

Scottish Executive and Food Standards Agency
Response to the Report of the Task Force on *E coli* O157

E-Coli O157
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SCOTTISH EXECUTIVE

Making it work together

Scottish Executive and Food Standards Agency Response to the Report of the Task Force *E. coli* O157



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FOREWORD

The Task Force on *E. coli* O157 established by my predecessor in 2000 was intended to address the many diverse issues underpinning Scotland's unenviable record of *E. coli* O157 infection in an open, innovative and holistic way. The substantive report which emerged from that process, in 2001, was cogent, comprehensive and compelling. It provides a fine example of the value which can emerge from the inclusive, cross-cutting and action-oriented ethos which is the foundation for all the work of the Scottish Executive: *making it work together*.

Since July 2001, the Scottish Executive and the Food Standards Agency (Scotland) have been working, with others, including UK Government Departments and NHSScotland, to consider, cost and implement the detailed recommendations made by the Task Force. We have already achieved a great deal, for example:

- the Food Standards Agency has initiated a £20 million "Food Hygiene" awareness and publicity campaign, which aims to communicate a range of different seasonal messages at appropriate times throughout the year;
- the Scottish Centre for Infection and Environmental Health (SCIEH) has been provided with appropriate additional funding from 2001-02, in order to initiate an enhanced programme of infection and disease surveillance;
- formal guidance has been issued to the National Reference Laboratory (SERL) restating protocols consistent with Task Force recommendations;
- guidance has been issued to water authorities on the need to give particular attention to testing water from high-risk catchment areas for coliforms and *E. coli* O157, and the consequentials of detection;
- "Private Water Supply Regulation: a consultation" was issued in November 2001;
- "Guidance on Recreational Use of Animal Pasture", detailing sensible precautions, was distributed to relevant organisations in March 2002;
- the Cairns Smith Group has taken account of Task Force recommendations relevant to outbreak management, and published revised guidance in April 2002.

We will build on those achievements. We recognise the threat posed by *E. coli* O157 and the challenge of continuing to respond positively and substantively to the many diverse actions proposed by the Task Force.

MALCOLM CHISHOLM, MSP

Minister for Health and Community Care

OVERVIEW

Introduction

1. The *E. coli* O157 Task Force was appointed by the Minister for Health and Community Care in September 2000, under the joint sponsorship of the Food Standards Agency (FSA) Scotland and the Scottish Executive (SE) Health Department.
2. The Task Force's remit was:

"In light of existing and emerging information on the incidence of *E. coli* O157 in Scotland, to

 - review the risk to health of the public in Scotland and current activities to prevent human infection with *E. coli* O157;
 - assess the effectiveness of the present arrangements for co-ordination of action at national and local level; and
 - consider what future measures would help protect public health."
3. Members appointed by the Minister, included expertise in epidemiology, public health, veterinary medicine, microbiology, agriculture, water supply, environmental health and consumer interests. Their knowledge and understanding was supplemented by dint of an exciting model of consultation, which encouraged some 140 subject specialists to engage in a series of subject meetings, each with its own membership of speakers and other participants.
4. This inclusive and pragmatic approach allowed the Task Force to examine all the issues relevant to its remit and make 105 recommendations, incorporating areas as diverse as:
 - animals/husbandry and routes of infection to the environment;
 - waste recycled to land;
 - risks to water supplies;
 - access to the countryside;
 - risks to the farming community and recreational use of animal pasture;
 - the food chain;
 - diagnosis and patient care by health professionals;
 - person to person spread of infection; and
 - epidemiology and outbreak control.

Format of this response

5. This document sets out the formal response of the Scottish Executive and the Food Standards Agency to the final report of the *E. coli* O157 Task Force, published in June 2001. The introductory sections of the Task Force report include an acknowledgement that "in practice,

the scale of the exercise has proved to be larger than anticipated". As such, in order to provide a clear response to each recommendation made by the Task Force, the following substantive chapters list the recommendations and indicate what action has been (or is being) taken as a consequence.

6. This section is focused on three key cross-cutting themes or issues emerging from those individual recommendations: risk; funding; and monitoring implementation.

Risk

7. Many of the individual recommendations made by the Task Force relate to the significant impact likely to be derived from effective communication of priority messages to certain key groups and individuals.
8. The importance of ensuring effective risk communication was acknowledged in the Scottish Executive's "Overview of Risk Guidance", published on 1 October 2001. It sets out, in clear, accessible terms: the range of the Executive's statutory and regulatory responsibilities; definitions of risk analysis, assessment, management and communication; key principles and guidance; and priorities and procedures. It recognises that, essentially, the Executive has a duty to identify hazards which, by dint of their nature or scale, require some form of government intervention in the best interests of the public. The focus is therefore on the possibility of harmful or negative outcomes. The Executive hopes that the new Scottish Science Advisory Committee will, in time, provide another source of expert advice on identifying new risks.
9. The Executive, the Food Standards Agency and others, will take forward the various actions set out in the next and final chapter of this response in order to communicate those priority messages to key groups and individuals, such as farmers, campers, food producers and processors, schools and nurseries. It is worth noting, however, that those priority messages implicitly acknowledge that the public at large have a key role to play in managing and avoiding the risks associated with *E. coli* O157, and can do so by adopting fairly simple precautionary measures.

Funding

10. The Task Force were asked to do a difficult and wide-ranging job in a very demanding time-scale. As a consequence, perhaps, the report contained little substantive information relating to the likely cost of implementing the recommendations. That task fell to the Executive and the Food Standards Agency.
11. Having considered the recommendations in detail, we believe that the great majority of the recommendations can be taken forward by utilising or re-ordering existing or planned expenditure.

Monitoring implementation

12. Given the number and range of recommendations to be taken forward, both the Executive and the Food Standards Agency acknowledge the importance of putting in place open and effective arrangements for monitoring implementation activity. The Executive and the Food Standards Agency will therefore submit regular progress reports to public meetings of the Scottish Food Advisory Committee and to the UK Zoonoses Group.
13. The Scottish Food Advisory Committee (SFAC) was established by the Food Standards Act 1999, with the remit of:

- giving advice and information to the Food Standards Agency about matters concerned with its functions (including particular matters affecting or otherwise relating to Scotland. The Act requires the Food Standards Agency to take account of such advice or information that is reasonable or practical, whether or not given at the Agency's request);
- ensuring that the decisions of the Food Standards Agency, Scotland take proper account of scientific advice, the interests of consumers and other relevant factors. The Committee has been appointed to act collectively in the public interest and not represent specific sectors;
- engaging with the routine development of policy and legislation undertaken by the Food Standards Agency in Scotland;
- giving advice to the Food Standards Agency, Scottish Ministers and the Scottish Parliament;
- helping to establish priorities following requests from the Agency, availability of data from surveillance or research, press coverage of topical issues, and its own judgement. Immediate priorities identified by the Committee are *E. coli* O157, Diet and Nutrition and Education and Risk Communication; and
- developing that advice in an open and consultative way.

Meetings are held each 6 to 8 weeks and members of the public and media are encouraged to attend. These meetings allow people to meet the Committee informally and to ask questions of the Committee. To encourage openness and raise the profile of the Committee and Agency, meetings take place at a variety of locations and venues throughout Scotland.

14. This element of monitoring implementation of the agreed actions relating to the Task Force recommendations recognises the importance and the value of both involving an independent expert advisory committee and establishing a mechanism for public accountability.
15. The UK Zoonoses Group is the UK-wide body established in line with the recommendations in the BSE Inquiry Report about a more synchronised approach to common problems of food safety and animal and human health matters. The Group is chaired in turn by each of the UK Chief Medical Officers. Members are drawn from relevant UK Government Departments and the devolved administrations. The remit of the group is to:
 - provide an overview on and means of ensuring overall co-ordination of public health action at the UK, national and local level with regard to zoonotic infections and antimicrobial resistance to those infections in animals and humans;
 - advise as appropriate the respective Ministers of Agriculture, Health and Environment in the UK on important events in the field of zoonoses, including, where necessary, preventative and curative action;
 - promote and facilitate activity leading to a better understanding of zoonoses and risks to public health;
 - ensure an exchange of views within and between central government departments, devolved administrations and local government, on developments in the field of zoonoses and to provide contact points or discussion; and
16. This element of monitoring implementation of the agreed actions relating to the Task Force recommendations acknowledges that the work of the Task Force is relevant to other parts of the UK too and that the support and co-operation of UK Government Departments and devolved administrations may, if appropriate, help to enhance the impact of some associated actions.

recommendations and actions

This chapter addresses the detailed recommendations made by the Task Force and indicates whether each one is accepted and what action has been (or is being) taken as a consequence.

Chapter 2 Setting the scene

2.1 Further research to identify why the virulent genes which can cause disease in people are not “switched on” in animals or otherwise do not affect them.

Accepted. The Science and Innovation White Paper published in July 2000, confirmed that, for the UK as a whole, post-genomic research should be one of three scientific priorities for the UK science base. It confirmed that the next stage of scientific research, following the decoding of the human genome, is to identify the function of genes. This will be a key step in understanding many diseases, including cancer and heart disease.

It follows therefore that there may be scope to develop an equivalent and better understanding of how *E. coli* O157 functions at a genetic level. The Task Force report rightly states that “the genetics of the organism are beginning to be understood, but we are still only at the frontier of this work”.

The Scottish Executive has brought this recommendation to the attention of the Medical Research Council (MRC) and the Biotechnology and Biological Sciences Research Council (BBSRC) to consider how such research activity might be aligned with the broader context of current genomic programmes and funding. The Chief Scientist Office of the Scottish Executive Health Department stands ready to consider any relevant research proposals, which would be subject to the normal peer review process.

2.2 Continuing research into the epidemiology of individual cases and outbreaks is undertaken.

Accepted. In common with the Task Force, The Scottish Executive and the Food Standards Agency recognise the value of research into the epidemiology of individual cases and outbreaks. This work will be taken forward by the Scottish Centre for Infection and Environmental Health (SCIEH) as part of an enhanced programme of surveillance of *E. coli* O157 infection and Haemolytic Uraemic Syndrome (HUS).

2.3 Communication and education processes within the food chain and within the home to be repeated regularly.

2.4 An ongoing drive to alter the public culture by education and improved understanding.

Accepted. The importance of education and awareness raising is fully recognised by the Scottish Executive and the Food Standards Agency. The Executive is working with the Health Education Board for Scotland (HEBS), the Health and Safety Executive (HSE) and local NHS Board Health Promotion Departments to ensure that appropriate messages are consistently and repeatedly delivered in range of relevant settings. This acknowledges both existing programmes and initiatives, including for example the FSA's ongoing "Food Hygiene" campaign and the significant impact likely to be derived from effective communication of priority messages to key groups and individuals. The HSE is developing video material targeted at farmers, teachers and responsible adults who supervise educational visits to open farms and recreational use of the countryside, highlighting routes of exposure and the importance of personal hygiene as a primary control measure. HSE is exploring the possibility of incorporating the video within its website and intends cross-referencing it in existing published guidance when these fall due for review.

In taking forward some of the more specific actions set out below, the Scottish Executive (supported primarily by HEBS) and the Food Standards Agency will (continue to) employ a range of methods to raise awareness and understanding, change behaviour and in time, seek to alter the public culture.

Chapter 3 Risk

3.1 That longitudinal studies be undertaken in both cattle and sheep.

Accepted. The Scottish Executive acknowledges that there is merit in seeking to enhance what is currently known about the dynamics of *E. coli* O157 within herds of cattle and flocks of sheep. The Executive will consider how such research activity might be aligned with current programmes and funding.

The Scottish Executive has also brought this recommendation to the attention of the Biotechnology and Biological Sciences Research Council (BBSRC) to consider whether and how such research activity might be aligned within the broader context of their current programmes and funding.

3.2 SEHD commission research on ages of responsibility of children.

The Scottish Executive acknowledges that there may be value in seeking to establish, as far as is possible, the age at which children might reasonably be expected to accept appropriate responsibility for personal hygiene.

Existing guidance on adult/child supervision ratios is included in the Health and Safety Executive's guidance on personal hygiene in respect of *E. coli* O157 at open farms. This is based on research undertaken in the early 1990s under the auspices of the Children's Act 1989. Responsibility for the Act in England & Wales was transferred to the Office of Standards, Training and Education Department (OFSTED) in September 2001. OFSTED is understood to be considering the need for a review of current guidance on adult/child supervision arrangements and ratios. This is likely to involve further research. Pending the outcome of the review, the HSE will continue to use currently quoted adult/child supervision ratios in published guidance and promotional materials.

The Scottish Executive and the Food Standards Agency for Scotland consider that understanding of these issues may be enhanced by taking account of such existing research.

- 3.3 The need to give priority to relatively simple messages which could make a significant improvement in our protection from risk.
- 3.4 That such messages need to be tailored very carefully to suit the target audiences and generally have to be reiterated at regular intervals.
- 3.5 That advice needs to be set in a picture sufficiently wide to allow the non-specialist to appreciate the way in which factors interact e.g. cattle with camping, holiday cottages with private water supply. The PEPFAA code does this well. Others are needed e.g. education/child care, public health/recreation.
- 3.6 That guidance should interpret the legislation and not lessen its impact.

Accepted. Generally, the lesson that “government” has learned from reviews of recent public health debates, notably BSE, is that the general public can be relied upon to understand and reach a judgement on complex risk issues. There is a need to make information accessible as well as easy to understand.

That said, the Executive recognises that, in part, the thrust of this series of recommendations is about securing added value by extracting common strategic themes which build upon and connect a more diverse range of targeted material specific to particular situations or groups.

The Executive has asked HEBS to review and revise existing health promotion material as appropriate, and prepare new material deemed necessary. This will become available progressively from Summer 2002.

Chapter 4 Diagnosis treatment and care – public health management

Diagnosis

- 4.1 Where diarrhoea persists for more than 48 hours, a patient should seek advice of a doctor or other health professional.
- 4.2 Where diarrhoea was bloody, a patient should immediately consult the doctor and a GP should immediately be thinking about *E. coli* O157.
- 4.3 The GP should obtain an early sample for submission to a laboratory to confirm or eliminate *E. coli* O157.
- 4.4 NHSScotland should develop advice which should include guidance on the circumstances in which a patient seeks early medical advice e.g. type and duration of symptoms and in which a GP requests a specimen.
- 4.5 Stool sampling in the high-risk groups or those with the clinical features identified should be undertaken.
- 4.6 NHSScotland should develop a concerted and consistent educational campaign targeting the public, medical and paramedical services
 - to increase awareness of the need for early diagnosis;
 - to reduce the risk of person to person spread; and
 - to facilitate therapeutic interventions as early as possible.

Accepted. The Task Force highlighted the value of effective communication of priority messages to key groups and individuals.

Such priority messages frequently relate to prevention, but it is also clearly of benefit to ensure that the general public is aware of the circumstances in which medical advice should urgently be sought. Again, the Scottish Executive has asked HEBS to review and revise existing health promotion material, as appropriate and prepare new material as necessary, to become available progressively from Summer 2002.

Issues relating to the clinical practice of doctors, including diagnostic awareness and indications for stool sampling, are being addressed by the Scottish Infection Strategy and Standards Group (SISS), a multidisciplinary professional group which has the objective of improving the quality of infection care in Scotland. Appropriate funding has been provided by the Scottish Executive to allow SISS to publish guidance early in 2003.

4.7 The need for testing all diarrhoea samples for *E. coli* O157 and for referring *E. coli* O157 isolates to the National Reference Laboratory (SERL) should be formalised in diagnostic laboratories' protocols.

4.8 Where the index of suspicion of *E. coli* O157 infection is high and initial testing is negative, further, more sensitive testing should be carried out by the Reference Laboratory.

4.9 The IMS Technique should be used where:

- any case of HUS or TTP in which conventional culture has failed to yield a pathogen;
- any case of a bloody diarrhoea stool in which a conventional culture has failed to yield a pathogen and more than 4 days have elapsed between the onset of diarrhoea and obtaining a stool sample;
- any patient of less than 10 years of age or over 60 years of age with diarrhoea from whom conventional cultures have failed to yield a pathogen and more than 4 days have elapsed between the onset of diarrhoea and obtaining a stool sample;
- any contacts of a case or outbreak-associated case with diarrhoea from whom conventional cultures have failed to yield a pathogen and who are in a high risk group i.e. under 10 years, over 60 years; and
- stool samples should also be examined for the presence of non O157 VTEC for organisms for which this technique is available.

Accepted. The Executive welcomes the recognition by the Task Force that these arrangements are already in place in the majority of diagnostic laboratories across Scotland. Formal guidance restating laboratory protocols has been issued by the Executive.

4.10 NHSScotland should establish a procedure for ongoing review of conclusions of our report in relation to new knowledge and emerging techniques.

Accepted. The Executive shares the Task Force's view of the importance of Scotland remaining at the forefront of laboratory diagnostic expertise. The Reference Laboratory Working Group will continue to assess existing practice in the light of new knowledge and techniques and make appropriate recommendations.

Treatment

- 4.11 **Guidance on the use of antibiotics in cases of *E. coli* O157 infection should be reconsidered by NHSScotland.**
- 4.12 **Guidance on the use of antimotility agents in *E. coli* O157 or potential *E. coli* O157 cases should be reconsidered by NHSScotland.**
- 4.13 **Creation of clinical guidelines on management of *E. coli* O157 and complications through formal networks e.g. Scottish Intercollegiate Guidance Network (SIGN), Clinical Standards Board for Scotland (CSBS), the Scottish Infection Strategy and Standard Group and by more specific initiatives.**

Accepted. The Scottish Executive notes that the Task Force supports the current clinical consensus which does not favour the use of antibiotics or antimotility agents in relation to actual or potential *E. coli* O157 cases. Following discussion with SIGN and CSBS, it has been agreed that SISS will develop good practice guidance on the management of *E. coli* O157 infection. Appropriate funding has been provided by the Executive to allow SISS to publish guidance early in 2003.

- 4.14 **Creation of education initiatives for health professionals and related interests and for the public on *E. coli* O157 and complications.**

The CSBS published Standards for Healthcare Associated Infection Control in December 2001. The SISS good practice guidance referred to above will be disseminated to all relevant health professionals.

The Executive has asked HEBS to prepare appropriate material, for the public at large.

Care

- 4.15 **Improve communication about illness to sufferers and their families, involving appropriate vocabulary, thoughtful targeting and relevant presentation.**

Accepted. The Scottish Executive and FSAS acknowledge that there are benefits to be derived from providing information, appropriately, to sufferers and their families. The Executive is therefore working with HEBS to prepare appropriate material, and expects this to be available later in 2002.

In addition, HUSH (Haemolytic Uraemic Syndrome Help - a support group for families affected by *E. coli* O157 which aims to increase public awareness and disseminate information on how to avoid infection) has been awarded funding for 3 years from 2002/03, to enable information to be disseminated to potentially vulnerable groups.

Person-to-person spread

- 4.16 **Consideration should be given to allow for the exclusion of a child on health risk grounds from nursery schools.**

The Scottish Commission for the Regulation of Care became operational on 1 April 2002 and assumed responsibility for the regulation of early education and childcare. Providers will be required to demonstrate appropriate procedures for the control of infection.

- 4.17 Personal hygiene should be promoted generally.
- 4.18 The importance of handwashing to the public and the staff of institutions including hospitals, nurseries, playgroups, etc. be publicised at regular intervals.
- 4.19 Our preliminary work in relation to ages/thresholds of competence in matters of personal hygiene should be taken further, for example by infection control nurses and information leaflets produced.
- 4.20 Use of hygiene facilities should be promoted within high risk groups e.g. children under 10 years of age within schools, nurseries, playgroups, etc. visiting open farms or camping on agricultural ground.

The Scottish Executive shares the view that priority messages, in this context, should relate to prevention and therefore shares the views of the Task Force on the importance of promoting personal hygiene generally and in a more targeted way.

Some such material is already available. For example, the Clinical Standards Board for Scotland published "Standards for Healthcare Associated Infection Control" in December 2001, and, in January 2002, the Chief Medical Officer wrote to NHS Trusts and NHS Boards to stress the importance of rigorous attention to hygiene and infection control measures. That said, the Executive and the Food Standards Agency (Scotland) are working with HEBS and the HSE to prepare appropriate promotional material and expect the first tranche to be available later in 2002.

In addition, the FSA "Food Hygiene" Campaign will generally cover this issue. Handwashing is one of the four key messages in the campaign, which targets the catering sector and the general public.

- 4.21 Hygiene for families/groups affected by *E. coli* O157 infection should be promoted via available literature.

Accepted. The Executive has asked HEBS to review and revise existing health promotion material, as appropriate, and prepare new material deemed necessary. This will become available progressively from Summer 2002.

In addition, HUSH has been awarded funding for 3 years from 2002/03, to enable information on *E. coli* O157 to be disseminated to potentially vulnerable groups.

- 4.22 All contact siblings under 5 should be excluded as a condition of licensing of nurseries and other education/social work facilities.

The Scottish Commission for the Regulation of Care became operational on 1 April 2002 and assumed responsibility for the regulation of early education and childcare. Under the new regulations and national care standards for early education and childcare up to the age of 16, providers will be required to show that staff take measures to control the spread of infection. Failure to demonstrate this will result in proportionate enforcement action by the Commission.

Surveillance

- 4.23 Introduction of a standardised enteric disease surveillance form.
- 4.24 Adoption of a revised Scottish Infectious Disease Surveillance System (SIDSS).
- 4.25 Continuation of the *E. coli* Register.

- 4.26 Creation of a surveillance system for HUS to include both children and adults.
- 4.27 High priority is given to ensuring that outbreaks are adequately investigated, sources and outcomes traced, reports produced and copies forwarded to SCIEH.
- 4.28 Integration of surveillance of *E. coli* O157 from human/food/animals and environmental sources, including water.

Accepted. The Executive and FSAS share the Task Force view of the importance of maintaining and enhancing effective surveillance arrangements.

SCIEH has undertaken to implement these recommendations, in collaboration with others, as appropriate. The Executive has provided appropriate additional funding.

Outbreak management

- 4.29 The Cairns Smith Group should consider the following:
 - clarify roles and responsibilities especially at national level e.g. Designated Medical Officer, Food Standards Agency, SCIEH, Environmental Health Officers;
 - consider need for a national SWAT team;
 - consider creating a panel of national experts for outbreaks and especially food investigation;
 - develop protocols for food and epidemiological investigation e.g. sampling priorities, recording, liaison with food laboratories, tracing food chain, inspection required for outbreaks;
 - develop and standardise protocols for controlling water-related incidents;
 - improved co-ordination and formalised support mechanisms among neighbouring Health Boards/SCIEH/FSA;
 - ongoing review and development of local outbreak plans between Local Authorities, Health Boards and FSA;
 - consider introduction of standards and audit for outbreak management; and
 - consider introducing formal reporting system for outbreaks and encourage formal publication of outbreak reports.

Accepted. The Cairns Smith Group, a joint review group established by FSAS/SEHD, has recently completed a revision of guidance on the investigation and control of outbreaks of foodborne disease in Scotland, taking account of the various relevant recommendations of the Task Force. The revised guidance was published in April 2002.

Chapter 5 Animals and the environment – understanding the hazard

- 5.1 Educate the public, and those with relevant occupational interest, on the prevalence of *E. coli* O157 in all ruminants, but mainly in cattle and sheep.
- 5.2 Advise farmers, other animal handlers and their families of the potential risks from contact with animals and their faeces or from cross contamination.

Accepted. The HSE has for some years published advice and guidance on the prevalence of *E. coli* O157 in ruminants and other animals and the precautions that should be adopted by animal handlers and their families to minimise the risk from contact with animals and animal faeces.

The Executive has asked HEBS to review and revise existing health promotion material, as appropriate. This will become available progressively from Summer 2002. The farming community will remain one of the primary target groups.

- 5.3 Carry out more follow-up studies back through multiple routes of infection.
- 5.4 Consider detection of other VTECs.
- 5.5 Maintain ongoing surveillance, identify risk factors and reduce spikes of excretion.
- 5.6 SEERAD should institute now, research to monitor the introduction and movement of *E. coli* O157 in some restocked herds post foot and mouth.

The Scottish Executive in conjunction with FSA and the Department of Environment, Food and Rural Affairs (DEFRA) has taken forward this recommendation, firstly, in the form of a workshop designed to determine the potential for scientific research as part of post-FMD restocking and secondly by an analysis of detailed proposals for such research provided by a Scottish Research Consortium. It was considered that these proposals would not deliver additional information beyond that being provided through the existing extensive UK research programme into *E. coli* O157. The Scottish Executive will continue to support a well-designed research programme which is aligned with the wider context of current programmes and funding into *E. coli* O157.

FSA(S) is funding a non-O157 VTEC study to look at the prevalence of *E. coli* O26, O111, O145 and O103 in 300 Scottish beef herds in addition to the International Partnership Research Award in Epidemiology (IPRAVE) on *E. coli* O157.

As a result of involvement in outbreak control management HSE is also proposing research to clarify the role of the wild rabbit population as a possible vector in the spread of the bacterium.

Chapter 6 Organic waste on land in Scotland

- 6.1 That an education/awareness programme for the farming community would again be worthwhile together with a commitment to periodic revision and publication.

Accepted. The Executive has asked HEBS to review and revise existing health promotion material, as appropriate, and prepare new material deemed necessary. This will become available progressively from Summer 2002. The farming community will remain one of the primary target groups.

In addition HSE will review existing guidance and promotional material on *E. coli* O157 targeted at the farming community and other key groups as part of its ongoing review of guidance and publications, and in doing so, will take account of the findings and recommendations of the Task Force.

- 6.2 The PEPFAA code guidance on waste management and recycling should be the subject of a concerted consultation programme by the Scottish Agricultural Pollution Group with farmers, other land managers and contractors as part of the Executive's review of the Code.

- 6.3 **A generic risk assessment format should be part of Farm Waste Management Plans and of the consultation referred to above.**
- 6.4 **An education and awareness-raising campaign on waste storage, practical treatment and application should be initiated by the Executive through the Scottish Agricultural Pollution Group for farmers, other land managers and contractors.**
- 6.5 **As part of the foregoing campaign, the Executive, with the Scottish Agricultural Pollution Group, should strengthen waste management/recycling practice through incentives for creation and implementation of farm waste management plans.**

The Scottish Executive has asked the Scottish Agricultural Pollution Group to take appropriate account of relevant Task Force recommendations, as part of the planned process of reviewing and updating the Prevention of Environmental Pollution from Agricultural Activity (PEPFAA). That process will, of course, include a consultation phase, which will provide members of the Task Force with an opportunity to engage in a detailed dialogue about the way forward.

- 6.6 **Farm/product assurance scheme should be encouraged to adopt PEPFAA guidance, including Farm Waste Management Plans, as prerequisites.**

Accepted. The Executive will encourage farm and product assurance schemes to recognise their role in implementing the recommendations of the Task Force.

- 6.7 **Steps to minimise volumes and leakage of contaminated water should be encouraged by the Scottish Agricultural Pollution Group.**

Accepted. The Scottish Executive has asked the Scottish Agricultural Pollution Group to take appropriate account of relevant Task Force recommendations, as part of the planned process of reviewing and updating the PEPFAA code.

The Scottish Executive commissioned the Scottish Agricultural College (SAC) to hold a series of technology transfer workshops in sensitive catchments during March 2002, to help farmers develop cost-effective measures to contain contaminated water and otherwise prevent agricultural diffuse pollution. These workshops publicised the PEPFAA Code, alluded to its forthcoming revision, and described some likely amendments to it.

- 6.8 **More Quality Control and Quality Assurance should be established for exempt industrial wastes brought in off-farm and also for irrigation (see also "Sewage Sludge").**

Accepted. The Executive is carrying out a wide-ranging review of possible amendments to the Waste Management Licensing Regulations (WMLR). Proposals include:

- a requirement for those intending to spread organic wastes on land to demonstrate to the Scottish Environment Protection Agency (SEPA) the agricultural benefit or improvement for animal and plant communities;
- restrictions on land utilisation following the application of wastes to prevent harm to health, wastes to be analysed for chemical and microbiological parameters prior to spreading;
- a prohibition on the spreading of septic tank waste or sludge on land.

6.9 Store blood at 15°C or below (if not practicable, consideration should be given to more frequent removal from the abattoir, i.e. daily).

The Fresh Meat (Hygiene and Inspection) Regulations 1995 and Poultry Meat, Farmed Game, Bird Meat and Rabbit Meat (Hygiene and Inspection) Regulations 1995 deal with this issue from the perspective of prevention of odours and pests, rather than proliferation of bacteria. There is no requirement that blood is chilled but some abattoirs do this to prevent malodours.

Most abattoirs have the blood collected in sealed containers either daily or every other day.

Furthermore, a statutory requirement for blood from abattoirs to be treated prior to final disposal is expected to be introduced in the first half of 2003 as part of new EU controls on animal bi-products.

6.10 The Scottish Executive considers exempting the spreading of industrial waste conditional upon

- the contractor satisfying SEPA of its satisfactory pre-spreading assessment for the site;
- SEPA being satisfied through site inspection that the spreading carried out under exemption did not cause environmental pollution. This topic should be included also in the initiatives for education and good practice recommended at paragraph 6.34.

The Executive is carrying out a wide-ranging review of possible amendments to the Waste Management Licensing Regulations (WMLR). Proposals include:

- a requirement for a waste producer who wishes to recycle organic waste to land to provide an audit trail which SEPA can assess;
- a charging scheme to be developed by SEPA to recover the cost of inspections from those seeking the exemption.

The Executive plans to initiate public consultation about these outcomes from the review and will aim to implement changes later in 2002.

Chapter 7 Water supply

Public supplies

7.1 The water authority gives particular attention to coliform and *E. coli* testing of water from a high risk catchment area. Where coliforms or *E. coli* were detected repeatedly in a supply, routine testing for *E. coli* O157 should be considered.

7.2 Where a supply has had repeated coliform and *E. coli* failures and/or known treatment works failures immediate testing for *E. coli* O157 should be carried out and boil water notices issued as appropriate.

Accepted. The Executive has issued written guidance to water authorities on the need to give particular attention to coliform and *E. coli* testing of water from high risk catchment areas and the consequentials of detection.

Private supplies

7.3 The PEPFAA Code should also include a requirement for fencing off water sources e.g. springs, wells and boreholes.

7.4 That the Scottish Executive should consider means of making this a mandatory requirement for private water supplies.

The Scottish Executive has asked the Scottish Agricultural Pollution Group to take appropriate account of relevant Task Force recommendations, as part of the planned process of reviewing and updating the PEPFAA code. That process will, of course, include a consultation phase, which will provide members of the Task Force with an opportunity to engage in a detailed dialogue about the way forward.

The question of whether there should be a mandatory requirement for fencing off private water supplies featured in the Scottish Executive consultation paper "Private Water Supply Regulation: a consultation" which was issued in November 2001.

Taking account of that consultation process, the Executive expects regulations to be in force before the end of 2002.

7.5 The leaflet "Keeping it Safe" is revised and re-issued to all owners and users of private water supplies as soon as it is practicable.

Accepted. A revised version of "Keeping it safe" was distributed in December 2001.

7.6 Unless water is known to be of good quality then advice on boiling the water should be provided to all visitors, etc.

7.7 Where high levels of coliforms and *E. coli* are detected within a private water supply whether to a single dwelling or to e.g. a campsite, boil water notices should be issued until steps have been taken to improve the quality of the water.

7.8 A standardised boil water notice be used by both Local Authorities and Water Authorities to ensure a consistent approach is taken throughout the country in the event of the detection of *E. coli* O157 in both private and public water supplies.

7.9 Testing for *E. coli* O157 be carried out if an association with either a private or public water supply is identified during the course of an outbreak or sporadic case of *E. coli* O157 and in addition boil water notices are issued to all persons/properties on the supply. We judged it important that where testing for *E. coli* O157 is to be carried out in association with human illness, samples be sent to a laboratory with facilities to test by IMS e.g. SERL.

7.10 The Scottish Executive should consider measures to ensure unsatisfactory private water supplies are upgraded to an acceptable standard.

7.11 Microbiological risk assessment should be included as a regulatory requirement.

The question of the circumstances under which it should be deemed appropriate to provide visitors with information about the potential risks of certain private water supplies, and a range of other issues relating to regulatory controls, featured in the Scottish Executive consultation paper "Private Water Supply Regulation: a consultation" which was issued in November 2001.

Taking account of that consultation process, the Executive expects regulations to be in force before the end of 2002.

Chapter 8 Access and use of rural land

8.1 Reiteration of advice to farmers at regular intervals.

8.2 Greater care by workers in keeping working clothes, vehicles and working animals separate from children and domestic space.

Accepted. The Executive, HEBS and the HSE will build on existing activity, and employ a range of methods, to further raise awareness of the prevalence of *E. coli* O157 in all ruminants, but mainly in cattle and sheep and the ease of transmission of the organism. The farming community will remain one of the primary target groups.

8.3 Work should be commissioned by SEHD to review infections among animal handlers.

Accepted. The Chief Scientist's Office of the Scottish Executive Health Department will consider any relevant research proposals, which would be subject to the normal peer review process.

8.4 Place greater onus on owners or managers of private water supplies to ensure that a risk assessment is updated at regular intervals.

The Scottish Executive issued the consultation paper "Private Water Supply Regulation: a consultation" in November 2001. Taking account of that consultation process, the Executive expects regulations to be in force before the end of 2002.

8.5 Those planning camping, etc. should check out the water supply as far as possible and consider a back-up (bottled supply). In relation to burns and streams, be aware that

- surface water run off from fields containing animal droppings can lead to contamination of streams, burns, etc. particularly during wet conditions;
- ensure that water from burns and streams is treated before drinking.

8.6 In relation to use of public areas such as show grounds, complementary action can minimise the risk from animals

- remove obvious droppings after the event;
- cut the grass and dispose of it e.g. fenced off for composting.

Accepted. In March 2002 the Executive issued updated guidance on recreational use of animal pasture to relevant organisations, including for example the National Farmers Union, the National Scout Association and the Guide Association.

8.7 Visits to open farms continue to be potentially valuable educational opportunities which should not be discouraged.

8.8 In relation to open farm visits, the operators' risk assessment has to be sound and its management of facilities and of visitors' needs to be strict.

Accepted. The Scottish Executive is currently considering the most effective way to assist education authorities assess the risks associated with farm visits. The generic risk assessment set out in the Task Force report is likely to form the basis of guidance for teachers, which will also take into account the HSE's pivotal role in relation to health and safety matters.

The HEBS' review of health promotion material, outlined above, can also be expected to have a positive impact in this specific context.

- 8.9 That publicity on bathing waters and beaches available by the Government, Water Authorities, Local Authorities and Keep Scotland Beautiful should include concerns for**
- **vigilance by bathers in avoiding visible animal droppings;**
 - **consideration by animal owners in not adding to such pollution; and**
 - **close attention by bathers to personal hygiene, especially in children.**

The main risks to human health for those using bathing water have hitherto come from the disposal of domestic sewage and industrial effluents to the water environment. With implementation of measures to control these inputs, however, diffuse sources of pollution, both urban and rural, have been unmasked as important contributors. In the context of potential transmission of *E. coli* O157 agricultural diffuse pollution can be particularly important. This can arise from animals defecating directly into water courses, or from faecal matter being washed into water courses by rainfall events, either from grazing animals, failure of containment procedures at farms, or the spreading of slurries and manures.

The Executive and HEBS will, however, work with others to raise awareness of these risks. In particular, the Executive has prepared a bathing water strategy which co-ordinates work to improve the quality of bathing waters being done across the range of potential polluters. It provides a context for massive investment by the Water Authorities in remediating and upgrading sewer systems and minimising discharges that can affect bathing water. It also outlines measures being taken in respect of urban and rural diffuse pollution.

- 8.10 The HSE guidance on levels of supervision should be the minimum level required and in addition**
- **where direct contact with farm animals is possible, children under 5 years of age are at greater risk and may need to be carried or more closely supervised;**
 - **organised visits to farms or similar sites should first have a pre-visit by the organiser to assess the facilities and gauge where/if close supervision or restriction might be required; and**
 - **where numbers of children were to visit and close supervision could not be arranged, the participation of under-5s should be postponed to a separate, smaller scale visit.**

Accepted. The Scottish Executive has brought this recommendation to the attention of the HSE as occupational health and safety is a reserved matter. The HSE is in discussion with OFSTED in England and Wales as to the basis for current guidance on adult/child supervision ratios – see also comments under Section 3.2. In the interim, existing guidance on open farms, targeted at farmers and teachers, will be reviewed and will take account of the Task Force’s recommendations.

In addition, the Scottish Executive is currently considering the most effective way to assist education authorities to assess the risks associated with farm visits. The generic risk assessment set out in the Task Force report is likely to form the basis of guidance for teachers, which will also take into account the HSE’s pivotal role in relation to health and safety matters.

The HEBS’ review of health promotion material, outlined above, can also be expected to have a positive impact in this specific context.

Chapter 9 Food

9.1 Focus *E. coli* O157 monitoring in foods to situations where biological plausibility allowed for targeted, well-defined study or where there was suspicion or association with an outbreak.

9.2 The application of the Meat Products Regulations should be reviewed and clarified.

Accepted. The Food Standards Agency is preparing revised guidance and codes of practice, consistent with the views of the Task Force. A related consultation process will begin in Spring 2002.

In addition, the FSA is planning to develop a microbiological food surveillance strategy and will take account of this recommendation in that context.

9.3 The Advisory Committee on the Microbiological Safety of Food (ACMSF) message continues to be reiterated at frequent intervals, not least throughout the “BBQ” season.

Accepted. The Food Standards Agency strategy reflects this recommendation from the Task Force. This key message will feature in the appropriate seasonal segment of the Agency’s ongoing “Food Hygiene” Campaign.

9.4 All raw drinking milk and raw cream for sale for consumption in that state in England and Wales should be heat-treated.

9.5. Raw sheep and goats’ milk for sale for drinking in England and Wales should be heat-treated.

In December 2000, the FSA Advisory Committee for Wales recommended that the sale of raw drinking milk should be banned in Wales. Their recommendation has been reported to the Chairman of the FSA and the National Assembly for Wales. A consultation exercise was launched in Wales in January 2002, to assess stakeholder opinion on either a ban or continued sales with enhanced health warnings.

In relation to England, the FSA notes the recommendations. The current policy is that, where risks are taken voluntarily by consumers, they should be informed of the risks. As such, raw drinking milk carries a health warning. There are plans to enhance the warning and increase the scope for microbiological testing by the enforcement authorities of raw milk on sale to consumers.

9.6 The recommendations on traceability in the Report on Small Scale Cheese Production in Scotland are implemented by the FSA.

Accepted. The FSA(S) is currently developing an implementation strategy relating to the recommendations set out in the Report on Small Scale Cheese Production, including traceability. Enforcement officers will receive appropriate training in April 2002, in order to facilitate a subsequent programme of consultation with individual cheesemakers.

9.7 Cheese made from raw milk should be clearly identified at retail to permit the consumer to make an informed choice.

Products made using unpasteurised milk are required to show clearly “for inspection purposes” that they have been “made from raw milk”, but this requirement does not apply directly to the labelling of products sold at retail level. The Advisory Committee on the

Microbiological Safety of Food made recommendations some time ago about providing information on cheeses made from raw milk from cows and other species, and this advice has been annexed to guidance notes on existing food labelling regulations. The Food Standards Agency is about to update these guidance notes and plans to strengthen this advice to ensure that consumers receive more consistent information about those products made using raw milk. That said, the Agency has no immediate plans to seek to impose additional labelling requirements on cheese made from raw milk.

9.8 Clear labelling/instructions for ready to cook/eat salad vegetables were required and should be supported by regulations.

The Food Standards Agency is about to update guidance notes on existing food labelling regulations and plans to strengthen this advice to encourage the provision of more consistent and comprehensive information to enable consumers to prepare and cook food safely.

9.9 Growers of salads/vegetables to be eaten raw should be advised on the correct handling of organic wastes.

9.10 Adequate training to be made available and undertaken by all of those involved in the preparation, handling and distribution of salad and vegetable crops.

9.11 All salad/vegetables to be consumed in their raw state, even though pre-washed, should be washed prior to consumption.

9.12 An education programme be targeted at smaller businesses, caterers and consumers on the need for a high standard of personal hygiene and for effective washing of all "raw" salad and vegetable products prior to sale and consumption.

9.13 Current handling procedures for sprouted seeds were included as part of the above education campaign.

Accepted. The Food Standards Agency strategy reflects the broad thrust of these recommendations from the Task Force. Some of these key messages will feature in the Agency's ongoing "Food Hygiene" Campaign and in particular the seasonal segment scheduled for June 2002.

The "Food Hygiene" Campaign contains information designed to be relevant to both commercial and domestic audiences.

9.14 The effectiveness of the implementation of licensing in butchers' shops should be assessed by the Food Standards Agency prior to considering the extension in all other high-risk premises.

Accepted. The Food Standards Agency is currently evaluating the implementation of licensing in butchers' shops and expects to publish a related report in Scotland in June 2002.

9.15 The UK Government to continue to press for adoption of Hazard Analysis and Critical Control Points (HACCP).

The current work to consolidate the European Food Hygiene Regulations is expected to introduce this requirement. The FSA Board, at a meeting on 14 November, agreed a strategy for the introduction of HACCP in food businesses ahead of the consolidation.

Chapter 10 Education and communication

- 10.1 Engage media and public.
- 10.2 Communicate the sciences effectively, clearly and concisely.
- 10.3 Put the message across as diversely as possible.
- 10.4 Present information openly and clearly.
- 10.5 Be aware of potential for news and stories.
- 10.6 Make use of trade journals.
- 10.7 Target specific topics, specific sections of the media and specific groups of interested people.
- 10.8 Raise the profile of the public's ability to make a difference through simple procedure and precautions.
- 10.9 Seek a cultural change towards personal hygiene.
- 10.10 Give guidance to parents and carers which should seek their co-operation in recognising when to keep children at home in order to prevent cross infection. The managers of institutions including nurseries, playgroups, etc. should also be given guidance on the risks involved and the actions to take.
- 10.11 Communicate our findings regarding risks and actions to minimise risk can be helpful to children and young people through the health education and environmental aspects of the curriculum.
- 10.12 Including information on risk self-assessment for educational visits to farms and a generic risk assessment form, if possible, in the educational programme.

Accepted. The Scottish Executive and the Food Standards Agency, working with HEBS and others, will develop appropriately targeted and differentiated material, linked by core strategic messages. This will build on existing plans and available resources, including for example the £20 million earmarked over a five-year period for the FSA's ongoing "Food Hygiene" campaign.

- 10.13 Implementation of this Report should seek to enlist the support of the media and the public in carrying forward its recommendation.

Accepted. It is self-evident that the media and consumer representatives can, if properly engaged, extend the range and impact of priority messages to key groups and individuals. In taking forward actions outlined above, the Scottish Executive and the Food Standards Agency will therefore (continue to) employ a range of methods to access the views and expertise of media professionals and the public at large.

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