Goal two
Food Safety, Animal Heath and Welfare and Plant Health
Food Safety Authority of Ireland (FSAI)

The service contract agreed with the Food Safety Authority of Ireland (FSAI) in 2006 covers the period to 31st December 2009. The enforcement of the food legislation in this contract is constantly reviewed through regular meetings between the Department and the FSAI, as well as through quarterly reports and an annual report as required under section 48 (8) of the FSAI Act. There is a strong co-operative working relationship between the Department and the FSAI and both are represented on a significant number of committees and working groups that address food safety concerns.

Food Hygiene Controls and Inspections

Food safety continued to be guaranteed in 2007 by the implementation of the range of control systems required under the EU food and feed hygiene legislation, known as the Hygiene Package. The Hygiene Package, which simplified and consolidated existing legislation, was motivated by the necessity to ensure high standards of public health protection. Its underlying philosophy is that food producers should bear full responsibility for the safety of the food they produce.

The Department plays a vital role in ensuring food safety by carrying out risk based inspections on registered operators, following through on any breaches discovered, implementing an independent audit programme and providing training and guides on good hygiene practices on food handling.

Risk based control inspections were carried out on meat, dairy and feed premises under DAFF supervision. The end result was that by end 2007, 163 (92%) of meat premises, 100% of feedmills and 96% (189 premises) of dairy establishments had received full or conditional approval.

In addition, relevant elements of the hygiene legislation were checked at farm level. These farm inspections were undertaken as part of the Statutory Management Requirements (SMR) of cross-compliance inspections and appropriate action was taken on non-compliant operators.

Further details on food safety monitoring and testing programmes operated by the Laboratory Service are set out on pages 40-42 following.

Multi-Annual Control Plan

A Multi Annual National Control Plan was developed and submitted to the EU Food and Veterinary Office (FVO) in 2007 for approval. This plan covers five specific areas i.e. food, animal feed, animal health, animal welfare and plant health. The food element was prepared jointly by DAFF and the FSAI. This single plan gives details of the controls which operate in each sector and also shows how these controls are coordinated to ensure that there are no gaps or overlaps. It will be the basis for the FVO audit planned for 2008 as well as the Department’s annual progress report which is required to be provided to the FVO by June each year. The Multi-Annual Control Plan includes controls for sea food but the implementation of these controls, as well as other seafood safety regulations, is enforced by the Sea Food Protection Agency which was established in January 2007 - see Appendix A.

Residue Surveillance

The Department implements a comprehensive National Residue Plan designed to protect consumers from illegal residues, be they of banned products (such as growth promoting hormones), licensed medicines (where animal products enter the food chain before expiry of the prescribed withdrawal period for the medicine concerned), or environmental contaminants. During 2007, in the region of 30,000 samples were taken and tested at officially approved laboratories for 18 residue groupings. All positive results are followed up by an investigation on the farm of origin with a view to taking the necessary enforcement measures up to and including legal action.

Since 2000, official testing has been complemented by a statutorily based regime under which primary processors are obliged to implement residue-monitoring measures. This regime of self-monitoring is subject to Department scrutiny.
IMPORT CONTROLS

To ensure protection of public and animal health, EU harmonised controls are applied at approved Border Inspection Posts (BIPs) to imports of animal products into the EU. In implementing these controls, the Department maintains close liaison with the Customs Services, the Sea Fisheries Protection Authority (SFPA) and the Food Safety Authority of Ireland.

Animal products entering the EU must have health certification and be from establishments that have production and processing controls offering equivalent guarantees to those within the EU. Where a consignment is found not to comply with the animal and public health import conditions it is seized and the cost of its re-exportation or destruction is levied on the importer. All importers of animal products must be registered and importers are required under EU and National legislation to pay fees towards the cost of veterinary inspection.

During 2007, imports of animal products for food, comprising 22,123,768 kg (16,661,767 kg in 2006) and involving 1156 consignments, were approved for entry into the EU through these BIPs. These included 417 consignments of fish and fishery products. In 2007, 19 consignments of animal products (3 in 2006) were rejected. In addition, 562 consignments of animal by-products were presented for entry into the EU through Irish BIPs (583 during 2006).

To reduce risks to public and animal health, EU regulations also provide for the banning of the personal importation, from most third countries, of products of animal origin for own consumption. Travellers to this country are advised not to bring such products in personal luggage and checks are carried out at airports and ports as well as on postal packages. In 2007, 1100 products (5176 kgs) were confiscated, of which almost 3170 kgs were fish products.

Licences are issued for importation of samples of animal products used for trade exhibition purposes or for research, as well for importation of non-harmonised animal products in accordance with national rules. Details as follows:

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2006</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade &amp; Research Samples:</td>
<td>382</td>
<td>251</td>
</tr>
<tr>
<td>Non-harmonised products:</td>
<td>133</td>
<td>310</td>
</tr>
</tbody>
</table>

Where an outbreak of animal disease occurs in an approved third country or where a public health risk is identified, the EU may invoke safeguard measures controlling or banning import until any risks to public health and to EU economic production have been removed. During 2007 safeguard measures affecting animal product imports were applied in many areas including:

(a) banning poultry products for outbreaks of Avian Influenza in Thailand, Peoples Republic of China, North Korea, Cambodia, Indonesia, Malaysia, Japan, Laos, Pakistan, Vietnam, Mongolia, Kazakhstan and South Korea;
(b) banning beef from certain areas of Brazil because of outbreaks of foot and mouth disease;
(c) banning fish and fishery products from Albania, Madagascar, Brazil, Indonesia and Myanmar.
(d) banning imports of meat and milk products from the Peoples Republic of China because of residue risks and requiring certificates of analysis for Chloramphenicol and Nitrofurans in imported consignments of certain other animal and fish products;

Animal By-Products

Animal by-products (ABP) are parts of animals not intended for human consumption. The slaughter and processing of millions of animals, on-farm animal deaths and food waste from factories and other establishments, results in the production of approximately 550,000 tonnes of raw ABP each year. All this material must be safely disposed of to protect both human and animal health and controls implemented to reduce the risk of the illegal diversion of animal by-products into the food and feed chains.

The Fallen Animals Scheme was introduced to maximise the number of fallen animals being collected, to provide important environmental benefits and to integrate fully with food and animal health requirements. This Scheme provides for the subsidised collection of fallen bovine animals from farms, their subsequent rendering and the disposal of the resultant meat and bone meal. Over 250,700 animals were disposed of in 2007 involving expenditure of €23.79 million.

Most of the ABP from the meat industry is rendered, producing tallow and meat and bone meal (MBM). The 9 approved rendering plants, which are supervised by staff of the Department, produced 151,000 tonnes of MBM in 2007. The ban on the feeding of meat and bone meal (MBM) to farmed animals, introduced at the end of 2000, remained in force in 2007. By the end of 2007, all MBM, blood meal and poultry meal for which the Department has responsibility had been disposed of at approved incinerator facilities in the UK and Germany at a cost of approx €23.5m. The costs of disposing of MBM produced since May 2003 are borne by the industry.
Controls on Veterinary Medicines

Legal and proper use of approved veterinary medicines (including vaccines) plays an important part in ensuring the continued high animal health status of our national herd and the health of consumers of Irish food. The Department, in co-operation with the Food Safety Authority of Ireland and the Irish Medicines Board, oversees and implements important controls in this area in terms of approval and distribution of veterinary medicines, implementation of residue surveillance measures (e.g. National Residue Plan) and follow-up enforcement activities. The legislative codes governing veterinary medicines and residues, (SI No 143/2007 and SI 144/2007) were updated in April 2007 as a result of a Supreme Court Judgement relating to the powers of the Minister to amend or revoke regulations made under the Animal Remedies Act 1993. The second mentioned SI was subsequently updated in November 2007 to take account of the successful outcome of negotiations on criteria for exempting certain veterinary medicines from a mandatory prescription requirement.

Animal Identification and Traceability

Animal Identification and Trace Back Systems

The Cattle Movement Monitoring System (CMMS) is the database under the National Beef Assurance Scheme (NBAS) which traces the movements of all bovine animals from birth to slaughter. This data base, as well as a number of other animal identification systems, are being redeveloped on a phased basis under the Animal Identification and Movement (AIM) system project. This web-based project provides a number of on-line facilities for farmers.

During 2007

- The marts on-line system operated in 48 marts by the end of the year.
- A new application was implemented in export assembly centres and a further application was developed for slaughterhouses supervised by the Department.
- Work commenced on the development of a new application for abattoirs supervised by the Local Authority Veterinary Service (Local Abattoirs).
- On-line facilities were finalised for the recording of animal events under the Animal Welfare, Recording and Breeding Scheme for Suckler Herds to be introduced in 2008

Sheep, Goat and Pig Identification Systems

The comprehensive national identification systems for sheep, pigs and goats operated satisfactorily in 2007. These national systems of identification are vital for disease control, traceability and consumer assurance. The results of the 2006 national sheep census, which became available in 2007, recorded that there were over 3.6 million sheep in 35,277 flocks in Ireland in December 2006. This is a reduction of 10% on the number shown in the December 2005 census.

Equine Identification

Under EU legislation all equines must have an identity document (pet passport). In 2007 the Department embarked on a campaign aimed at getting all stakeholders in the equine industry to comply with this requirement. This involved national advertisements in the farming press, correspondence with industry stakeholders and compliance spot checks at the vast majority of sales venues and ports.
Animal Welfare

Animal Welfare and Recording Scheme

One of the objectives of the Animal Welfare and Recording Scheme for Suckler Herds approved in October is to underpin high standards of animal welfare in suckler herds. To provide assurances on quality welfare standards, farmers who join the scheme are required to attend a training course and follow best practice in animal husbandry. A budget of €235 million has been allocated for the scheme with annual payments of €80 per cow, payable over five years from 1 January 2008.

Animal Health and Welfare Bill

Considerable progress has been made in drafting the proposed legislation which will deliver on a number of important commitments in the Programme for Government, i.e.

- ‘introduce a new Animal Health Bill to consolidate and amend previous legislation to reflect the changed disease status of our nation’s animals’,
- ‘a comprehensive Animal Welfare Bill, updating existing legislation, to ensure that the welfare of animals is properly protected and that the penalties for offenders are increased significantly’.

The Programme for Government included a further commitment to consolidate the responsibility for the welfare of all animals (including non-farm animals) in this Department. This means that welfare responsibilities for all animals (not just for farm animals, as at present) will be assigned to this Department but control and regulatory responsibilities for non-farm animals will remain the responsibility of the other relevant Departments. The proposed Animal Health & Welfare Bill will provide the necessary statutory basis to give effect to this commitment

Farm Animal Welfare Advisory Council (FAWAC)

The Farm Animal Welfare Advisory Council (FAWAC) is an independent advisory body to the Minister which provides advice on issues relating to the care and welfare of farm animals. The Council is currently chaired by Prof. Patrick Fottrell, former President of NUIG.

The Early Warning/Intervention System for Animal Welfare Cases (EWS) established by FAWAC, which brings together representatives of the Department, the Irish Farmers’ Association and the Irish Society for the Prevention of Cruelty of Animals, continued to operate in 2007. In September, FAWAC produced the booklet “Best Practice for the Welfare of Animals during Transport”. These guidelines apply to cattle, sheep, goats, pigs and equines. Discussions also took place in 2007 with a view to extending the involvement of the EWS to the Gardaí and the HSE in view of the number of animal welfare cases that are associated with social issues and require a non-legislative response.

Scientific Advisory Committee on Animal Health and Welfare

The Scientific Advisory Committee on Animal Health and Welfare (SACAHW) provides the Minister with expert advice on various issues of animal health and welfare. Following SACAHW’s Report on “The Use of Electro-immobilisation on Live Farm Animals in Ireland”, the Minister banned with effect from the 1st September, the use of any electrical equipment or other instrument that applies a sustained electric current or impulse directly to live farm animals.

Animal Care and Welfare Organisations

The Department has made ex-gratia payments to a number of organisations which are directly involved in the delivery of animal care and welfare services since 1995. To date €8.65 million has been provided. In 2007, 107 such organisations were supported throughout the country to the tune of €1.479 million. This is a 25% increase in the level of support made in 2006.

Control of Horses

The Minister is empowered by the Control of Horses Act, 1996 to make grants available to Local Authorities towards expenses incurred in its implementation. In 2007, the Department provided funding totalling €3.457m to 15 Local Authorities. This figure includes grant aid of €2.25m provided to Dublin City Council in respect of the Ballymun Equine Centre.
CLASS A DISEASES – MONITORING AND CONTROL

Avian Influenza

Despite four outbreaks of Avian Influenza in the U.K. in 2007, Ireland remained free of the H5N1 subtype. In 2007, the Department strengthened its robust contingency framework to deal with any suspected outbreak including its legal base and specifically trained and equipped staff. A Government Task Force on Avian ‘Flu met during 2007. This was chaired by the Minister and comprised representatives of those Departments and Agencies that might be involved in dealing with an outbreak of the disease.

In addition, an Expert Advisory Group, chaired by Professor Michael Monaghan of UCD, offers advice on the adequacy of the control measures in place. On the advice of this group, a water chlorination grant scheme was introduced in 2007 for commercial poultry flock owners for the installation of chlorination treatment facilities to inactivate any virus that might be in the water. Over 450 applications and payments in the region of €1.5m were made by year-end.

Foot and Mouth (FMD)

Overall, there were 8 outbreaks of FMD in Great Britain in 2007; all apparently associated with bio-security breaches at the Community reference laboratory in Pirbright in Surrey. Ireland remained free of FMD but to protect our FMD free status, the Department actively implemented aspects of its contingency plan including national control measures and import restrictions on live animals and animal products from the infected areas.

Bluetongue

Bluetongue is a viral disease of most ruminants, including cattle, sheep and goats. This disease does not infect or affect humans and does not have a public health significance but an outbreak would have serious economic consequences for farming and trade. In 2007, the disease spread into England, where the restricted zone extended throughout most of England and into part of Wales. Consequently, the risk to Ireland has increased significantly with the two primary vectors being imports of infected animals or wind blown midges.

In 2007, the Department implemented relevant aspects of its Bluetongue contingency plan which involved a significant tightening of the movement controls of animals from restricted areas; an effective ban on the importation of animals from such areas and tests on imported animals. In addition, the Department’s communication strategy was reviewed to ensure that awareness of this disease was increased and comprehensive information and advice was posted on the DAFF website.

BSE

The incidence of BSE in Ireland is in decline. The numbers peaked in 2002 with 333 cases and have since fallen to 69 in 2005, 41 in 2006 and 25 in 2007. This reduction in case numbers is assisted by intensive active surveillance involving testing of all bovines over 30 months of age which are slaughtered for human consumption. In excess of 700,000 animals per annum are tested in Ireland under this surveillance regime.

In response to the improved BSE situation, in 2007 the Minister indicated support for raising the testing age to 42 months. This would significantly reduce the amount of testing to be undertaken.

Scrapie

Scrapie is a compulsory notifiable disease and the Department genotypes flocks affected, followed by partial depopulation of sheep most susceptible to Scrapie. Overall, a total of 113 flocks were restricted during the period October 2003 to December 2007. Compensation payable under the scheme includes live valuation of breeding animals, a rate for factory lambs based on the average factory price and a “hardship” payment of €84 per breeding ewe.

The Department also implements a voluntary National Genotype Programme to encourage sheep breeders to raise genetic resistance to Scrapie in the National Flock. Since its introduction in 2004, a total of 72,400 animals have been genotyped. The programme continuing in 2007 with the Department making a contribution of €12 toward the laboratory testing cost of each blood sample. In addition, in 2007 an Active Surveillance Programme was introduced involving the testing of 26,970 sheep over 18 months of age at slaughter plants and 16,184 fallen sheep at knackeries.
CLASS B AND OTHER DISEASES – MONITORING AND CONTROL

Bovine Brucellosis

Ireland is free of brucellosis in sheep and pigs. In cattle, the incidence of Brucellosis has fallen each year since 1998 when an enhanced eradication programme was introduced. This trend continued in 2007 and brucellosis is now at an historically low level. Just over 3.72 million blood samples were tested for brucellosis in 2007 which are supplemented by monthly Bulk Milk Testing from each dairy herd and blood sampling of cows in slaughter plants. These latter measures have proved very effective in disclosing a number of reactors that might otherwise not have been detected. The net effect is that in 2007 there have been no confirmed case of brucellosis in cattle in Ireland and no herd was depopulated, compared to 3 in 2006 and 27 in 2005. See Table following.

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Reactors</td>
<td>6,417</td>
<td>4,545</td>
<td>3,112</td>
<td>1,530</td>
<td>664</td>
<td>228</td>
<td>212</td>
<td>243*</td>
</tr>
<tr>
<td>Number of Newly Restricted Herds</td>
<td>1,081</td>
<td>875</td>
<td>553</td>
<td>430</td>
<td>283</td>
<td>144</td>
<td>132</td>
<td>161*</td>
</tr>
</tbody>
</table>

*the numbers of reactors and herds restricted as a result of brucellosis tests in 2007 were, on the basis of further investigation, considered to be due to false positive reactions.

Bovine Tuberculosis

The incidence of Bovine Tuberculosis increased in 2007 compared with 2006. However, the incidence of the disease fell slightly during the first 4 months of 2008 when the number of herds infected with the disease fell from 5.3% to 4.8%. The nature of this disease is such that its incidence can best be measured over a period of years. Trends in the incidence are set out the table below which show that there has been a 21% reduction in the average incidence of the disease over the past 5 years (2003-07) compared with the previous 5 years (1998-02).

<table>
<thead>
<tr>
<th>Bovine Tuberculosis Statistics</th>
<th>1998</th>
<th>1999</th>
<th>2001</th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incidence</td>
<td>6.76%</td>
<td>7.35%</td>
<td>7.12%</td>
<td>6.37%</td>
<td>5.54%</td>
<td>6.02%</td>
</tr>
<tr>
<td>Number of Reactors</td>
<td>44,498</td>
<td>44,903</td>
<td>33,702</td>
<td>27,978</td>
<td>25,884</td>
<td>27,711</td>
</tr>
<tr>
<td>No. of Newly Restricted Herds</td>
<td>10,055</td>
<td>10,660</td>
<td>9,195</td>
<td>7,771</td>
<td>6,647</td>
<td>7,046</td>
</tr>
</tbody>
</table>
Bovine TB is a much more intractable disease than Brucellosis, mainly because of the presence of infection in wildlife (badgers) and it is generally accepted that eradication is not a practicable proposition until this source of infection is removed. The current eradication programme includes a badger removal strategy. However, the long-term objective of the Department is to develop a vaccine for badgers and a collaborative research project has been ongoing with UCD. The Department is due to commence a three-year badger vaccination trial. The objective of the field vaccination trial is to provide information as to the efficacy of the oral vaccine in reducing the level of TB infection in the badger population under study. If the field trial is successful, the introduction of a national badger vaccination strategy will reduce the need to remove TB infected badgers as TB levels fall in both cattle and badgers. It will be some years, however, before the project comes to fruition and, in the meantime, existing strategies, adjusted as necessary, will be broadly maintained.

Prosecutions

In 2007 the Special Investigation Unit and the local District Veterinary Office continued to investigate irregularities in the Bovine TB and Brucellosis Eradication Schemes and in bovine identification and registration. Resulting from those investigations, there were six successful prosecutions during the year and seven further cases were submitted for prosecution. This compares to 7 successful cases in 2006 and 12 in 2005.

Compensation Schemes

The On-Farm Market Valuation Scheme is the main measure for compensating farmers for the removal of reactors. Other schemes (Depopulation Grants, Income Supplement and Hardship Grants) are also available to compensate farmers for income losses arising from restriction. Approximately €19.3 million was spent during 2007 on all compensation elements of the TB and Brucellosis Eradication Schemes. This was an increase on 2006 (€ 17.6m) and resulted both from an increase in TB disease levels and higher valuations of reactors, particularly of dairy cattle.

Bovine Diseases Levies

Receipts from Bovine Diseases Levies amounted to €6.26 million in 2007. This compares to €10.44 million in 2006 and €11.40 million in 2005. The rate of levy was reduced by 50% on 1 January 2007 due to the ongoing improvement in TB and Brucellosis levels and the consequent reduced cost of the schemes. This is in line with commitments under the Social Partnership Agreement Towards 2016.

Aujeszky’s Disease

Round two of the Aujeszky’s Disease Control and Eradication programme was finalised in 2007 with over 16,000 factory blood samples and 22,000 on-farm blood samples tested. The results have been very satisfactory with just one additional herd found positive for Aujeszky’s disease from this round.

Herd Health Initiative

During 2007 the Department met with relevant stakeholders to progress a herd health initiative to deal with non-regulated diseases in a comprehensive and integrated manner. The initiative aims to develop effective national plans for action and to facilitate Ireland achieving international best practice in the area of animal health.

Fish Health

All movements of fish are continually monitored by the Department to ensure that the health status of fish is maintained at its current high level. Meetings involving DAFF, Marine Institute and industry personnel were held on a regular basis to frame and publish a Fish Health Code of Practice. This is an industry-led initiative and is expected to be finalised in late 2008.

The sea louse is the common enemy of both the salmon farmer and wild fisheries. The Marine Institute carried out monitoring of sea lice levels at salmon farms throughout 2007 which involved inspection and sampling at all fish farms 14 times per annum. A sea lice control strategy for salmon is being developed which will intensify the single bay management approach and incorporate ‘real time’ management of sea lice infestations on a case-by-case basis.
The Department operates a multi-disciplinary laboratory service involving the central Veterinary Research Laboratory (comprising Bacteriology/Parasitology, Pathology, Virology Divisions), six regional veterinary laboratories, a Meat Control Laboratory, a Brucellosis Laboratory (Cork), central Dairy Science Laboratory with 2 regional laboratories in Cork and Limerick, Pesticide Control Laboratory and Seed Testing Laboratory. Over the past few years, all these laboratories, other than the regional laboratories, have been relocating to the state of the art complex in Backwester.

By end 2007, all staff, with the exception of the animal pathogen high security unit, had moved to the Backwester campus. In addition to the physical integration of services a great deal of progress was made in 2007 on resolving the human resource issues concomitant on integrating for the first time managerial responsibility for all services into a unitary structure. The level of progress made has been such that it is anticipated that all such issues will be finally resolved in 2008. The official opening of the laboratory complex took place in April by an Taoiseach, Bertie Ahern.

### National Reference Laboratories (NRL) and Accreditation

The Laboratory Service operates as the National Reference Laboratory for a wide range of tests including TSE, Salmonella, Bluetongue, Residues, Trichinella, Listeria monocytogenes, Bacterial and Somatic Cell count in raw milk. In this capacity, it carries out a range of testing functions under national and EU legislation, validates the competency of relevant tests undertaken by private laboratories and participates in trials organised by other Community Reference Laboratories. In 2007, the laboratories actively sought to upgrade their capacity to deliver NRL functions and increased the number of tests accredited.

### VETERINARY LABORATORIES

#### Bacteriology/Parasitology Division

The focus of the Bacteriology Division is directed at diseases of national concern from an animal health or food safety perspective. It provides bacteriological support to the Bovine TB and Brucellosis disease control programmes, testing on Johne’s, Leptospira, genotype testing for Scrapie as well as tasks related to its NRL functions for Campylobacter, E. Colie (including VTEC), Antimicrobial resistance and parasites.

A sample of results from the wide range of tests conducted in 2007 is shown below

<table>
<thead>
<tr>
<th>Tuberculosis</th>
<th>Johnes</th>
<th>Brucellosis</th>
<th>Parasites</th>
<th>Scrapie Genotyping</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of samples tested</td>
<td>6,234 (animals with lesions)</td>
<td>657 bovines</td>
<td>139</td>
<td>30 (sheep mite)</td>
</tr>
<tr>
<td>Number of positive</td>
<td>3,613 (58%)</td>
<td>126 (19%)</td>
<td>Nil</td>
<td>4 (10.8%)</td>
</tr>
</tbody>
</table>
As part of its NRL functions, the Bacteriology Division conducted two EU baseline studies on the prevalence of *Salmonella* spp. in slaughter pigs (426 animals) and in turkey flocks (262 flocks).

In addition, a summary of tests conducted for zoonotic pathogens in 2007 by private laboratory testing for DAFM is presented in the following table.

<table>
<thead>
<tr>
<th></th>
<th>Salmonella</th>
<th>Campylobacter</th>
<th>Listeria</th>
<th>VTEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of samples tested</td>
<td>140,605</td>
<td>2,443</td>
<td>97,624</td>
<td>15,709</td>
</tr>
<tr>
<td>Number of positive samples</td>
<td>1,418</td>
<td>23</td>
<td>5,407</td>
<td>4</td>
</tr>
</tbody>
</table>

Other 2007 developments include
- Introduction of a more sensitive western blot assay to facilitate detection of atypical strains of scrapie,
- Preparation of over 15,500 tissue slides for microscopic evaluation by pathologists,
- New staining procedures introduced,
- A 5th TSE rapid testing laboratory was approved,
- Metal, metabolite and enzyme analysis carried out on animal bloods and tissues to assist the diagnosis of economic or environmental animal diseases,
- Involvement in a number of inter-agency projects including one to test the selenium status of cows and parasitological experiments on elucidating production losses due to lungworms and fluke infestations.

Central Meat Control Laboratory (CMCL)

As part of its accreditation process, various laboratory procedures at the CMCL were reviewed with the result that in 2007, 8 additional tests were accredited; bringing the total number of accredited tests to 15. As part of the overall accreditation process, it also hosted audits from the USDA FSIS, the CVRL Audit team as well as INAB.

Its sampling programme under the Hygiene Package involved testing 1,547 ready to eat products for salmonella etc and 389 water samples for physico-chemical properties. 112 or 7.2% of the ready to eat products were unsatisfactory as they contained salmonella or other bacteria while 33 of the water samples were also unsatisfactory primarily due to too high levels of chlorine or the presence of coliforms.

Over 14,000 routine screening tests were carried out as part of the national residue control plan. These tests include screening for a wide range of substances including immuno-assay, beta-agonists, antibiotics, trichinella, heavy metals etc.

Regional Veterinary Laboratories (RVLs)

RVLs provides a diagnostic service and surveillance network to the agriculture industry. In 2007, the RVLs undertook many investigations of outbreaks of disease and illnesses in cattle, sheep, pig and poultry herds and flocks. Diagnoses were reported promptly to facilitate optimal treatment, control and prevention within each individual herd. These laboratories also contribute to the Regional Veterinary Laboratory Disease Surveillance reports which collate results of disease in Irish livestock as detected by the RVLs. The 2006 report is available on the Department's website at: (http://www.agriculture.gov.ie/areasof/cvrl/VetSurveillance06.pdf)
AGRICULTURE LABORATORIES

Dairy Science Laboratories

The Dairy Science Laboratory in Backweston is now the National Reference Laboratory for Listeria monocytogenes, coagulase positive staphylococci, total bacterial count in raw milk, somatic cell count in raw milk and phosphatase activity in milk. In 2007, it maintained and expanded its accreditation to 15 test methods and the Cork and Limerick laboratories progressed towards accreditation.

In 2007, the three Dairy Science laboratories tested 8,722 samples of milk and milk products and 315 samples of water in accordance to microbiological requirements of the Hygiene Package. Analysis of which resulted in:

- 23 Food Safety Hazard notifications issued on Microbiological analysis
- 85 Process Hygiene Criteria non-conformances issued
- Of the 315 samples of water tested for microbiological requirements, 53 non-conformances were reported.

A further 2,846 samples of milk and milk products were tested in accordance with the chemical requirements of other schemes and services. Appropriate action was taken on non-compliant operators.

Crops Laboratory

In July of 2007 the laboratory was audited and re-accredited for the third time to the International Seed Testing Association. Agricultural and horticultural seeds subject to official certification, require to be officially tested for purity and germination to ensure compliance with EU seed regulations. These tests were carried out at the Department's Seed Testing Laboratory and over 11,000 tests were completed in 2007. Overall, there was a 25-30% increase in the number of seed samples submitted for pathology testing in 2007 compared to the previous year. For cereals, 576 samples were tested for Fusarium spp. and Microdochium nivale including 200 barley samples tested for barley leaf stripe and net blotch. During the same period, 182 tests were conducted on barley for the presence of loose smut.

Horticultural pathology includes tests for quarantine organisms as detailed in Commission Directive 200/26/EC. 99 camellia, 71 strawberry and 674 woody ornamental samples were received for testing during 2007. Sample numbers were largely similar to those submitted in 2006.

Pesticide Control Laboratory

The Pesticide Control Laboratory remained accredited to the ISO 17025 standard. Extensive further validation work was carried out in 2007 which will expand its accreditation scope in 2008.

Residue

In 2007, the Pesticide Control Service fully implemented the pesticide residue monitoring programme prescribed under the DAFF/FSAI service contract. This involved analysing 1433 samples for up to 266 different pesticide residues. The Maximum Residues Levels (MRLs) were exceeded in 34 samples. One of these, methomyl in pears, was considered to be a risk to consumers and was issued as a rapid alert. Warning letters were issued and in the case of Irish producers inspections were carried out to ensure that MRL exceedances would not be repeated. The number of pesticides residues encompassed in the testing programme has increased from 148 in 2006 to 266 in 2007.

Formulation

The Pesticide Formulation Laboratory was fully operational, in 2007, for the first time in Backweston. One hundred and forty nine samples of plant protection products were analysed, to check compliance with their agreed specifications, as part of the enforcement programme in place to control the marketing and use of these products. During 2007, the Formulation Laboratory was prepared for accreditation to the ISO 17025 standard. An application will be made in 2008 to have the laboratory accredited to this standard.

The laboratory participated successfully in six collaborative studies conducted by CIPAC with a view to developing and validating analytical methods for the analysis of plant protection products.

In addition, the Biocidal Product Register was finalised and will be placed on the DAFF website in 2008.
Plant Health

PLANT HEALTH & FOREST PROTECTION

Plant Protection

To maintain the country’s high plant health status, in 2007, the Department’s Plant Protection Service carried out an action programme which included the following activities:

- Mandatory plant inspection were carried out on relevant plants and plant products imported directly into Ireland from third countries;
- Premises registered under the Plant Health Registration Scheme and other relevant outlets where monitored throughout the year;
- Quarantine and harmful organisms were intercepted on a number of occasions. All of these were dealt with successfully and none became established in the country. However ‘brown rot’ was detected, in February, in a consignment of potatoes imported from France. In an unrelated incident, ‘brown rot’ was also detected in potato crops on three farms in the Wexford region last August. Eradication measures were put in place to dispose of the affected crops and extensive testing of seed potatoes was also undertaken to maintain confidence in the sector.
- Measures to contain outbreaks of the bacteria Erwinia amylovora, known as fireblight, particularly in the Dublin area, were undertaken and Ireland has managed to maintain it’s protected zone status for the bacteria.

Forest Protection and Health

In 2007, as part of EU wide forest pest and disease surveys, the national forest estate was surveyed by the Forest Service for pitch canker disease, oriental chestnut gall wasp, pine wood nematode and sudden oak death. Surveys were also conducted for 11 other quarantine forest pests and diseases for which Ireland has special protection status within the EU. No forest quarantine pests or diseases were detected but the quarantine disease, Phytophthora ramorum, was detected on rhododendron in three forest areas.

Data from the Level 1 Forest Focus plots again showed the good health of Ireland’s forests.

The Forest Service carried out ongoing inspections of imports of wood and wood products. There were a number of interceptions of quarantine forest pests associated with wood imports, the most significant of which was the interception of pine wood nematode. Non-compliant imports were treated, destroyed or refused entry.

As part of an International Plant Protection Convention (IPPC) process, a special forest pest monitoring exercise was carried out on imports of wood packaging material associated with imported goods of all kinds. The Forest Service continued to also implement the IPPC’s Guidelines for regulating wood packaging material in international trade.