was the most commonly detected serovar across Member States. In the UK the prevalence of *Salmonella* Derby was 14.9 per cent in breeding holdings and 11.0 per cent in production holdings.

This was the second baseline *Salmonella* survey carried out in pig herds in the EU, the first being in fattening herds at slaughter, in 2007. The Commission and Member States will be considering the results of both in setting *Salmonella* reduction targets.

The European Food Safety Authority has also carried out an assessment of the risk of human infection by *Salmonella* from pigs, to estimate the effects of interventions on human health. The target will not be set until the results of a Commission cost-benefit analysis are available in 2010. In collaboration with industry and other partners, the UK will then develop a statutory *Salmonella* NCP, which will build on monitoring programmes that industry assurance schemes already operate on a voluntary basis. The NCP is expected to come into force in 2012.

Chickens

Breeding flocks

Since the introduction of the current *Salmonella* NCP in 2007, *Salmonella* prevalence results for breeding flocks of domestic fowl in the UK have been very encouraging. The reduction target – 1 per cent or fewer flocks remaining positive for *Salmonella* Enteritidis, Typhimurium, Hadar, Infantis and Virchow – has been achieved each year since the start of the programme, indicating continued effective control of *Salmonella* by the UK breeding sector.



Laying flocks

The NCP for reduction and control of *Salmonella* Enteritidis and *Salmonella* Typhimurium on layer farms was implemented in the UK in February 2008. Before then the UK baseline prevalence of *Salmonella* Enteritidis and *Salmonella* Typhimurium, tested in 2004–2005, was 8.2 per cent, and the UK target for reduction was set at 10 per cent year-on-year, up to a maximum target of 2 per cent or fewer flocks remaining positive for the regulated *Salmonella* serovars. By the end of 2008, the UK prevalence had already fallen to an estimated 1 per cent, and 2009 monitoring results indicate a further reduction to below 1 per cent – well below the specified maximum reduction target of 2 per cent. These results indicate good progress made by the UK egg layer industry in reducing and controlling *Salmonella* within the sector.

In March 2009 Defra launched a consultation on the Eggs and Chicks Regulations 2009 (www.defra.gov.uk/corporate/consult/eggs-chicks-2009/consult-doc-eggs-chicks.pdf). Replacing Regulations of 2008, these simplify enforcement of EU controls on eggs intended for human consumption – previously enforced under the Zoonoses Order 1989. The 2009 Regulations require eggs from flocks where *Salmonella* has been

detected and eggs from flocks of unknown *Salmonella* status to be classified as Class B eggs and sent for heat treatment to eliminate contamination. The new Regulations came into force on 14 September 2009, also introducing the legal basis for an Administrative Penalties Scheme to enforce controls on eggs, administered by Animal Health. An equivalent consultation was launched by the Welsh Assembly Government in June 2009.

» <http://www.defra.gov.uk/animalhealth/inspecting-and-licensing/index.htm> »

Broiler flocks

The UK implemented the NCP for control of *Salmonella* in chickens reared for meat (broilers) in 2009. The 2005/2006 EU-wide baseline survey indicated the very low UK prevalence for *Salmonella* Enteritidis and *Salmonella* Typhimurium of 0.3 per cent. The NCP aims to maintain this low level in order to achieve the EU reduction target of fewer than 1 per cent of flocks testing positive for *Salmonella* Typhimurium and *Salmonella* Enteritidis by the end of 2011. During 2009 monitoring has shown the UK prevalence to be well within this target.

The EU's Food and Veterinary Office carried out a routine inspection mission to review UK implementation in accordance with the EC legislation, focusing on implementation in Northern Ireland and England, and reported favourably.

» www.ec.europa.eu/food/fvo/rep_details_en.cfm?rep_id=2377 »

In a 12-month EU-wide survey on the prevalence of *Campylobacter* in broiler chickens at slaughter and *Campylobacter* and *Salmonella* presence on broiler carcasses, published in 2009, the UK had a high prevalence of *Campylobacter*-contaminated broilers (75.3 per cent) and carcasses (86.3 per cent). These levels were similar to estimated levels in several other Member States with comparably large broiler industries.

However, the UK results of the *Salmonella* component of the survey were much more encouraging: the UK figures for *Salmonella* Typhimurium and *Salmonella* Enteritidis in broiler carcasses was 0 per cent – among the lowest of the Member States, whose average prevalence was 3.6 per cent.

Carried out in 2008, this was the first harmonised baseline survey of *Campylobacter* and *Salmonella* in broiler batches and carcasses in the EU. Its aim was to obtain comparable data for considering the need, feasibility and cost-benefit of Community-wide control measures.

Defra is currently working with the Food Standards Agency and industry to develop measures at the farm and slaughterhouse to reduce the incidence and spread of *Campylobacter*.

The European Food Safety Authority has analysed the results of the survey.

» www.efsa.europa.eu/en/scdocs/scdoc/1503.htm?WT.mcid=EFS AHL01&emt=1 »

Reptiles

In 2009 Defra and the Health Protection Agency worked to investigate and control a steady increase of human cases in England and Wales of *Salmonella* Typhimurium DT191a. This strain had not previously been identified in the UK. There were 226 reported cases, over a third of which occurred in children under five.

An epidemiological investigation showed that many of the infected individuals had pet snakes that were fed imported frozen rodents. Defra worked with the Veterinary Laboratories Agency, the Health Protection Agency and the Department of Health to revise import requirements for frozen rodents intended for pet food, including authorisation from Defra to import, which came into force in November 2009.

The Health Protection Agency and Defra produced joint hygiene guidance for reptile keepers (see www.hpa.org.uk/web/HPAweb&HPAwebStandard/HPAweb_C/1239264199921) and continue to monitor cases.

Research

The outputs from Defra research projects have already helped farmers to reduce and control *Salmonella* in the UK poultry sector and successfully meet the designated EU targets. Now new research is building on these successes with ongoing research projects on *Salmonella* control on pig and poultry farms.

Defra also continues to fund research into risk factors involved in the transmission of *Salmonella* in pig herds, with a view to a possible eventual vaccine.

In October 2009 Defra held a workshop with the Food Standards Agency and the Biotechnology and Biological Sciences Research Council to identify key research priorities to reduce levels of *Campylobacter* in the food chain. Researchers and industry representatives worked together to identify priorities and prepare a joint funders' research strategy, and the first joint call for research will be published in Summer 2010.

Antimicrobial resistance

The antimicrobial resistance policy aims to reduce the development and spread of resistant bacteria by raising awareness of the issue and encouraging good practice in administering antimicrobials.

MRSA

The first two cases of an apparently new strain of methicillin-resistant *Staphylococcus aureus* (MRSA) to be identified in animals in the United Kingdom – known as ST398 – were isolated during 2009, as a result of a pre-hospitalisation screening study by the Royal Veterinary College. One of the two horses had been brought into the UK from another EU Member State, while the other had never been outside the UK and had not received veterinary treatment in the preceding six months.

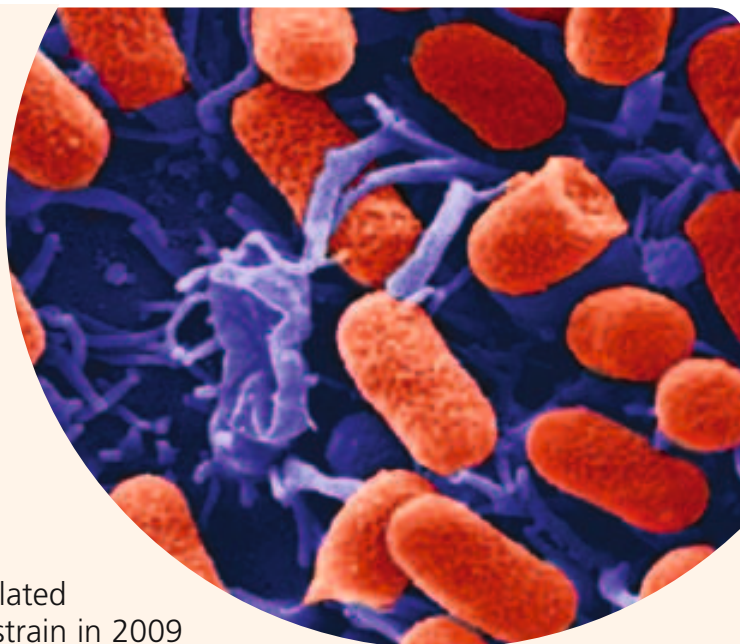
November 2009 saw publication of the results of the EU-wide baseline survey of MRSA in breeding pigs across Europe, which had been triggered by the discovery of the ST398 strain in pigs in several countries across the continent. Encouragingly, the results showed no indication of MRSA in any UK pig herd.

ESBLs

Following the first UK isolation from animals of a *Salmonella* with acquired resistance to extended spectrum beta-lactamases (ESBLs), in 2008, the Veterinary Laboratories Agency (VLA) established during 2009 that the resistant *E. coli* were also present both in the pigs and in the environment of the farm where the discovery had been made.

The VLA liaised with the farm's veterinary surgeon to reassess the management of other ongoing diseases affecting the herd, so as to minimise the use of antibiotics that may have selected for this particular plasmid on this farm.

A further significant development in 2009 was the VLA's isolation of ESBL-producing *E. coli* from a dairy cow, one of three on a farm that had suddenly died with acute mastitis. The udder of one of the three yielded profuse growth of ESBL *E. coli*, but no other pathogens likely to cause mastitis. It appeared that this cow had probably died due to endotoxic shock which had developed as a result of the mammary infection. This is one of the first cases investigated by the VLA where a resistant bacterium possessing an ESBL has caused clinical disease in animals.



E. coli – the VLA isolated an ESBL-producing strain in 2009

Other resistance issues

Defra continues to pursue its policy of responsible prescription and use of veterinary antibiotics, and sought to reinforce this message with the veterinary profession during the year. The Defra Antimicrobial Resistance Coordination group advised the British Veterinary Association on the latter's November 2009 poster about responsible use of antimicrobials, which was published to coincide with Antimicrobial Resistance Awareness Day across Europe. The group also strengthened its links with the Responsible Use of Medicines in Agriculture Alliance, while the Chief Veterinary Officer (UK) raised the issue of antimicrobial resistance with the Royal College of Veterinary Surgeons and the British Cattle Veterinary Association.

Research

Research on antimicrobial resistance is co-ordinated with the Veterinary Medicines Directorate, both in response to new antimicrobial resistance issues and in an effort to identify ways of minimising its occurrence.

Several ongoing projects are looking at the emerging issue of ESBL resistance, in particular CTX-M resistance genes. These are trying to understand the epidemiology of the genes and the plasmids that carry them, as well as investigating control methods.

Countering BSE

Cases of Bovine Spongiform Encephalopathy (BSE) fell in number from 37 in 2008 to 12 in 2009 – a drop of 68 per cent. Despite this decline, modelling carried out by the VLA during the year suggests that occasional cases will be detected for several years to come.

EU TSE Roadmap

On 1 January 2009 the age threshold for BSE testing of fallen cattle and cattle slaughtered for human consumption, born in the UK or in 14 other EU Member States, was raised to 48 months, in line with the European Commission's Transmissible Spongiform Encephalopathy (TSE) Roadmap. Slovenia was later added to the list. The Commission is expected to issue a new Roadmap in 2010.

» www.ec.europa.eu/food/food/biosafety/bse/roadmap_en.pdf »

**BSE cases fell in number from
37 to 12 in 2009 – a drop of 68%**

Research

Spend on BSE research continued to fall during the year, although the need to understand the origin of BSE cases born after the UK reinforced the ban on feeding meat and bone meal to farmed animals in 1996 (BARB cases) remains a priority.

BARB cases are being examined with respect to their molecular, pathological and genetic characteristics. A case control study, with emphasis on those cases born after controls across Europe were tightened in 2001, was funded in 2009 and will report in 2010. Its conclusions, however, will be limited by the lack of cases available for study and the difficulty farmers have in recalling information after many years.

Other research aims to provide information on the efficacy of controls to prevent the spread of classic and the newer forms of BSE. For example, research has begun into the efficacy of methods currently used for disposal of animal by-product in inactivating the atypical (H- and L-type) BSE infectious agents.

Risk assessments were commissioned in 2009 to identify any residual risk of BSE on research premises where BSE challenge experiments have been undertaken.

Changing responsibilities

As announced in 2008, Defra and the devolved administrations made changes to TSE activities in Great Britain resulting in significant savings to the taxpayer:

- From 1 January 2009 responsibility for the cost of BSE testing of cattle slaughtered for human consumption transferred to industry in Great Britain. Slaughterhouse operators were allowed to enter into commercial relationships with private testing laboratories approved by the Veterinary Laboratories Agency.
- On 1 January 2009 responsibility for administering the Scrapie Monitoring Scheme (see www.defra.gov.uk/foodfarm/animaltrade/eu/animals/sms.htm) transferred to the Scottish Agricultural College.
- On 12 January 2009 livestock producers in Great Britain assumed responsibility for the cost of collection and disposal of fallen cattle requiring BSE testing. New legislation required the submission of these carcasses to sampling sites approved by Animal Health.
- The voluntary Ram Genotyping Scheme formally closed on 31 March 2009.
- On 9 November 2009 the Department of Agriculture and Rural Development introduced similar arrangements for the collection and disposal of fallen cattle requiring BSE testing in Northern Ireland (see www.northernireland.gov.uk/news/news-dard/news-dard-october-2009/news-dard-271009-start-date-announced.htm).

Transitional financial support was made available for the collection and disposal of fallen cattle that required testing in the UK in 2009.

Monitoring Q fever

A significant outbreak of human cases of Q fever that continued in the south of the Netherlands during 2009 was linked to the high incidence of dairy goat farms in that region.

Defra is continuing to monitor the situation in the Netherlands. It has also scrutinised scanning surveillance returns in the UK, but so far there has been no significant change in the number of UK diagnoses being made by the Veterinary Laboratories Agency and the Scottish Agricultural College.

Defra implemented a research project to provide baseline data on the prevalence of Q fever in sheep and goats in Great Britain this year, using blood samples collected in 2008 primarily to demonstrate the UK's freedom from *Brucella melitensis*. Results will be available in early 2010.

Reporting on trends and sources

The 2008 Community Zoonoses Report was published in December 2009 (see www.efsa.europa.eu/en/scdocs/scdoc/1496.htm). This shows that *Campylobacter* still tops the list of zoonotic diseases in the EU, despite considerable variations between Member States.

The report also shows that while the number of cases of *Salmonella* infections in humans fell for the fifth year in a row, cases of listeriosis remained at a similar level to previous years.

The UK Zoonoses Report for 2008 was published in February 2010 (see www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/zoonoses/reports.htm) and includes information from surveys finishing or published in early 2009.

New regulations on horse passports

In response to revised European Regulations, new domestic horse passport Regulations were adopted in the UK during 2009. The aim of the revised arrangements was to strengthen the link between the horse and its passport by compulsory microchipping of all foals and older horses not previously identified.

Legislation came into force on 1 August 2009 in England, 1 July 2009 in Scotland, 1 October 2009 in Wales and 31 March 2010 in Northern Ireland.

» www.defra.gov.uk/foodfarm/farmanimal/movements/horses/index.htm »



The aim of horse passport legislation is to ensure that horses that have been treated with veterinary medicines not authorised for use in food-producing animals are not slaughtered for human consumption. Failure to comply with the Regulations could result in the UK losing key veterinary medicines or our horsemeat trade.

CHAPTER 3: PROTECTING AND PROMOTING THE WELFARE OF ANIMALS

Animal owners are responsible for the health and welfare of their animals, and need to understand and provide for their care. Both the Animal Welfare Act 2006 and the Animal Health and Welfare (Scotland) Act 2006 make owners and keepers responsible for ensuring that welfare needs are met.

The role of government is to establish standards of welfare on behalf of society and enforce those standards. Government interventions ensure that priority is given to these standards for the welfare of animals on-farm, during transport, at markets and at slaughter. Additionally, the Farm Animal Welfare Council, an independent advisory body, provides advice to Ministers in Great Britain on these issues.



Welfare on farms

Following advice from the Farm Animal Welfare Council, Defra prepared proposals to amend the Mutilations (Permitted Procedures) (England) Regulations 2007. This was to remove the ban on beak-trimming of day-old chicks intended for laying, and propose regular trimming using the infra-red technique only.

On Defra's behalf, ADAS continued to run a series of welfare awareness campaigns for farmers throughout the UK during the year, to promote good stockmanship and provide the latest advice on a range of welfare issues. These included campaigns on managing the dairy cow around calving, rearing more lambs, improving welfare in free-range egg production systems, preventing tail-biting in pig production and awareness of EU Broiler Directive workshops.

Defra carried out a 12-week consultation between January and April 2009 on new legislation to implement an EU Directive on broiler welfare, as well as a revised welfare code. The Northern Ireland consultation ended in June 2009. The Directive is the first piece of EU welfare legislation to look at the welfare outcome via slaughterhouse monitoring, as well as setting the conditions in which the birds are kept. The Welsh Assembly Government carried out a similar consultation between April and July 2009, and consulted on the cattle and sheep codes during the year.

Under the Animal Welfare Act 2006, Defra also launched a public consultation exercise on a code of practice for the welfare of gamebirds reared for sporting purposes.

Welfare in transit

Great Britain's administrations and Animal Health continued to work with local authorities, welfare organisations and the industry to ensure that legislation on the transport of animals was being enforced effectively. This included working with the devolved administrations to share information and ensure consistency of approach.

Although the European Commission has so far been unable to table a formal proposal to amend the EU legislation (Council Regulation 1/2005), particularly in relation to the rules governing long journeys, it is understood that it will undertake a review in 2010, with a formal proposal being produced later in 2010 or early in 2011.

Meetings involving UK experts in the welfare of equines and livestock began in late 2009 to determine what changes the UK wished to see in the EU legislation. The findings of these expert groups will be presented to a wider stakeholder group later in 2010.

Welfare at slaughter

EU Regulation 1099/2009 on the protection of animals at the time of killing was made on 24 September 2009. It protects the welfare of animals kept for food or products at the point of slaughter or killing in a slaughterhouse or on-farm. It also applies to killing for depopulation, including disease control. It will apply basic welfare standards across Europe, and will allow Member States to use national rules to maintain current welfare protection where this is above the minimum levels set in the Regulation. All administrations are working together on the implementation of the Regulation, and held a number of workshops in 2009 with industry and other stakeholders.

Trade in seal products

EU Regulation 1007/2009 banning trade in seal products was made on 16 September 2009. It will ban trade in products from seals and other pinnipeds (sealions and walruses), which includes imports and intra-Community trade, unless they:

- result from traditional hunts conducted by Inuit or other indigenous communities and contribute to their subsistence;
- are for personal use, or
- result from hunts regulated under national law with the sole purpose of the sustainable management of marine resources, and where the products are marketed on a non-profit basis.

Companion animals

Under the Animal Welfare Act 2006, Defra introduced Regulations to protect the welfare of racing greyhounds, and published codes of practice for the welfare of cats, dogs, equines and privately kept non-human primates. The codes provide owners and keepers of such animals with practical guidance on how to comply with the legislative provisions in the Act. A code on the welfare of pet rabbits was issued by the Welsh Assembly Government in 2009.

Defra also launched a public consultation exercise on the use of wild animals in travelling circuses, and has engaged with stakeholders to support ongoing work looking into welfare issues affecting the breeding of dogs. In Wales work started on a review of the breeding of dogs legislation, and is to report to the Welsh Minister in June 2010. Wales has continued to fund local authority special projects on companion animal welfare, and to support education initiatives and forums set up under the Companion Animal Welfare Enhancement Scheme.



Researching animal welfare

In the financial year 2009–10 Defra spent £2.9 million on research and development projects designed to inform and support effective policies on animal welfare. This included on-farm welfare and its assessment, slaughter (including emergency killing for disease control purposes) and welfare during transport. Work on companion animals included a study to identify risk factors for aggression in dogs.

Previous studies have shown the effect of early-life programming on an animal's response to stress. This is now being taken forward in a study designed to identify the important conditions or events experienced by pregnant farm animals that might have a negative effect on their offspring.

Findings from a study looking at the welfare of ducks housed in systems used in the UK have been adopted by one of the major commercial producers, and are being incorporated into the Duck Assurance Scheme standards for the whole industry.

The Farm Animal Welfare Council

The Farm Animal Welfare Council was very active during 2009, issuing a report on welfare at the slaughter or killing of white meat species, a report on the history and future of farm animal welfare in Great Britain and an opinion on the welfare of dairy cows.

The role of the Council was reviewed in 2009, concluding that: government needs independent, expert advice on farm animal welfare; the Council is the best organisation to provide this; and it represents exceptional value for money.

Work initiated during the year included a report on economics and farm animal welfare, and opinions on bone strength in laying hens and mutilations of growing pigs.

International animal welfare

On behalf of all the administrations, Defra contributed during the year to EU negotiations on welfare initiatives relating to banning trade in seal products, the use of animals in research, the use of labelling in promoting animal welfare, the possible development of an EU reference centre for animal welfare, and a workshop on the castration of pigs. It also opposed a request from some Member States for a delay in the ban on conventional cages in 2012.

Defra also worked with the EU and the World Organisation for Animal Health (OIE) to develop further a number of terrestrial code chapters on transport and slaughter, and introduce new chapters on stray dogs and the transport of fish. It commented on proposed new chapters on broilers and beef cattle, and worked to seek revisions of the killing section to include the successful development of containerised gassing systems for humane killing of poultry for disease control purposes (for example, in an outbreak of highly pathogenic avian influenza.) We responded to an OIE initiative on private standards for animal health and welfare by working with the EU Commission to agree an EU position.

The team shared their expertise of killing methods for disease control by contributing to the OIE European regional meeting in Istanbul.

Defra continued to work closely with parties and observers to the Council of Europe's Standing Committee on the Protection of Animals Kept for Farming Purposes, developing several new recommendations for farmed fish and rabbits, and a revision of the cattle recommendation.

As part of the EU policy on promoting animal welfare globally, Defra assisted in providing training in welfare science and legislation to the veterinary services and non-government organisations of ten Arab countries. Significant contributions were also made to the EU Better Training for Safer Food programme, on welfare during transport, for veterinarians in the EU and many third countries in Africa, Asia and South America.

CHAPTER 4: PROTECTING THE INTERESTS OF THE WIDER ECONOMY, ENVIRONMENT AND SOCIETY

Government intervenes in animal health and welfare where the market on its own cannot deliver some or all of its animal health and welfare strategic objectives.

Government carries out global monitoring of animal diseases, assessing the risks of their entering the country, and taking appropriate precautions. This is to protect the interests of the wider economy, environment and society.

Diseases such as foot and mouth disease are highly infectious, and can move rapidly through animal populations. In these cases government works with animal owners to establish measures to prevent, control and eradicate them.

Bovine TB continues to be a serious problem for the farming industry. Though largely regional – concentrated in the South West and West Midlands in England, in Wales and in Northern Ireland – bovine TB can be disruptive and economically damaging for farmers. It is also a zoonosis.

The government-funded National Scrapie Plan, including the Ram Genotyping Scheme and the Compulsory Scrapie Flocks Scheme, has had a positive impact on classical scrapie in sheep. Both classical scrapie and atypical scrapie continue to exist at very low levels.



Lung lesions typical of bovine TB infection

Fighting TB

Provisional end-of-year statistics for the year show a 9.6 per cent decrease in the number of new incidents (herd breakdowns) of bovine TB in Great Britain compared with 2008, with 79 per cent of these occurring in the West of England and Wales.

Taking into account the overall number of tuberculin skin tests performed in unrestricted herds during the year (57 853 – more than in 2008) this equates to total herd incidence of 7.6 per cent, compared to 8.8 per cent for the previous year. The herd incidence of breakdowns confirmed by post-mortem examination and culture in 2009 was 4.1 per cent (4.7 per cent in 2008). In Northern Ireland the incidence of bovine TB has remained relatively static, with an end-of-year herd incidence of 5.54 per cent.

» www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/stats/index.htm »

TB-free Scotland

In September 2009 Scotland became officially recognised as tuberculosis-free. To protect its new status, extended pre-movement testing arrangements were agreed by a working group of officials from all UK administrations.

» www.scotland.gov.uk/Topics/farmingrural/Agriculture/animal-welfare/Diseases/SpecificDisease/bTB/OTFStatus »

Eradication in Wales

In November 2009 the National Assembly for Wales approved the Tuberculosis Eradication (Wales) Order 2009, giving the Welsh Assembly Government powers to use culling and vaccination of badgers as part of its bovine TB Eradication Programme.

During the year the Minister for Rural Affairs also announced the establishment of an Intensive Action Pilot Area involving a coordinated badger cull and stricter cattle measures over an area of 288 square km in West Wales – just one strand of a comprehensive programme designed to eradicate TB from the country.

The Eradication Programme is overseen by a Programme Board, while three Regional Eradication Delivery Boards ensure that delivery of policy is specific to local conditions and is implemented effectively. (For example, in North Wales, where disease levels are fairly low, the region's Eradication Delivery Board is piloting a biosecurity project.)

Following recommendations by the Programme Board, the Minister took decisions on a number of issues including badger vaccination policy and the cattle measures to be implemented within the Pilot Area.

» www.wales.gov.uk/bovinetb »

The TB Eradication Group for England

In October 2009 the TB Eradication Group for England presented its progress report to stakeholders. This outlined the Group's progress in developing a bovine TB Eradication Programme for England, the risk-based approach it is taking in identifying and assessing new policies, and changes following recommendations made to the Secretary of State.

» www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/documents/tb-erad091008.pdf »

TB in other species

One hundred and twenty-three individual camelid submissions were made to the Veterinary Laboratories Agency for examination and culture in 2009, of which 68 alpacas were diagnosed with *M. bovis* infection, arising from 12 different holdings. None of the llama submissions was confirmed following examination and culture.

During 2009 the profile of TB in camelids rose significantly. Where TB is suspected in these animals Animal Health will restrict herds' movements, and will work with the livestock owners to agree testing, slaughter and compensation arrangements. Defra also recognises the need to review and enhance the existing TB control framework for camelids, and will be doing this in partnership with industry bodies. In response to industry concerns, a TB information leaflet has been produced for camelid owners, including advice on TB risk reduction measures.

In 2009, *M. bovis* was identified in 27 of 104 feline tissue submissions referred to the Veterinary Laboratories Agency following suspicion of mycobacterial disease.

Of the 116 domestic pigs submitted for TB examination 23 were diagnosed as infected with *M. bovis*, from nine different pig units. Five sheep out of the nine submissions were diagnosed with *M. bovis*, all from different flocks.

M. bovis was confirmed in 19 of 52 deer carcasses notified either to Animal Health or to the Veterinary Laboratories Agency. Eighteen cases originated from wild deer populations, and one case from a farmed deer.

Research

Although scientific knowledge of bovine TB has increased significantly in recent years, much uncertainty remains. Approximately £8.9 million was spent in 2009–10 on wide-ranging research including:

- improved diagnostics, using developing technology such as high-throughput genome sequencing and polymerase chain reaction;
- further analysis of the Randomised Badger Culling Trial data;
- detailed longitudinal epidemiological studies;
- further work to understand the genetics of resistance;
- work aimed at a better understanding of changes in farm management practices following a herd breakdown;
- research to develop tools to model disease control strategies and support cost benefit analyses.

» www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/documents/current-research-projects.pdf »

The Badger Vaccine Deployment Project

During 2009 Defra held meetings with farmers, local veterinary practices and regional representatives in the proposed areas of the Badger Vaccine Deployment Project, providing opportunities for farmers to find out more about the project and register their interest in participating. There was also progress on surveying land for badger setts, while contractors responded positively to the invitation to tender for trapping and vaccinating. Progress will be subject to evaluation of the contractors' bids, and to Ministerial agreement.



Countering exotic diseases

Exotic diseases are those not normally present in the UK livestock population, such as foot and mouth disease, bluetongue, avian influenza and rabies. The exotic disease programme developed by Defra and the other administrations assesses and responds to disease risks, develops and maintains control strategies for diseases (prioritised by risk and impact) and builds capacity to deal with outbreaks.

Bluetongue

The first case of bluetongue (BTV8) in Great Britain was reported in September 2007. In the run up to and during the outbreak Defra has worked with a core group of industry stakeholders to develop control approaches. A voluntary bluetongue vaccination campaign has been very effective, and vaccine is now supplied through commercial markets (although Defra and the Welsh Assembly Government stimulated the market by underwriting 28 million doses of vaccine in 2008.)

The last case of BTV8 in Great Britain was found in an imported animal in November 2008, and no new cases were detected in 2009. An extensive surveillance programme was carried out in Winter 2009.

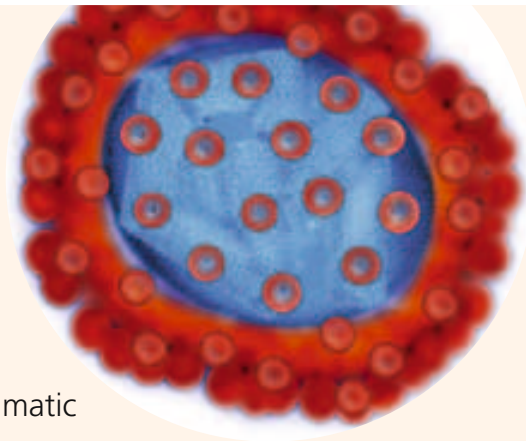
At the end of 2009 the whole of Great Britain remained a protection zone for BTV8. Various bluetongue strains were still circulating in the EU, although the number of cases had decreased significantly. Movements out of the zone are controlled, and vaccination can take place within the zone, which also includes most Northern European countries.



Bluetongue vector – the *Culicoides* midge, in close-up

Avian influenza

Avian influenza (AI) can be high pathogenic (HPAI) or low pathogenic (LPAI). The last outbreak of HPAI was in June 2008, but the UK remains at constant low risk of introduction of AI via wild birds. This situation is monitored regularly, and there are detailed EU and UK measures in place to deal with outbreaks. Work is in progress with a small group of avian business and conservation interests to review the UK's ability to deal with such outbreaks.



Avian influenza – a diagrammatic representation of the virus

Classical and African swine fever

Defra continues to work closely with industry and delivery agents to improve readiness for an outbreak of swine fever. Work is underway to improve the existing domestic legislation for control of the disease.

Pandemic (H1N1) 2009 influenza (swine 'flu)

This disease in pigs is principally caused by Type A influenza viruses. Influenza is present in pigs in all pig-producing countries, including the UK. Type A strains can also infect other species, including humans, although the strains of virus involved are usually different.

The Food Standards Agency has advised that influenza infection in pigs does not pose a food safety risk to consumers. This applies to all influenza viruses, including pandemic (H1N1) 2009.

A number of cases of pandemic (H1N1) 2009 have been identified in pigs in Great Britain and Northern Ireland, but as in humans the infection is usually mild and self-limiting. A voluntary code of practice has been agreed with the industry on how to protect herds from infection, and how to mitigate impact and minimise the risk of an infection spreading.

The Food Standards Agency has advised that influenza infection in pigs does not pose a food safety risk to consumers

Equine diseases

The likelihood of African horse sickness (AHS) being introduced to the UK through legal trade is currently assessed as very low, but infected equines or vectors could possibly be introduced illegally, or inadvertently by transport, vehicles, commodities such as vegetables and plants or other means. On the basis of official reports, the disease is known to be endemic in sub-Saharan Africa. The disease has previously spread as far north as Morocco and the Middle East.

The outbreak of midge-borne bluetongue disease in farm animals in recent years has highlighted the unexpected and significantly detrimental impact that insect vector-borne diseases can have on the equine sector and the rural economy.

During 2009–10 new legislation and an associated control strategy on AHS was developed, and a public consultation was undertaken (see panel.)

Working on AHS

The Government/Horse Industry Working Group on African Horse Sickness, established in 2008 with representatives of the equine industry, academia, research organisations and government, worked on a variety of issues during 2009, including a disease awareness campaign, an incursion risk assessment and an industry impact risk assessment.

The year's most significant achievements (indeed the reason for the Group's formation) were the draft legislation to implement Council Directive 92/35/EEC on the control of AHS and the draft AHS control strategy – both put out to consultation (England and Wales) in December 2009. Implementation of Directive 92/35/EEC will have a positive impact on Defra's ability to act swiftly and efficiently in the case of an outbreak of the disease.

Also during 2009, Defra established an Equine Expert Advisory Group to provide guidance in the event of an outbreak of AHS. The Group will also provide technical advice during development of policy.

Pet travel scheme

The derogation from EU legislation under which the UK carries out a slightly different control regime on pet travel has now been extended until the end of December 2011. Defra will continue to assess the disease risks from rabies, ticks and tapeworm.

The derogation for the UK's control regime on pet travel has been extended

Research

Much of Defra's research effort is designed to maintain its expertise and infrastructure, so enabling it to remain vigilant and responsive to disease threats. With more emphasis in 2009 on collaborative research, Defra supported research into:

- vector-borne diseases, jointly with other EU Member States (www.emida-era.net/);
- a joint initiative with the Research Councils looking at the transmission of H1N1 influenza and how its spread in pigs and humans may be prevented or slowed;
- new research to develop a vaccine for AHS, in partnership with industry.

Making implementing EID easier

New European legislation on electronic identification (EID) and individual recording for sheep and goats was implemented on 31 December 2009. Council Regulation 21/2004 replaced the system of conventional double tags and batch recording and reporting, with the aim of improving the effectiveness of identification and tracing systems in the event of a disease outbreak.

The UK sheep industry was concerned about the new rules because of the disproportionate cost of implementing EID compared to its potential benefits. There were also significant concerns about the technical ability of the reading equipment to operate effectively in the UK's high-volume market situations.

Defra and the devolved administrations worked closely with industry to successfully negotiate at EU level a number of changes of significant benefit to the UK sheep industry. These included:

- a two-year postponement, to 31 December 2009, of EID's introduction;
- a further postponement, to 2011, of the introduction of individual movement reporting;
- an agreement that non-electronically identified sheep (those born before 31 December 2009) moving to slaughter won't have to be recorded individually;
- a derogation from the need to electronically identify animals intended for slaughter within 12 months of age, and
- a provision to permit the individual recording of animals not intended for slaughter within 12 months of age at an approved Central Point Recording Centre (or Critical Control Point in Scotland), instead of as they move off the holding. This will reduce the number of keepers who need to purchase reading equipment.

The combination of the total package of concessions secured could reduce UK implementation costs by between £28 million and £65 million by 2015. After this time a further saving of between £7 million and £18 million could be made, depending on how the industry uses its concessions.

Defra and the devolved administrations continue to work closely with stakeholders and partner organisations, and will continue to press the Commission to review the new rules to ensure they meet their disease control objectives in the most cost-effective way.

Controlling Scrapie

In 2009 scientists announced that the prevalence of classical scrapie had declined by around 40 per cent from 2003 to 2007.

(www.iah.bbsrc.ac.uk/press_release/2009/2009_7.htm). This was thought to be due to the positive effects of the Government-funded National Scrapie Plan, including the voluntary Ram Genotyping Scheme and the Compulsory Scrapie Flocks Scheme. There were 17 cases of classical scrapie and 25 cases of atypical scrapie detected in the UK in 2009.



The EU TSE roadmap

New EU legislation to address the risk of transmissible spongiform encephalopathy (TSE) infectivity in milk from sheep or goats infected with these diseases came into force in February 2009. During the year Defra and the Scottish Government consulted on legislation to administer the new measures. The Welsh Assembly Government and Northern Ireland's Department of Agriculture and Rural Development are expected to consult in 2010.

» www.ec.europa.eu/food/food/biosafety/bse/roadmap_en.pdf »

A legal case generated by a French challenge to more proportionate EU controls on classical scrapie remained unresolved during the year, while French unilateral trade controls on sheep and goat milk from classical scrapie-affected flocks and herds resulted in a further legal case.

Research

Defra expenditure on TSE research is reducing, with the residual programme focusing on scientific uncertainties surrounding the nature and significance of scrapie agents in sheep and goats. Several long-running investigations into classical scrapie will report during the next few years, providing information about its nature and biological significance, particularly in sheep that are relatively resistant. A joint effort with the Food Standards Agency continues to explore the transmissibility of newer forms of scrapie and BSE in transgenic mice as surrogate models for humans, sheep and cattle.

A large study of two goat herds culled in 2008 provided information on the nature and prevalence of classical scrapie in goats. One animal was reported to carry a non-standard scrapie agent, and this is being investigated further in the UK and in Europe.

After careful consideration and review by independent experts, in 2009 Defra began withdrawing support for maintenance of sheep of defined scrapie status. The size of the New Zealand-derived flock which is free of classical scrapie has been reduced in line with demand. Support for a flock with a high level of endemic scrapie from mixed sources has been withdrawn, and work has started to investigate the residual contamination of pastureland.

Addressing the issue of EBL

After routine serological screening in 2009 revealed a number of calves testing positive for enzootic bovine leukosis (EBL) antibodies, having been fed colostrum (first milk) substitute imported from Canada, Defra worked closely with the European Commission and other agencies to address the issue.

Defra effectively raised awareness of the need for movement restrictions and disease investigations that are required following the use of products containing EBL antibodies, using information sources such as the *Veterinary Record*, *Farmers Weekly* and the Defra website (www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/ebl/colostrum.htm). This information was particularly relevant to cattle herds producing calves for artificial insemination centres or for export, and those producing calves that could be tested for EBL for any other reason.

The European Commission has since advised that Regulation (EC) No. 1774/2002 prohibits the import from third countries of colostrum not intended for human consumption.

Defra's surveillance programme for EBL includes testing bulk milk samples collected from a proportion of dairy herds every year and examining suspect tumours in cattle.

Animal By-Products Regulations revised

In April 2009 the European Parliament and Council adopted a revised Animal By-Products Regulation 1069/2009, published in October 2009 to come into effect from March 2011 (see <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:300:0001:0033:EN:PDF>).

The revised Regulation largely meets UK aims for a deregulatory approach, with a net reduction in controls on use and disposal of animal by-products to make them more proportionate to risk. In the latter half of 2009 and into 2010 more work was begun on negotiating detailed EU implementing rules for the revised Regulation, and on revising domestic legislation to provide enforcement powers for the revised Regulation.

Key issues for the UK are ensuring flexibility in arrangements for containment of fallen stock on farm pending disposal, provisions for use of tallow as a fuel and implementing derogations (for example to cover disposal of small quantities of animal by-products) and widening the possibility of using certain by-products for feed and fertiliser.

Fallen stock

The National Fallen Stock Scheme, begun in November 2004, is run by the National Fallen Stock Company, which was set up jointly by Government and industry to assist farmers with collection and disposal of fallen stock.

In October 2009 the Government and the National Fallen Stock Company successfully co-operated in transferring ownership of the company to the private sector as a Community Interest Company – a limited company created to conduct business for community benefit and not purely for private advantage (in this case the company is run in the interests of farmers who are members of the Scheme) – see also the National Fallen Stock Company annual report at www.nfsco.co.uk/images/stories/pdf/2009_nfsco_Annual_Report.pdf.

The Government and the National Fallen Stock Company successfully cooperated in transferring ownership of the company to the private sector

Routine government support for the Scheme ceased in November 2008. But during 2009 arrangements were made for farmers to receive £2 million in transitional support through the Scheme, to assist with the cost of collection and disposal of adult bovine fallen stock requiring BSE testing. At the request of the company the Government agreed to extend this period to March 2010, to smooth out the period over which the payments were made to farmers.

CHAPTER 5: PROMOTING AND SAFEGUARDING INTERNATIONAL TRADE

The presence of animal disease, nationally or internationally, can have severe repercussions for global trade in live animals and animal products.

The outbreak or continuing presence in a country of a high-pathogenicity virus, such as foot and mouth disease, can have a significant impact on the risk management measures applied to live animals and products imported from that country.



Imports

The continuing work of Defra's International Disease Monitoring Unit during 2009 helped the UK Border Agency (UKBA) – responsible for anti-smuggling controls on imports of animal products at the UK border – to deliver a flexible, risk-based enforcement strategy.

New personal import rules

New rules covering personal imports into the EU of products of animal origin came into force on 1 May 2009. There was no change to the ban on imports of meat and dairy products from most countries outside the EU, but there were increases in the personal allowances of low-risk products of animal origin, such as fish, honey and eggs.

Publicity campaigns for travellers

Defra, UKBA and the Food Standards Agency continued to work together to help raise awareness of the rules on personal imports.

October saw a national re-launch of the 'Don't bring me back!' campaign to increase awareness of food products that cannot be brought into the UK, and to push the 'buy in the UK' message. This received excellent coverage on BBC Breakfast, and more than double the overall expected print and online coverage, including *Travel Weekly*, the *Sunday Times*, the *Daily Mirror*, *TNT* magazine, the *Times* online and the *Independent* online.

A national re-launch of the 'Don't bring me back!' campaign received excellent coverage

In November the personal imports campaign aimed at black and minority ethnic (BME) communities was relaunched. This involved media interviews with the Minister, an UKBA officer and African and Chinese community ambassadors, and resulted in widespread print, online and broadcast coverage. There were also posters placed in ports and airports, distribution of leaflets and outreach activity at key locations such as community supermarkets and places of worship. Highlights of the campaign included:

- a Defra-sponsored African restaurant and retail directory in *The Trumpet* and a Chinese guide to restaurants in the UK *Chinese Times*. Calendars for both the African and Chinese communities were also created and distributed via outreach activity, receiving very positive feedback;
- broadcast of the Defra-led TV filler 'Don't bring me back!', which has been transmitted over 50,000 times since August 2008. As well as Channel 5 it has aired on 41 channels including BBC1, all the terrestrial ITV channels, S4C and many BME channels.

In December 2009 the personal imports rules were included in a range of UKBA messages displayed on internet desks, LCD screens and screensavers at ports and airports, and incorporated into a new UKBA booklet, *Playing by the rules*, issued to all successful UK visa applicants.

Exports

International negotiations

Defra continued to collaborate internationally to facilitate and simplify trade with third countries, with help from other government departments – principally the Food Standards Agency and the Foreign & Commonwealth Office. In the main, this involved supporting initiatives, led by the Consumer Protection and Trade Directorates-General of the European Commission, to establish trade and cooperation partnerships with third countries, especially the USA, Canada, New Zealand and Australia.

Highlights of the year included equivalence discussions on in vivo-derived bovine embryos (Canada), dairy products (Canada) and live bivalve molluscs (Canada and USA). Defra also played an active role in the sanitary and phytosanitary market access initiatives of the European Commission, attending the working group and placing UK interests on the agenda.

Global Animal Health's team continued to deliver World Organisation for Animal Health business, and input into specific working groups on highly pathogenic avian influenza and pandemic influenza.

Accessing markets

During 2009 Defra continued to work in close partnership with stakeholders through the Export Certification User Groups on poultry and by-products and the United Kingdom Export Certification Partnership on livestock and livestock products, helping to prioritise resources and make effective use of budgets. These groups have successfully identified priority markets and secured export certification for new and pre-existing third-country markets.

Defra also worked collaboratively with industry representatives and delivery partners to identify critical markets and devise strategies to overcome trading barriers caused by third countries' import conditions, including approval and pre-listing of animal processing facilities for export. Work will continue into 2010 to address market access issues to open trade with key countries such as China, India and the Russian Federation.

PART 3: THE ANIMAL HEALTH AND WELFARE STRATEGY IN ACTION

This Part contains examples of projects and other practical activities carried out across Great Britain and Northern Ireland by Defra, the devolved administrations, delivery partners, the veterinary profession, industry and other stakeholders in 2009. They have been selected to illustrate the wide range of practical steps being taken each day to achieve the desired outcomes of the UK's Animal Health and Welfare Strategies.



Working in partnership

Joining forces to improve disease detection

Animal Health and the Veterinary Laboratories Agency joined forces to investigate cross-infection between poultry smallholdings, and so improve early detection of diseases in general.

Following five reports of suspected disease on poultry smallholdings within days, in September 2009, Animal Health and the Veterinary Laboratories Agency realised they had an opportunity not just to learn more about smallholdings' contact networks but also to improve their mutual engagement.

A joint project revealed that a complex 'backyard' poultry network was providing considerable potential for dissemination of avian diseases. The fact that many holdings were unknown to the authorities was also delaying the implementation of control measures.

The work yielded many lessons that will be used to improve engagement between the agencies. These include better triage processes in suspect notifiable disease cases, more regular sharing of expertise, wider data capture at initial investigation of cases and agreed mechanisms for transferring responsibility during a case.

Better-defined processes will also enable the Veterinary Laboratories Agency to provide follow-up and diagnostic support for private practitioners after negated notifiable disease case investigations.

Sharing resources and expertise in export market access

Defra worked successfully with UK poultry and livestock export stakeholders in 2009, opening and reopening key overseas markets while maintaining the safety and quality of UK exports.

Always keen to maximise resources and expertise, Defra worked closely during the year with the United Kingdom Expert Certification Partnership (UKECP) on livestock, and with the Export Certification User Group (ECUG) on poultry. Successes include the lifting of import conditions regarding:

- foot and mouth disease (Ukraine and the United Arab Emirates);
- H1N1 swine 'flu (Russia and Ukraine);
- highly pathogenic avian influenza (Korea).

In this first year of the UKECP project 64 new and revised livestock-related export health certificates were agreed, helping to increase UK export earnings by about £20 million.

Numerous successes were achieved through the poultry ECUG forum, including securing new trading opportunities such as exporting breeding poultry to Kyrgyzstan. Many poultry-related export health certificates were revised to include exports from Northern Ireland and to remove excessive assurances. New and revised certificates were agreed with countries such as Brazil, Chile, Turkey, the Russian Federation and Australia.

» www.defra.gov.uk/foodfarm/animaltrade/noneu/ecug.htm »

» www.ukecp.com/cms/ »

Promoting the benefits of animal health and welfare: prevention is better than cure

Mitigating disease risk through effective surveillance

Effective scanning surveillance by the Veterinary Laboratories Agency and the Scottish Agricultural College led to early detection of a new disease affecting calves.

Cases of bovine neonatal pancytopenia (BNP), or 'bleeding calf syndrome', began to be detected in Scotland, and subsequently in England and Wales, during 2009. Affecting very young calves, the disease produces clinical signs including bleeding from apparently intact skin, and is fatal in most cases.

This early detection gave rise to an internationally agreed definition of the condition which formed the basis of a profile in the new Disease Briefing, Decision Support, Ranking and Risk Assessment Database (D2R2) – a risk comparison platform developed in June 2009 under the Great Britain Veterinary Surveillance Strategy. This development in turn allowed the dissemination of consistent information about the disease.

The Veterinary Risk Group, a new cross-directorate and administration disease monitoring and ranking group reporting directly to the four UK CVOs, was active in assessing new evidence during the year, while Defra worked closely with other bodies to assess the possible impact of this disease on any of the four reasons for government intervention.

Collection of evidence on BNP continues. Its main impact, to date, has been limited to the welfare and productivity of generally small numbers of animals on affected farms. There is no evidence that BNP is of public health importance, and there are no trade restrictions associated with it.

» www.defra.gov.uk/vla/diseases/dis_bcs.htm »



Using a compartment scheme to protect trade

Great Britain has begun certification of avian influenza-free and Newcastle disease-free breeding poultry compartments, so that international trade can carry on even during an outbreak.

The UK has introduced a poultry compartment model in Great Britain that incorporates both the World Organisation for Animal Health guidelines and EU Regulation (EC) 616/2009, making the UK the first EU Member State to introduce such a scheme.

The scheme is open to any poultry breeding company with an administrative headquarters in Great Britain. All the premises included in the compartment must be located in Great Britain, and must be under the full management control of the company.

In October 2009 Global Animal Health sent letters telling 12 third countries about the new scheme and asking for feedback in principle on compartment status. Replies from Australia, New Zealand and the Republic of South Africa were very encouraging.

» www.defra.gov.uk/foodfarm/animaltrade/compartment/index.htm »

Combating disease through vaccination

Effective vaccination of herds and flocks in Great Britain provided a method to protect animals from bluetongue during 2008 and 2009.

Following the 2007 outbreak of bluetongue in England, an emergency vaccination plan was developed and a bluetongue Protection Zone rolled out across England and Wales to enable voluntary vaccination of flocks and herds.

To speed availability, Defra underwrote supply of 28 million doses of vaccine for use in England, while the Welsh Assembly Government underwrote 7.5 million for Wales. Roll-out to priority areas began on 1 April 2008, with the entire 35.5 million doses being distributed across both countries in just six months.

Scotland opted for compulsory vaccination, at its industry's request, becoming part of the Protection Zone on 3 November 2008 and so making Britain one confluent zone from that date.

Government, industry and the veterinary profession encouraged vaccination by means of joint campaigns. They also urged importers to check risks and disease status when importing livestock from any infected area. Government went still further in May 2009 by discounting the remaining doses of unsold vaccine by 50 per cent.

The Bluetongue Core Group of industry and veterinary stakeholders in England played a crucial role in getting wider industry backing, leading stakeholder meetings and driving the industry-led 'JAB' campaign encouraging vaccination.

Ensuring a clearer understanding of costs and benefits

Government and industry working together to improve animal health

Effective regulation and post-movement testing led to Scotland gaining Officially Tuberculosis-Free status in September 2009.

Developing systems for reducing the incidence of new bovine TB breakdowns without disrupting traditional trade patterns was achieved by extensive discussions between the Scottish Government, other departments and industry stakeholders across Great Britain.

Once developed, responsibility for implementing the systems was taken mainly by industry – farmers, their suppliers and auctioneers. Government retained the role of regulating movement and testing, providing advice and carrying out enforcement action.

Industry was also fully engaged in the cost benefit analysis. Although it was clear that the new controls would have financial consequences, stakeholders accepted these as justified by the ultimate long-term benefit.

Achieving Officially Tuberculosis-Free status has enhanced Scotland's reputation as a high health status producer. The Scottish Government is now seeking to realise further benefits by reducing the cost of controls through risk-based surveillance testing and other refinements.

» www.scotland.gov.uk/Topics/farmingrural/Agriculture/animal-welfare/Diseases/SpecificDisease/bTB/OTFStatus »



Understanding and accepting roles and responsibilities

Public and private sectors working in partnership to beat disease

Thanks to high levels of commitment by livestock industry stakeholders, every cattle herd in Wales was tested for TB between October 2008 and December 2009.

TB Health Check Wales was part of the Wales TB Eradication Programme, involving an additional one-off test in order to ascertain the extent of infection and allow for the removal of diseased animals.

Nearly 4 000 additional cattle herds were tested over the 15-month period. Crucially, the initiative showed up the continuing spread of the disease, uncovering 62 new cases in north Wales alone – in areas thought to be relatively disease-free.

Equally important, TB Health Check Wales demonstrated the very significant commitment of farmers and veterinary practitioners to working alongside Animal Health and the Welsh Assembly Government to undertake a major programme of work.

» www.wales.gov.uk/bovinetb »

Delivering and enforcing standards

Developing the capability to enforce compliance

Animal Health has been developing its capability this year to deliver affordable, risk-based animal health and welfare compliance and enforcement.

A significant development during 2009 was the appointment, in accordance with the Regulator's Code and Hampton Principles, of Animal Health's first Head of Regulatory Affairs. This new post will help the organisation to work together with its enforcement partners to seek and develop a more complete range of sanctions for legislative non-compliance.

Throughout the year Animal Health provided governance for investigations which involved multiple authorities or agencies, or which stretched local authority resources because of wide geographical span. It also trained its 500 professional and technical experts to support investigations as expert witnesses as well as witnesses of fact.

Collaboration with the Department of Agriculture and Rural Development in Northern Ireland also helped Animal Health to learn about other enforcement models in use. Discussions included subjects such as methods of achieving compliance at least cost, the effectiveness of verbal and written warnings and the provision of accredited training for staff.

ANNEXES



ANNEX A: SUPPORTING TABLES

Animal welfare

On-farm

In 2009 Animal Health carried out 9 963 welfare inspections at 3 788 visits (2.6 inspections per visit) on farms to check that legislation and welfare codes were followed. All complaints and allegations of poor welfare on specific farms were treated as a matter of urgency. The level of compliance with animal welfare legislation for random inspections was 97%. However, the majority of the inspections were risk-based, for example in response to complaints or on farms targeted for inspection using a risk model, and the level of compliance for these visits was much lower, at 77%. This demonstrates the importance of responding to complaints and using targeted information to plan the visit programme.

Numbers at the end of each row represent the total number of assessments made.

- = Full compliance with legislation and code
- = Compliance with legislation
- = Non-compliance with legislation but no unnecessary pain, suffering or distress identified
- = Unnecessary pain or unnecessary distress

Table 1: Assessments of the welfare of animals on-farm in Great Britain during complaint, targeted, cross-compliance targeted and cross-compliance scored risk visits – enterprise (2009)

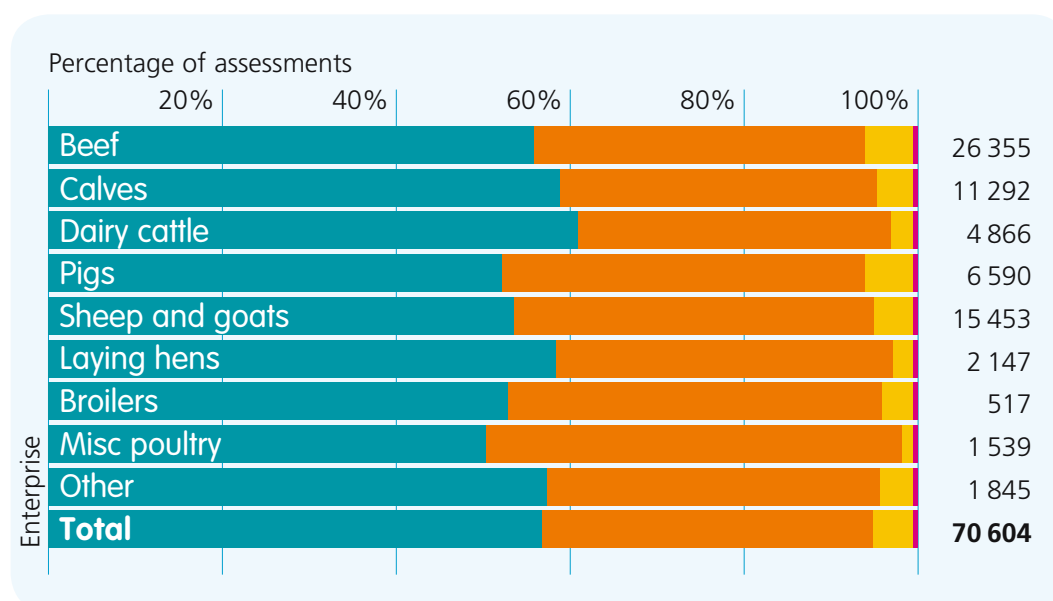


Table 2: Assessments of the welfare of animals on-farm in Great Britain during programme, elective and cross-compliance random visits – enterprise (2009)

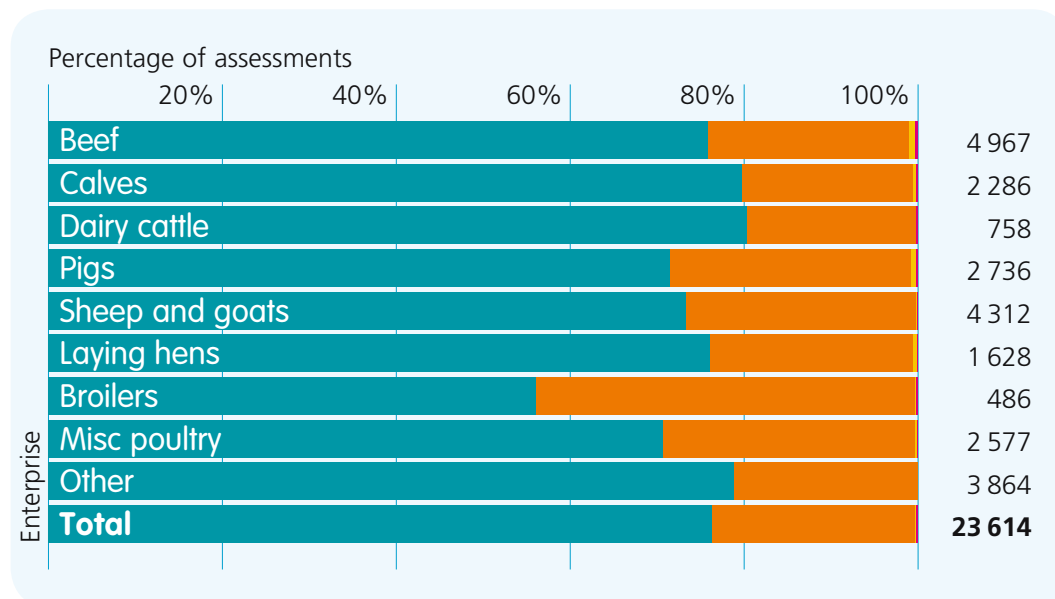


Table 3: Assessments of the welfare of animals on-farm in Great Britain during complaint, targeted, cross-compliance targeted and cross-compliance scored risk visits – criteria (2009)

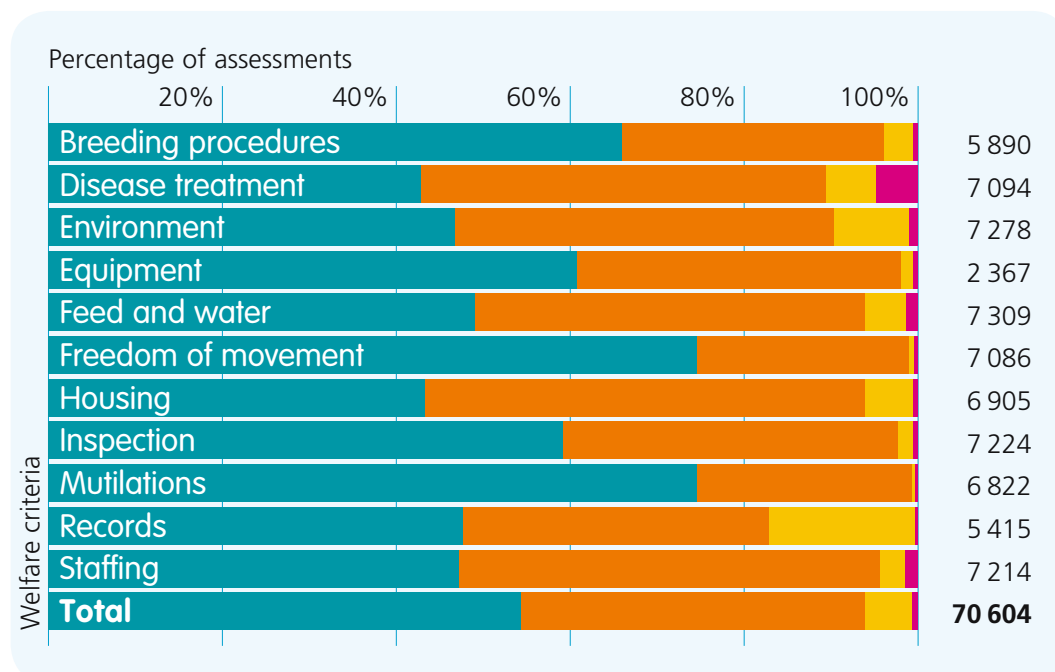
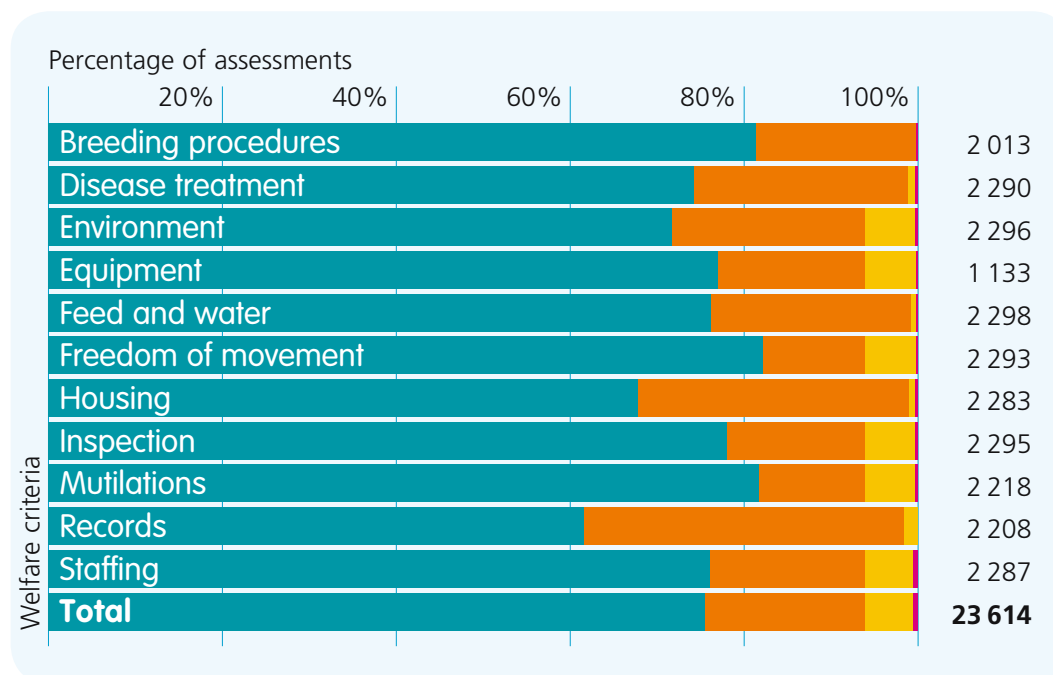


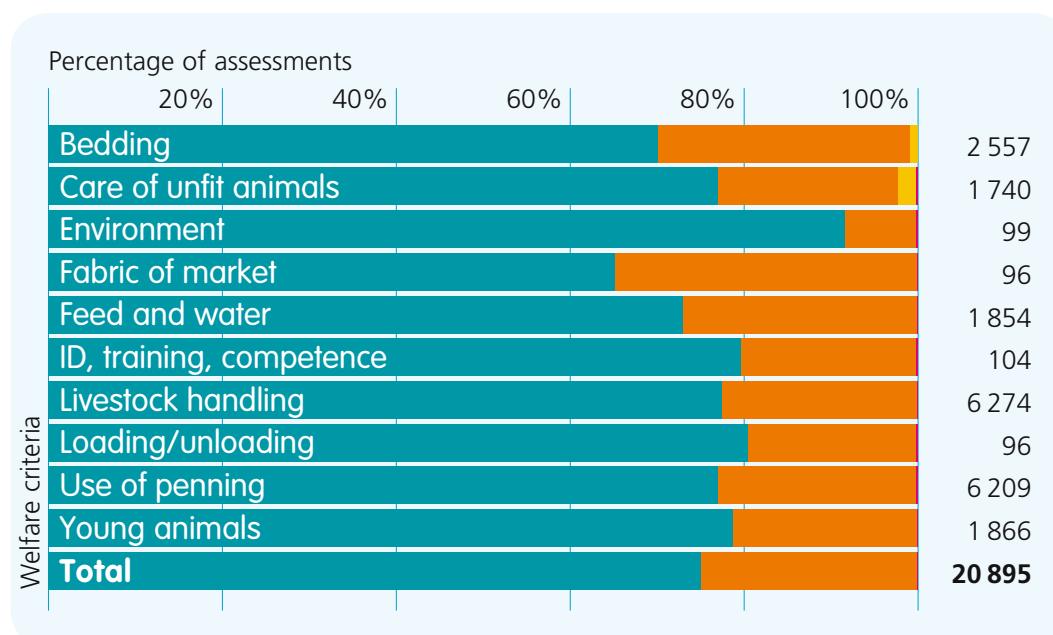
Table 4: Assessments of the welfare of animals on-farm in Great Britain during programme, elective and cross-compliance random visits – criteria (2009)



Markets

In 2009 Animal Health carried out 6 390 welfare inspections at 2 621 visits (2.4 inspections per visit) at markets. Full compliance with animal welfare legislation was recorded during 99% of inspections.

Table 5: Assessments of the welfare of animals at markets in Great Britain (2009)



Research funding

Table 6: Relative spend on different areas of animal health research (2009–10)

The chart depicts how the £32.5 million spent on animal health research in 2009–10 was divided between the main research portfolios. Bovine TB remains an area of importance, along with statutory and exotic diseases such as animal influenzas, foot and mouth disease and vector-borne diseases like bluetongue. The money spent on research into transmissible spongiform encephalopathies (BSE and scrapie) is approximately half that in 2004–05, and continues to decline.

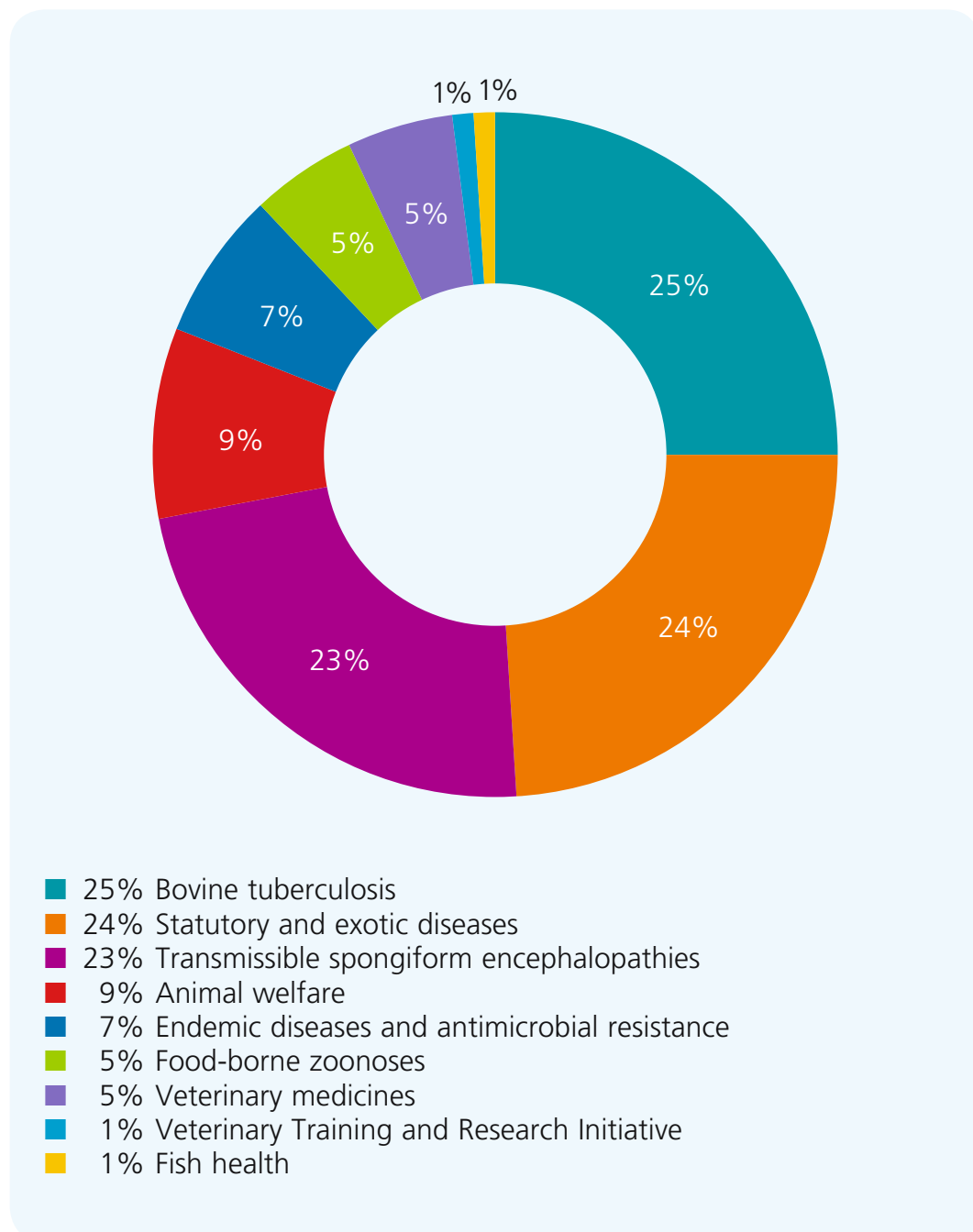


Table 7: Funding levels for research programmes (2009–10)

Defra funding of veterinary research to provide evidence for animal health and welfare policies.

Veterinary science programme	Research subject	Allocation (£'000s)
Bovine TB		8 049
Statutory and exotic diseases	Foot and mouth disease	3 027
	Swine fevers	645
	Rabies (and related viruses)	640
	Brucellosis	340
	Influenza and Newcastle disease	526
	New and emerging diseases	657
	Bluetongue (and related viruses)	780
	Other exotic diseases and biosecurity	1 041
Veterinary Training and Research Initiative		464
Food-borne zoonoses	Salmonellosis	885
	Campylobacteriosis	510
	Other food-borne zoonoses	386
Endemic diseases and antimicrobial resistance	Bovine mastitis	83
	Non-statutory viral disease	652
	Non-statutory parasitic disease	389
	Antimicrobial resistance	689
	Others	238
TSEs	Sheep TSEs	4 716
	Diagnostics	1 460
	BSE and animal by-products	1 513
Veterinary medicines	Veterinary medicines	1 600
Animal welfare	On-farm	1 601
	Slaughter	339
	Transport	618
	Others	342
Fish health		300
Total		32 490

Bovine TB

Table 8: Headline bovine TB statistics for Great Britain in 2009, compared with equivalent figures for 2008¹

	2008	2009	Change 08–09
Registered cattle herds (year-end)	86 192	84 515	-1.95%
Total cattle herds tested ²	53 822	57 853	7.49%
Tests on unrestricted herds (including pre-movement tests) ³	56 581 (74 540)	59 956 (95 959)	5.96% (28.73%)
New TB herd incidents (breakdowns)	4 986	4 574	-8.26%
Herd incidence of new TB breakdowns (including pre-movement tests)	8.40% (6.70%)	7.60% (4.80%)	-9.52% (-23.36%)
New confirmed TB herd incidents ⁴	2 633	2 468	-6.27%
Herd incidence of confirmed new TB breakdowns (including pre-movement tests)	4.70% (3.50%)	4.10% (2.60%)	-12.77% (-25.71%)
Total cattle tested with the tuberculin skin test ⁵	6.31m	6.94m	9.98%
Total cattle tested with the gamma interferon blood test ⁶	28 238	30 624	8.45%
Total test reactors identified (of which were gamma interferon reactors)	37 075 (4 181)	34 765 (3 261)	-6.23% (-22.0%)
Reactors per 1 000 skin tests	5.9	5.0	-15.25%
Other cattle slaughtered (DCs and IRs)	2 873	1 557	-45.81%
Apparent prevalence at year end (herds under restrictions due to a TB incident, excluding herds with overdue tests ⁷)	2.90%	2.00%	-31.03%
Percentage of cattle herds officially TB-free at year end (remainder includes herds with overdue tests)	91.10%	94.00%	3.18%
Bovine carcasses reported with suspect TB lesions at routine slaughter (individual slaughterhouse cases)	1 117	1 060	-5.10%
Proportion of individual slaughterhouse cases that yielded a positive culture for <i>M. bovis</i>	57.00%	50.00%	-12.28%

Year-end statistics show there has been a reduction in the total number of new TB incidents, confirmed new incidents and test reactors, compared to 2008 figures. This was despite more herds and animals being tested in 2009 than in 2008.

Although welcoming the observed year-on-year reduction in bovine TB incidence headline indicators in 2009, the Government remains cautious and does not want to read too much into the short-term disease trends, given the cyclical and multifactoral nature of incidence in endemic areas. Incidence of bovine TB in parts of England is still far too high, and Defra continues to take the fight against the disease very seriously, not least because of the serious impact it has on farmers.

¹ All figures are provisional and subject to minor revisions as more data become available (data downloaded 10 March 2010).

² Herd TB tests, includes tuberculin skin and gamma interferon blood tests.

³ Whole herd and other tests (includes partial herd tests and tests on individual animals within the herd, eg inconclusive reactors, tracings). Includes tuberculin and gamma interferon tests.

⁴ A small number of herd incidents were still unclassified when this report was produced (ie none of the animals removed from the affected herds had presented with typical lesions of TB at PM examination or a positive tissue culture result, although there were still some animals awaiting culture results).

^{5 & 6} Total number of cattle tested is less than the total number of tests carried out on individual animals (some animals will have been skin-tested more than once or may have had more than one blood sample taken for gamma interferon testing).

⁷ Overdue test data 2009 was estimated from TB Data Warehouse downloads from 30 Nov 2009, 15 Jan 2010 and 9 Feb 2010. This may have resulted in a decrease in apparent prevalence at year end (herds under restrictions due to a TB incident, excluding herds with overdue tests).

Table 9: Number of new confirmed and unconfirmed TB incidents disclosed annually in Great Britain since 1994

After three consecutive years of increases in numbers of TB breakdowns recorded in Great Britain, this parameter fell in 2009.

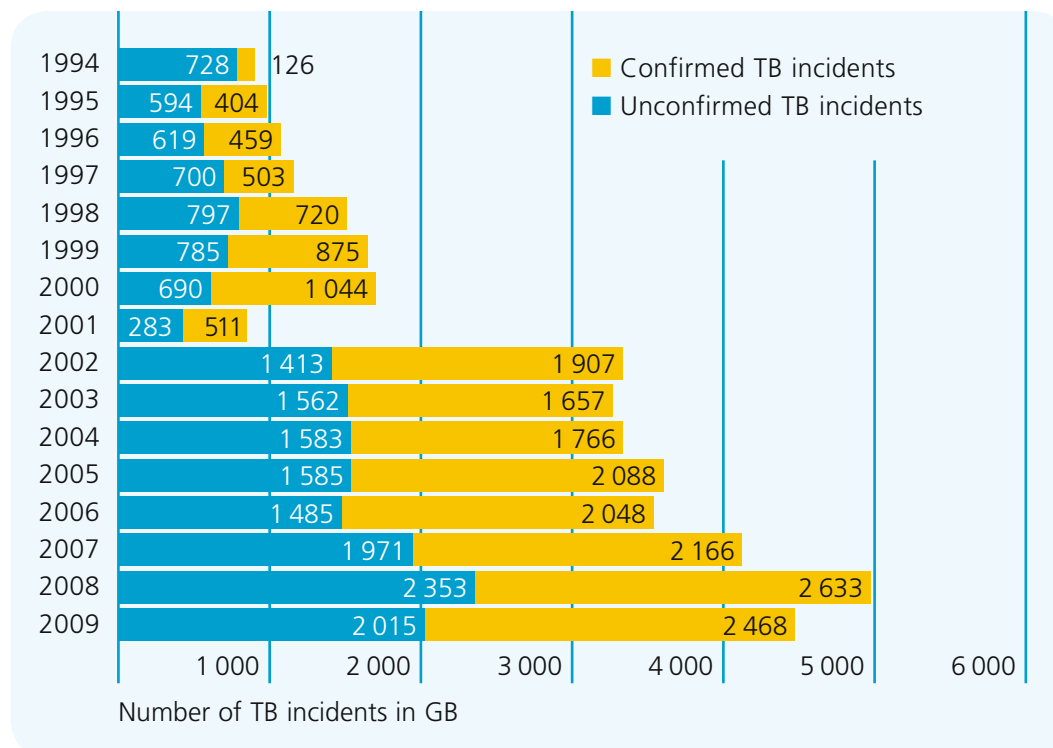
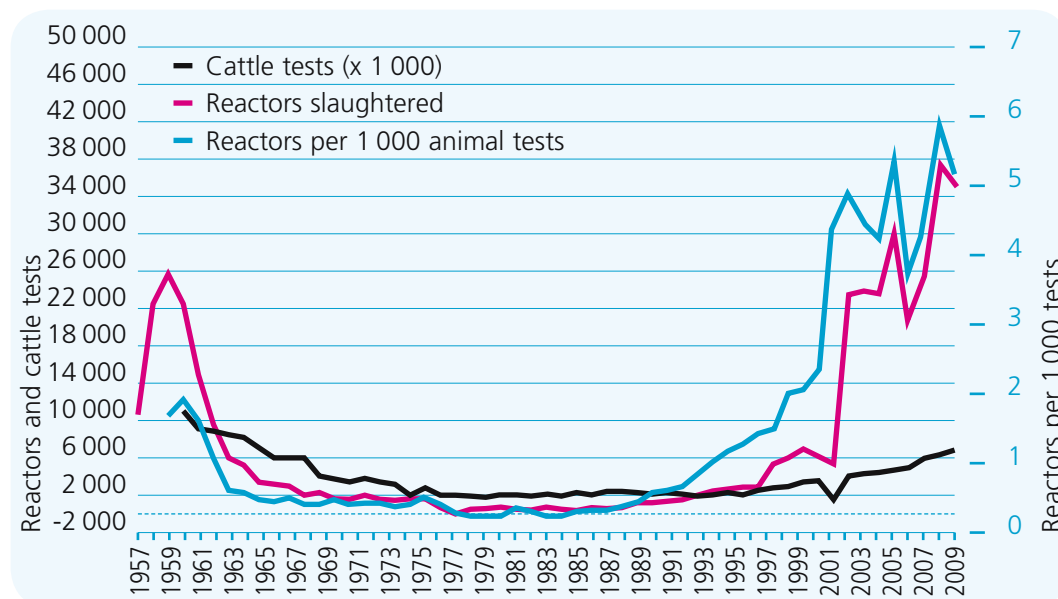


Table 10: Number of tuberculin skin tests in cattle, and reactors and rate of reactors per 1 000 tests disclosed annually in Great Britain

Despite the rise in numbers of cattle TB tests carried out in 2009, the number of reactors disclosed (and the rate of reactors per 1 000 animals tested) was less than in 2008, but still too high by historical standards.

The figures exclude gamma interferon test reactors, direct contacts and slaughterhouse cases^{1, 2}



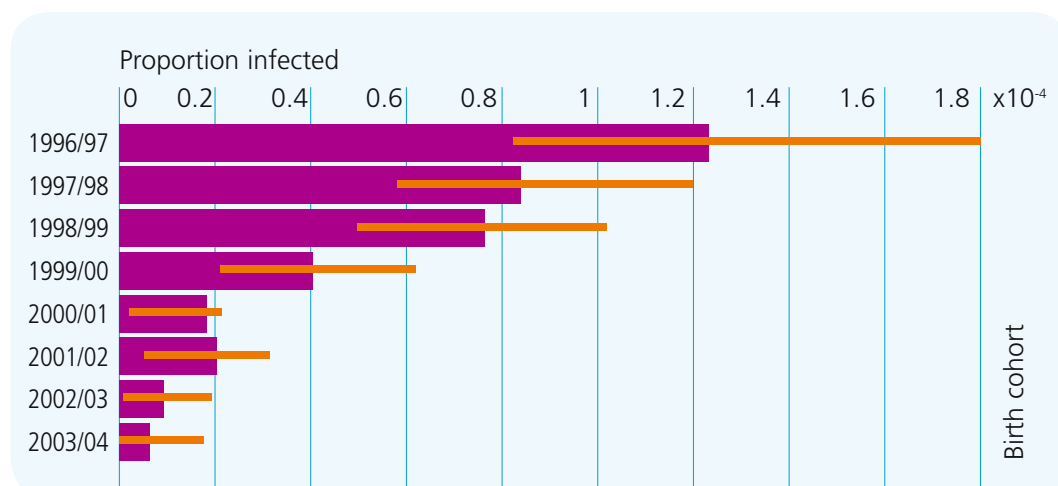
¹ TB testing was markedly reduced in 2001 due to the foot and mouth disease outbreak, but recovered in 2002.

² Some variation in the number of test reactors disclosed in recent years may have been due to the introduction of new policies and changes in the definition of reactors.

BSE

Table 11: The estimated proportion of cattle infected with BSE in successive annual birth cohorts (born from 1 July 1996 to 30 June 2004) in Great Britain

The orange bars represent uncertainty (data from scanning and targeted surveillance as at November 2009).



Scrapie

Table 12: Rates of classical scrapie and atypical scrapie (number of cases per 100 tests) detected in Great Britain through targeted surveillance of fallen sheep and abattoir-cull sheep aged over 18 months (2002 to 2009)

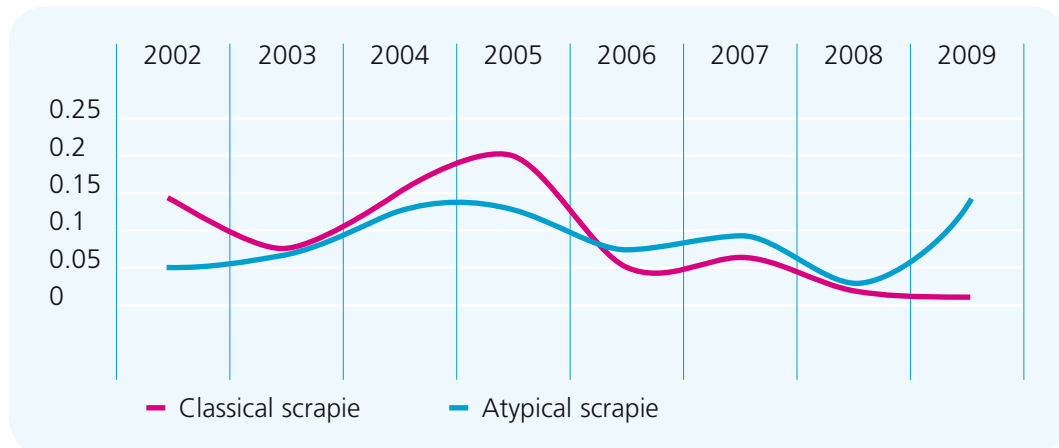
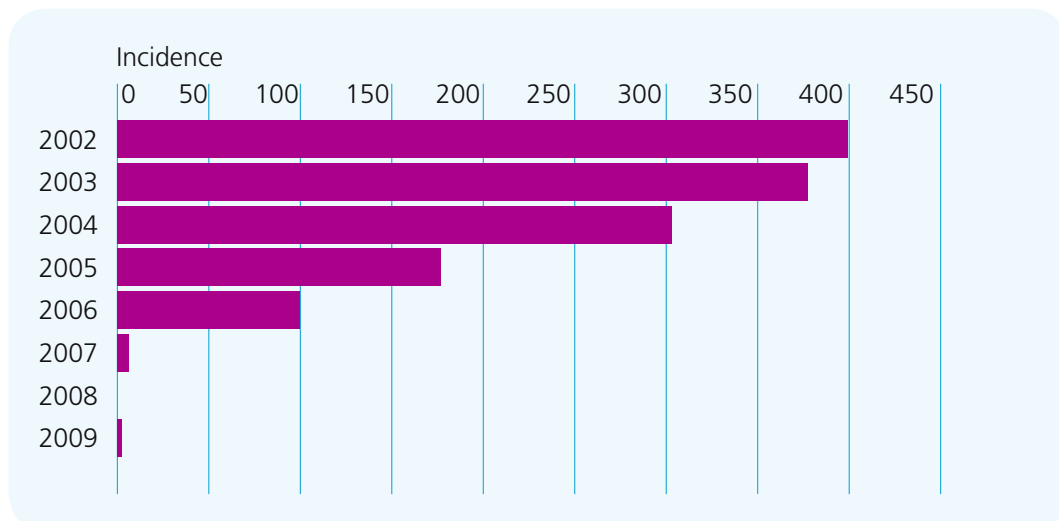


Table 13: Annual incidence of classical scrapie detected in Great Britain through scanning surveillance of sheep (2002 to 2009)



ANNEX B: DELIVERY PARTNERS

This annex contains a short profile of our delivery partners, with a link to each organisation and, where possible, its current annual report, business plan or strategic plan.



Animal Health

Animal Health is a Great Britain-wide organisation dealing with animal health, public health, animal welfare and international trade. One of its main roles is the implementation of government policies which aim to prevent or manage outbreaks of serious animal diseases, and, in doing so support the farming industry, protect the welfare of farmed animals and safeguard public health from animal-borne disease.

» www.defra.gov.uk/animalhealth/ »

» www.defra.gov.uk/animalhealth/publications/index.htm »



Centre for Environment, Fisheries and Aquaculture Science (Cefas)

Cefas makes a significant contribution to securing healthy and sustainable marine and freshwater environments so that current and future generations can prosper. Being the UK's largest and most diverse applied marine science centre, Cefas helps shape and implement policy through its internationally-renowned science and collaborative relationships, spanning the EU, UK government, non-governmental organisations, research centres and industry.

» www.cefasc.co.uk/ »

» www.cefasc.co.uk/media/133189/cefasc_ara_2008-9.pdf »



Food Standards Agency (FSA)

The Food Standards Agency is the UK Central Competent Authority for food and feed. As an independent government department, the FSA also provides advice and information to the public and government on food safety from farm to fork, nutrition and diet, protecting consumers through effective legislation, enforcement and monitoring.

The Meat Hygiene Service merged with the FSA on 1 April 2010 and became FSA Operations Group York. It is responsible for meat inspection duties in fresh meat premises in Great Britain, ensuring that the meat industry safeguards the health of the public, as well as the health and welfare of animals at slaughter.

» www.food.gov.uk/ »



Local Government Regulation (formerly LACORS)

Local Government (LG) Regulation is the local government central body responsible for coordinating local authority regulatory and related services in the UK.

LG Regulation consults with stakeholders and local government advisers on a range of issues through a policy forum and focus groups, including the National Animal Health and Welfare Panel, providing specialist advice and guidance, promoting good practice and influencing and lobbying on behalf of local government. The advice and guidance provided is based on the needs and priorities of local councils, and these mechanisms help ensure that a consistent enforcement approach is taken.

As part of the Local Government Group, LG Regulation is also closely involved with local authority contingency planning for animal disease outbreaks, as well as the National Animal Health and Welfare Framework.

» www.lacors.gov.uk/lacors/Home.aspx »

» www.lacors.gov.uk/lacors/ContentDetails.aspx?id=21574 »



Marine Scotland

Fisheries Research Services merged with the Scottish Fisheries Protection Agency and the Scottish Government Marine Directorate on 1 April 2009 to form Marine Scotland – Scotland's new marine management organisation. Combining world class scientific research, monitoring and management, Marine Scotland's mission is to manage Scotland's seas and marine environment to improve both of them for the use and enjoyment of future generations.

» www.scotland.gov.uk/About/Directorates/Wealthier-and-Fairer/marine-scotland »

» www.scotland.gov.uk/Publications/2010/04/16154510/1 »



Rural Payments Agency (RPA)

The RPA is a major delivery body for Defra, providing a range of high-quality services such as rural payments and carrying out rural inspections and livestock tracing for government and the rural community. The RPA is also responsible for the Common Agricultural Policy (CAP) payment schemes in England, including the Single Payment Scheme. It is the paying agency for all CAP schemes.

» www.rpa.gov.uk/rpa/index.nsf/home »

» [www.rpa.gov.uk/rpa/index.nsf/0/2b8c4bc1f2cb5e5b802575fa00494ada/\\$FILE/Annual Report 2008-2009.pdf](http://www.rpa.gov.uk/rpa/index.nsf/0/2b8c4bc1f2cb5e5b802575fa00494ada/$FILE/Annual%20Report%202008-2009.pdf) »



SAC (The Scottish Agricultural College)

The SAC is an innovative, knowledge-based organisation that supports the development of land-based industries and communities via specialist research and development resources, education and training provision and expert advisory and consultancy services.

The SAC carries out a wide range of work, but with particular emphasis on agriculture and related sciences, rural business development and management, food chain quality and safety and rural resource and environmental management.

» www.sac.ac.uk/ »

» www.sac.ac.uk/mainrep/pdfs/annualreport0809.pdf »



Veterinary Laboratories Agency (VLA)

The VLA is a national and international laboratory for many livestock diseases, and is known internationally as a centre of excellence in veterinary research. Its services include a wide range of interrelated core functions and capabilities such as disease surveillance, prevention and control, environmental and public health protection and animal health-related research. The VLA collaborates and works in partnership with universities and scientific institutes in the UK and across the world, maximising outputs and increasing the pool of professional knowledge and experience available to government and the public.

» www.defra.gov.uk/vla »

» www.defra.gov.uk/vla/reports/rep_accounts.htm »

» www.defra.gov.uk/vla/reports/rep_annrev.htm »



Veterinary Medicines Directorate (VMD)

The VMD seeks to protect public health, animal health and the environment, promoting animal welfare through assurance of the safety, quality and efficacy of veterinary medicines. VMD stakeholders are wide-ranging, including the European Medicines Agency, the Department of Health, the Food Standards Agency, consumer representative groups and other representatives of foreign governments. The VMD supports them through its three areas of business: authorisations, residues and policy.

» www.vmd.gov.uk »

» www.vmd.gov.uk/Publications/AnnReps/vmdanrep0910.pdf »

ANNEX C: REPORTS AND PUBLICATIONS

A selection of reports and publications relating to animal health and welfare, published during 2009.

Animal health: Animal Health publications

Animal Health Business Plan and 2008–09 Annual Report

www.defra.gov.uk/animalhealth/publications/index.htm

Defra's revised Contingency Plan for Exotic Diseases of Animals

www.defra.gov.uk/foodfarm/farmanimal/diseases/control/contingency-plan.htm

Animal welfare

Code of Practice for the Welfare of Dogs

www.defra.gov.uk/wildlife-pets/pets/cruelty/documents/cop-dogs.pdf

Code of Practice for the Welfare of Cats

www.defra.gov.uk/wildlife-pets/pets/cruelty/documents/cop-cats.pdf

Code of Practice for the Welfare of Horses, Ponies, Donkeys and their Hybrids

www.defra.gov.uk/wildlife-pets/pets/cruelty/documents/cop-horse.pdf

Code of Practice for the Welfare of Privately Kept Non-Human Primates

www.defra.gov.uk/wildlife-pets/pets/cruelty/documents/primate-cop.pdf

Code of Practice for the Welfare of Rabbits

www.wales.gov.uk/animalwelfare

Animal health and welfare

Wales Animal Health and Welfare Strategy Action Plan 2009–10

www.wales.gov.uk/ahwstrategy

Antimicrobial resistance

EFSA 2008 MRSA in breeding pigs Part A report (published Nov 2009)

www.efsa.europa.eu/en/scdocs/scdoc/1376.htm

EFSA 2008 MRSA in breeding pigs Part B report (published June 2010)

www.efsa.europa.eu/en/scdocs/scdoc/1597.htm

Link to abstracts from MRSA Conference (September 2009)

www.escmid.org/research_projects/scientific_activities/conferences/escmidasm_conference_2009_on_methicillin_resistant_staphylococci_in_animals_2009/

Bovine tuberculosis

Final report of the Bovine TB Advisory Group, April 2009

www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/documents/tbag-finalreport.pdf

The Bovine TB Eradication Group's Progress Report for England, October 2009
www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/tb/documents/tb-erad091008.pdf

Contingency planning

UK Contingency Plan for Exotic Diseases of Animals

www.defra.gov.uk/foodfarm/farmanimal/diseases/control/documents/framework-of-emergency-preparedness.pdf

Scottish Government's Exotic Animal Disease Contingency Framework Plan

www.scotland.gov.uk/Publications/2010/01/19142713/0

Welsh Assembly Government – Exotic disease contingency planning

www.wales.gov.uk/topics/environmentcountryside/ahw/exoticdiseases;jsessionid=1jT1M2LL8B2GLdY4sLq7C7vmvLZtF7h7gfJF71LyZfnQJRWJ282S!-612830727?lang=en

E. coli

Vet Record VTEC on open farms article (published by the VLA in 2009)

www.defra.gov.uk/vla/diseases/docs/dis_vtec.pdf

Review of the major outbreak of *E. coli* O157 in Surrey, 2009 – Griffin report (although published in June 2010, it relates to the 2009 outbreak)

www.griffininvestigation.org.uk/

England Implementation Group

A Review of the England Implementation Group

www.defra.gov.uk/foodfarm/policy/animalhealth/eig/pdf/david-eves.pdf

Farm Animal Welfare Council

Report on the Welfare of Farmed Animals at Slaughter or Killing:
Part 2 – White Meat Species

www.fawc.org.uk/pdf/report-090528.pdf

Farm Animal Welfare in Great Britain: Past, Present and Future

www.fawc.org.uk/pdf/ppf-report091012.pdf

Opinion on the Welfare of the Dairy Cow

www.fawc.org.uk/pdf/dcwelfar-091022.pdf

Farm health planning

Defra Farm Health Planning Initiative Review Of Pump-Priming Expenditure, by John Osmond, September 2009

www.defra.gov.uk/foodfarm/farmanimal/fhp/pump-priming.htm

Global Animal Health

International Disease Monitoring Preliminary Outbreak Assessments

www.defra.gov.uk/foodfarm/farmanimal/diseases/monitoring/poa.htm

International Disease Monitoring Qualitative Risk Assessments

www.defra.gov.uk/foodfarm/farmanimal/diseases/monitoring/riskassess.htm

Veterinary Record reports
veterinaryrecord.bvapublications.com/

Government Veterinary Journal
www.defra.gov.uk/gvs/publications/gvj/index.htm

Surveillance and epidemiology

DEFRA/AHT/BEVA Equine Quarterly Disease Surveillance Reports
www.aht.org.uk/equine_disease.html

Regular disease surveillance reports from the Great Britain national scanning surveillance programme
www.defra.gov.uk/vla/reports/rep_surv.htm

Development and application of methods for effective surveillance in livestock populations. Summary report and presentations from a workshop held prior to the International Society for Veterinary Epidemiology and Economics (ISVEE) Conference, August 2009
www.defra.gov.uk/vla/reports/rep_presentations.htm

UK zoonoses reports

The UK Zoonoses Report
www.defra.gov.uk/foodfarm/farmanimal/diseases/atoz/zoonoses/reports.htm

Guidelines for the Investigation of Zoonoses (published April 2009 jointly by HPA and VLA)
www.hpa.org.uk/HPA/Topics/InfectiousDiseases/InfectionsAZ/1240530336254/

Veterinary profession

Unlocking Potential: A Report on Veterinary Expertise in Food Animal Production by Professor Philip Lowe
www.defra.gov.uk/foodfarm/policy/animalhealth/vservices/pdf/lowe-vets090806.pdf

VLA Disease Surveillance Reports

The main outputs of VLA's surveillance programmes
www.defra.gov.uk/vla/reports/rep_surv.htm

Wildlife and aquatic

England Wildlife Health Strategy: a strategy for tackling the impacts of wildlife diseases in England (June 2009)
www.defra.gov.uk/foodfarm/farmanimal/diseases/vetsurveillance/species/wildlife/strategy/pdf/whs-090615.pdf

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