

**ADVISORY COMMITTEE ON  
DANGEROUS PATHOGENS**

**ANNUAL REPORT 2007**

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## 1. INTRODUCTION

The Advisory Committee on Dangerous Pathogens (ACDP) is a non-statutory advisory non-Departmental Public Body. The Committee comprises a Chairman and 17 members. The membership is tripartite, with scientific experts, employer and employee representatives.

The work of the ACDP cuts across a number of Government Departments, and thus the Committee is supported by a Secretariat with representatives from the Health and Safety Executive (HSE), the Health Protection Agency (HPA) and the Department for Environment, Food and Rural Affairs (Defra).

In 2007 the ACDP held three main meetings (the 86<sup>th</sup> on the 5<sup>th</sup> January, the 87<sup>th</sup> on the 7<sup>th</sup> June and the 88<sup>th</sup> on the 2<sup>nd</sup> October). Agenda, papers and a summary of these meetings is available at:

<http://www.hse.gov.uk/aboutus/meetings/acdp/index.htm>

A number of the ACDP Working Groups met throughout the year including:

- The Transmissible Spongiform Encephalopathy Working Group (TSE WG);
- A number of subgroups to discuss the revision of the 1996 ACDP guidance “Management and Control of Viral Haemorrhagic Fevers”;
- The Steering Group for revision of the ACDP guidance on blood-borne viruses;

A summary of these Working Groups can be found under Item 6 of this report.

## 2. TERMS OF REFERENCE

The Advisory Committee on Dangerous Pathogens’ terms of reference are:

*“To advise the Health and Safety Executive, and Ministers for the Department of Health and the Department for Environment, Food and Rural Affairs, and their counterparts under devolution in Scotland, Wales and Northern Ireland, as required, on all aspects of hazards and risks to workers and others from exposure to pathogens.”*

## 3. DANGEROUS PATHOGENS

### 3.1 Background

The remit of ACDP is to provide advice to workers and others on risks from exposure to dangerous pathogens (also known as biological agents and infectious agents). Workers and others can be exposed to a range of dangerous pathogens in the workplace and through workplace activities.

Bacteria, fungi, viruses, internal parasites and infectious proteins (known as prions) are all defined as dangerous pathogens. Dangerous pathogens may be used intentionally at work, e.g. in a microbiology laboratory, but exposure can also occur that is incidental to the purpose of the work, e.g. healthcare workers exposed to infectious patients, farmers exposed to diseases carried by their stock. Exposure to dangerous pathogens in the workplace could lead to the development of infectious disease, disease caused by the toxins produced by the dangerous pathogen, or an allergic reaction.

### **3.2 Legislation**

Dangerous pathogens include infectious agents that cause diseases transmissible between animals and man (zoonoses). Such agents are controlled under human health (DH/HPA remit), health and safety (HSE remit), and animal health legislation (Defra remit). The primary purpose of the latter legislation is to prevent the introduction and spread of animal diseases that affect farmed livestock and poultry.

One of ACDP's roles is to advise on worker health and safety, and much of its advice supports health and safety legislation on the control of exposure to hazardous substances such as dangerous pathogens. Health and safety legislation (principally the Control of Substances Hazardous to Health [COSHH] Regulations 2002 (as amended)) requires employers to assess the risks from dangerous pathogens in their workplace and to prevent or control exposure. Further information can be obtained from the HSE website:

<http://www.hse.gov.uk/biosafety/index.htm>.

Defra seeks to control imports of animal pathogens and carriers from third countries under the Importation of Animal Pathogens Order 1980, and animal pathogens causing serious, predominantly exotic, diseases of farmed livestock and poultry under the Specified Animal Pathogens Order 1998 by means of licensing regimes. Further information can be obtained from Defra's website: <http://www.defra.gov.uk/>.

There are various pieces of legislation covering public health; further information on these can be obtained from the DH website

<http://www.dh.gov.uk/Home/fs/en>.

### **3.3 Role of the ACDP**

The work of ACDP can be broadly divided into three areas:

- Production of guidance relating to safety at work and protection of public health;
- Provision of advice to Government on the formulation and implementation of legislation;
- Provision of advice to Government on specific pathogen risk issues and their impact.

ACDP makes a significant contribution to the assessment of risks to employees and the general public from infectious agents, and to ensuring that appropriate controls are in place. It has produced several guidance documents that give practical advice on the application of health and safety measures for a range of occupational groups and on a range of public health issues.

#### 4. MEMBERSHIP IN 2007

##### 4.1 Advisory Committee on Dangerous Pathogens (ACDP) Membership

Independent member	Expert/Employer/ Employee representative/Lay Member	Employer
Professor George Griffin (Chair)	Expert in clinical and research microbiology and infectious diseases	St George's Hospital Medical School
Professor Tony Hart	Employer representative	University of Liverpool
Professor Colin Howard	Expert in veterinary microbiology/parasitology	The Royal Veterinary College
Professor Will Irving	Expert in clinical virology	University of Nottingham
Ms Karen Jones	Lay Member	Air Support International, Crawley
Dr John Keddie	Employer representative	GlaxoSmithKline
Mr John McLuckie	Employee Representative	Belfast City Hospital
Dr Phil Minor	Expert in research virology	National Institute of Biological Standards and Control
Dr Mike Painter	Expert in epidemiology/ public health	Public health physician (retired)
Mrs Judith Potter	Employee Representative	Royal Devon and Exeter NHS Foundation Trust
Dr Andrew Rycroft	Expert in veterinary microbiology	The Royal Veterinary College
Professor Armine Sefton	Expert in medical microbiology	Bart's and The London
Mr Gordon Sutehall	Expert in laboratory health and safety	Addenbrooke's Hospital
Dr Diana Westmoreland	Expert in clinical virology	University Hospital of Wales
Dr Peter Wilson	Employer representative	St Andrew's Hospital

Assessors and Observers	Representing
Dr Tim Brooks	Centre for Emergency Preparedness and Response, Health Protection Agency
Dr David Brown	Health Protection Agency, Centre for Infections
Dr Ian Brown	Veterinary Laboratories Agency
Professor Brian Duerden	Department of Health, Inspector of Microbiology
Ms Amanda Gatto	Department of Health
Mr Greg Jordinson	Environment Agency
Dr Kerri Mack/Dr Andrew Simpson	Defence Science and Technology Laboratories
Dr Paul Manser/Mrs Ruth Lysons	Defra

Mr Michael Paton	Health and Safety Executive
Mr David Redwood	Veterinary Laboratory Agency
Dr Roland Salmon	National Public Health Service for Wales
Dr Delia Skan	Department of Health, Social Services and Public Safety, Northern Ireland
Ms Maggie Tomlinson	Department of Health
Dr Malcolm McWhirter	Scottish Executive

Secretariat	Representing
Mr Colin Dunn	Health and Safety Executive
Miss Papia Khanom	Defra
Mr Graham Lott	Defra
Miss Charlotte Mirrielees	Health Protection Agency
Mr Norman Smith	Health and Safety Executive

Sadly Professor Tony Hart died in September 2007. He made a significant contribution to the work of ACDP, had served for 9 years as an employer representative on the committee and will be greatly missed.

There were some changes to the ACDP observers and assessors in 2007. These were:

- Dr Malcolm McWhirter replaced Dr Lesley Wilkie as the representative from the Scottish Executive at the beginning of 2007
- Mrs Ruth Lysons replaced Dr Paul Manser as the Defra observer
- Dr Andrew Simpson replaced Dr Kerri Mack as the Observer for the Defence Science and Technology Laboratories

#### 4.2 ACDP TSE Working Group Membership

Independent member	Employer
Professor Donald Jeffries (Chair)	St. Bartholomew's Hospital (retired)
Mr Ray Bradley	Veterinary Laboratory Agency (retired)
Mr John Goodman	Meat and Livestock Commission
Professor Colin Howard	The Royal Veterinary College
Professor James Ironside	National CJD Surveillance Unit
Professor Ian McConnell	University of Cambridge
Professor Jean Manson	Neuropathogenesis Unit, Roslin Institute
Dr Phil Minor	National Institute of Biological Standards and Control
Dr Mike Painter	Public health physician (retired)
Dr Geoff Ridgway	University College London (retired)
Dr Roland Salmon	National Public Health Service for Wales
Mr Ron Spellman	Unison
Dr Tim Wyatt	Mater Hospital Trust, Northern Ireland

Officials and Observers	Representing
Mr Peter Bennett	Department of Health, Statistical Unit
Mr Patrick Burke	Defra

Dr Rebecca Cardigan	Secretariat to the Advisory Committee on the Safety of Blood, Tissues and Organs
Dr Peter Christie	Scottish Executive
Dr Nicky Connor/Dr Yimmy Chow	CJD Incidents Panel Secretariat
Dr Lynne Bountiff/Dr Darren Cutts	Food Standards Agency (retired mid-2007)
Dr Irene Hill	Food Standards Agency
Dr Neil Ebenezer	Secretariat to the Advisory Committee on the Microbiological Safety of Blood, Tissues and Organs
Mr Allan Hilderley	Medicines and Healthcare Products Regulatory Agency
Mr Craig Kirby	Meat Hygiene Service
Ms Amanda Gatto	Department of Health
Mr Mark Noterman	Department of Health, CJD Policy
Dr Michael Paton	Health and Safety Executive
Mr David Pryer	Chair of CJD Incidents Panel
Dr Kate Richards/Dr Tom Barlow	Spongiform Encephalopathy Advisory Committee Secretariat, Defra
Dr John Stephenson/Dr Elaine Gadd	Department of Health, Research and Development Directorate
Mr Nigel Tomlinson	Department of Health, Estates and Facilities

Secretariat	Representing
Miss Charlotte Mirrielees	Health Protection Agency

There were some changes to the TSE Working Group in 2007. These were:

- Four new members joined the ACDP TSE Working Group in summer 2007; Professor Colin Howard, Professor Ian McConnell, Professor Jean Mason and Dr Phil Minor
- Dr Tom Barlow replaced Dr Kate Richards as Observer from the Spongiform Encephalopathy Advisory Committee Secretariat
- Dr Elaine Gadd replaced Dr John Stephenson as Observer from the Department of Health's Research and Development Directorate
- Dr Darren Cutts replaced Dr Lynne Bountiff as Observer from the Food Standards Agency
- Dr Yimmy Chow replaced Dr Nicky Connor temporarily as Observer from the CJD Incidents Panel Secretariat
- Dr Rebecca Cardigan replaced Dr Neil Ebenezer as Observer from the Advisory Committee on the Safety of Blood, Tissues and Organs Secretariat (formerly the Advisory Committee on the Microbiological Safety of Blood, Tissues and Organs)

#### 4.3 Membership of subgroups to discuss the revision of the 1996 ACDP guidance "Management & Control of Viral Haemorrhagic Fevers"

##### ACDP VHF Diagnostic subgroup

Member	Representing
Dr Emma Aarons	University College Hospital
Dr Sheila Burns	Newcastle General Hospital

Dr Anne Dawnay	University College Hospital
Dr Robin Gopal	Health Protection Agency
Professor Don Jeffries	Emeritus Professor of Virology
Dr Steve Lever	Defence Science and Technology Laboratories
Dr Graham Lloyd	Health Protection Agency
Mr Nigel Reader	Department for Transport
Mr Rob Shorten	Royal Free Hospital
Dr Clive Taylor	Health Protection Agency

<b>Officials/Observers</b>	<b>Representing</b>
Mr Steve Copping	Health and Safety Executive
Ms Amanda Gatto	Department of Health
Dr Mike Paton (Chairman)	Health and Safety Executive
Ms Maggie Tomlinson	Department of Health
Mr Nigel Tomlinson	Department of Health

<b>Secretariat</b>	<b>Representing</b>
Miss Charlotte Mirrielees	Health Protection Agency

#### **ACDP VHF Clinical Management subgroup**

<b>Member</b>	<b>Representing</b>
Professor George Griffin (Chairman)	St George's, University of London
Ms Breda Athan	Royal Free Hospital
Dr Barbara Bannister	Royal Free Hospital
Dr David Brown	Health Protection Agency
Mr Ian Bullamore	London Ambulance Service
Dr Simon Clarke	Frimley Park Hospital
Professor Richard Elliott	St Andrew's University
Dr Andrew Freedman	Cardiff University School of Medicine
WC Andy Green	Ministry of Defence
Dr Sara Hedderwick	Royal Victoria Hospital
Mr Peter Hoffman	Health Protection Agency
Ms Karen Jones	ACDP member
Dr Steve Lever	Defence Science and Technology Laboratories
Dr Graham Lloyd	Health Protection Agency
Dr Dilys Morgan	Health Protection Agency
Ms Sheila Morgan	Newcastle General Hospital
Dr Ed Ong	Newcastle General Hospital
Dr Mike Painter	ACDP member

<b>Officials/Observers</b>	<b>Representing</b>
Mr Steve Copping	Health and Safety Executive
Ms Amanda Gatto	Department of Health
Mr Ken Holmes	Department of Health
Dr Mike Paton	Health and Safety Executive
Dr Geoff Ridgway	Department of Health (consultant)
Ms Maggie Tomlinson	Department of Health
Mr Nigel Tomlinson	Department of Health

<b>Secretariat</b>	<b>Representing</b>
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Miss Charlotte Mirrielees	Health Protection Agency
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#### 4.4 Membership of the Steering Group for revision of the ACDP guidance on blood-borne viruses

<b>Independent member</b>	<b>Employer</b>
Professor Will Irving (Chair)	University of Nottingham
Dr Nick Armand-Smith	Stoke Mandeville Hospital
Professor Brian Gazzard	Chelsea and Westminster Hospital
Dr Kit Harling	Derriford Hospital, Plymouth
Professor Don Jeffries	St Bartholomew's Hospital (retired mid-2006)
Professor Mike Malim	Kings College, London
Dr Fortune Ncube	Health Protection Agency
Dr Mike Painter	Public health physician (retired)
Dr Alison Rimmer	Northern General Hospital, Sheffield
Dr Howard Thomas	Imperial College School of Medicine
Dr Diane Westmoreland	University Hospital of Wales (retired)
Mr Paul Weaving	Cumberland Infirmary

<b>Observers</b>	<b>Representing</b>
Dr Alan Beswick	Health and Safety Laboratory
Ms Carole Fry	Department of Health
Miss Amanda Gatto	Department of Health
Professor David Goldberg	Health Protection Scotland
Dr Michael Paton	Health and Safety Executive
Ms Maggie Tomlinson	Department of Health

<b>Secretariat</b>	<b>Representing</b>
Mr Colin Dunn	Health and Safety Executive
Mr Norman Smith	Health and Safety Executive
Miss Caroline Walls	Health and Safety Executive

## **5. Key Issues discussed by ACDP in 2007**

In 2007 the ACDP held three main committee meetings: the 85<sup>th</sup> on the 5<sup>th</sup> January, the 86<sup>th</sup> on the 7<sup>th</sup> June and the 87<sup>th</sup> on the 2<sup>nd</sup> October.

Members discussed the progress of ACDP Working Groups under the Secretariat Report at each meeting. ACDP Working Group reports for 2007 are in section 6 of this document.

### **5.1 85<sup>th</sup> Meeting – 5<sup>th</sup> January 2007**

At the 85<sup>th</sup> meeting, members discussed:

- Seasonal Influenza Vaccination Programme for poultry workers

The vaccination programme in England started on the 15<sup>th</sup> January and was scheduled to continue until the end of March. Some Primary Care Trusts had reported that uptake was slow initially but had improved. Scotland and Wales has started their vaccination schemes. In Northern Ireland the issue was under consideration as there was no equivalent of Primary Care Trusts to deliver the vaccine. However, employees of the Veterinary Service working with poultry had been immunised.

- Results of serological testing following H7N3 outbreak

The results of the serological testing of cases and contacts from the H7N3 avian influenza outbreak in Norfolk in 2006 were discussed. Good data would be obtained only if serum samples could be taken from all those people who may have been affected. However, the transient nature of some of the workforce made this impossible. This also prevented any conclusions being drawn about the relationship between clinical illness and serology, as sera from only a third of those who reported symptoms of illness had been obtained.

- Proposed changes to HPA operational approaches to avian influenza incidents

The HPA proposed to change their guidance on the use of anti-virals in avian influenza incidents. Following discussions in European fora, the HPA accepted, subject to certain criteria, that it would only be started from the outset of high risk incidents. Senior officials at the HPA would decide whether an outbreak was assessed as low or high risk. A revised paper detailing the changes would be submitted to ACDP.

- Current Research

The HPA are engaged in two strands of research on influenza viz. laboratory based studies, including vaccine development on H5, H7 and H9 strains and diagnostics, and epidemiological modelling. The modelling studies are aimed at developing effective interventions for, and assessing their applicability in, the event of a pandemic.

- West Nile Virus

The Department of Health had sponsored a mosquito surveillance scheme, as it is known that the WNV vector is present in the UK, but no positive results had been obtained on testing for the virus. Mosquito surveillance was not undertaken in 2006 and discussions would be held on whether to extend the surveillance scheme this year.

- Occupational Exposure to *Coxiella burnetti* (Q fever) in the Agriculture and Food Sector

HSE inspectors investigated an outbreak of Q fever that occurred at a Scottish meat processing plant in summer of 2006, where initially 46 workers were serologically confirmed with clinical Q fever. This rose over a period of time and the final outcome was 110 cases which included contractors, employees and visitors to the site. This raised the question as to whether the vaccination of workers in this sector should be recommended. In 2004, the Joint Committee on Vaccination and Immunisation (JCVI) has considered vaccination but not made any recommendation. The issue of vaccination would be referred again to the JCVI as there is currently no vaccine that is licensed for use in the UK.

- Research Findings and Guidance on Isolation Facilities

The Department of Health has commissioned a study on the design of patient isolation rooms with the aim of achieving all round improvements compared with the current negative pressure isolation rooms. The initial findings showed promising results for infection control and further work is being undertaken.

- Pandemic Influenza

The Department of Health had sent the Committee copies of some papers that had been used to inform the preparation of the UK's pandemic influenza plan.

## **5.2 86<sup>th</sup> Meeting – 7<sup>th</sup> June 2007**

At the 86<sup>th</sup> meeting Members discussed:

- Letter from the Chair to the CMO regarding serological surveillance in UK outbreaks of avian influenza

The Chair had written to the CMO raising the issue of preparedness for detailed sero-epidemiological surveillance of outbreaks of infection. The CMO had responded, thanking the Chair for raising this, and confirming that the HPA were taking this surveillance forward in response to outbreaks. It was anticipated that the studies will be presented to ACDP in future.

- Q fever studies in Northern Ireland

The preliminary results of a study carried out by Belfast Health and Social Care Trust were reported, which looked at serological evidence of Q fever exposure in three groups of people: farmers, vets, abattoir workers. The Committee requested that the final results be presented to them when available. In addition, HSE reported on progress with promoting guidance on Zoonoses in the agricultural sector.

- Seasonal influenza vaccination of poultry workers

DH reported on the outcome of the poultry workers vaccination programme which was implemented by Primary Care Trusts in early 2007. The rate of uptake varied between PCTs, and they chose a variety of contracting routes. It was proposed to run the programme again in 2008 with the aim of achieving better uptake. DH were to organise a stakeholder event to identify strategies that proved successful and identify problem areas which would assist in the planning of the 2007/2008 scheme.

- ACDP Work Plan for 2007/2008

Members were invited to comment on a draft work plan for ACDP for 2007/2008. Based on comments received, several items were to be amended on the ACDP work plan 2007/2008, and the final work plan would go up on the HSE ACDP website.

- ACDP Annual Report 2006

Members were invited to comment on the draft annual report for 2006. The final ACDP annual report for 2006 would go up on the HSE ACDP website.

- Update on the Human Animal Infections and Risk Surveillance Group (HAIRS)

Members were informed about the work of the HAIRS Group, a multi-agency and cross-disciplinary horizon-scanning group that acts as a forum to identify and discuss risks of transfer of animal pathogens to human populations.

- Update on rabies

Defra provided an update on the current position in the UK with regards to the EU review on rabies disease controls in relation to the importation of pet animals. Members confirmed their strong support for retaining current tick and tapeworm controls to protect public health. Defra will keep the committee informed of progress.

- Avian influenza in pigs

The Veterinary Laboratories Agency gave a comprehensive presentation on the potential of pigs to act as a reservoir for human pandemic strains of influenza. Evidence is lacking to support the postulate that pigs act as potential reservoirs for pandemic strains. Members were of the view that seroprevalence studies amongst people working with pigs too determine whether there is subclinical evidence of infection would have some merit.

- West Nile Virus

HPA Porton Down presented an overview of the diagnostic tests used in the UK for WNV and updated Members on the results from their collaboration with the Institute of Virology. DH were advised by Members to seek expert advice on how best to undertake a study of suitable scale as there might be some merit in extending such a study to look for other viruses.

- WHO Global Action Plan for Laboratory Containment of poliovirus following its eradication

HSE invited members to comment on Annex A of the WHO Global Action Plan (GAP). HSE will be conducting an audit of laboratories holding polio virus, raising awareness of the eradication and containment plans, and encouraging destruction of virus and unwanted contaminated materials. HSE will report the findings of the audit at a future meeting. Following completion of the audit of laboratories the UK will need to establish goals and policies for the post eradication/post-OPV era in line with the requirement of GAP. ACDP recognised a change in containment may be required and agreed to review classification of the virus possibly in 2008.

### 5.3 87<sup>th</sup> Meeting – 2<sup>nd</sup> October 2007

At the 87<sup>th</sup> meeting Members discussed:

- Update on Rabies

Defra reported that there had been no major progress on this issue since the last meeting. The European Commission's views were awaited and Members were to be informed of developments at the next meeting.

- West Nile Virus: Letter from Dr Roland Salmon

A letter to the Chair from the Welsh Assembly Government assessor, Dr Roland Salmon, regarding discussions on West Nile Virus at the 85<sup>th</sup> meeting, had been circulated to Members. Dr Salmon had not been present for the discussions at that meeting. The Chair has previously discussed the issues raised with Dr Salmon and had agreed to hold a meeting with the relevant parties in the near future.

- Seasonal influenza vaccination for poultry workers

DH reported that the 2007/2008 vaccination programme had been announced on 28<sup>th</sup> September 2007 and would run from the 1<sup>st</sup> November 2007 to April 2008.

- Foot and Mouth Outbreak at the Pirbright site

HSE's final report into the investigation of biosecurity at the Pirbright site was published on the HSE website on 7<sup>th</sup> September 2007:  
<http://www.hse.gov.uk/news/archive/07aug/finalreport.pdf>

Following the foot and mouth outbreak at Pirbright, Sir Bill Callaghan conducted a review of the regulatory framework for handling animal pathogens, which reported its results in December 2007. All the review's recommendations were accepted by Hilary Benn, the Secretary of State for Environment, Food and Rural Affairs. These include that HSE should become the single regulatory body for both animal and human pathogens, implementing a single regulatory framework and in support of this regulatory framework, ACDP should formulate a common set of containment measures applicable to both animal and human pathogens.

- Government Office for Science – Department of Health Science Review

The Science Review team in the Government Office for Science had started a review of the quality, management and use of both natural and social science in the Department of Health. ACDP had been invited to give its views on DH's use of science, and were asked to send their comments to the HPA ACDP Secretariat.

- Results of serological testing following H5N1 and H7N2 avian influenza outbreak in England and Wales

HPA, Defra and the National Public Health Service Wales provided an update to members on the two avian influenza incidents, H7N2 and H5N1 which had occurred in England and Wales in 2007. ACDP members asked to receive a report of the H7N2

serology results from the National Public Health Service Wales as soon as it was finalised.

- Q fever serology studies in Northern Ireland

A representative from the Belfast Health and Social Care Trust presented the results from their studies on Q fever in humans (including farmers and vets) and in animals in Northern Ireland.

The human seroprevalence data have been published since the meeting was held: McCaughey C, McKenna J, McKenna C, Coyle PV, O'Neill HJ, Wyatt DE, Smyth B, Murray LJ. Human Seroprevalence to *Coxiella burnetii* (Q fever) in Northern Ireland. *Zoonoses Public Health*. 2008;55(4):189-94.

The results of the other studies are to be published in due course.

- Prevalence of Q fever in cattle in Great Britain

Defra updated members on the prevalence of Q fever in cattle in Great Britain (GB). There was a comment that previous instances of Q fever have been associated with gaseous waste release from animal and animal product incinerators and waste from leaky vehicles used to transport infected animals or carcasses. Defra responded that improved standards for animal carcass transport vehicles and for incinerators meant that these issues have now been addressed.

- Status of vaccination against Q fever

There is currently no vaccine licensed for use in the UK; however, a vaccine, Q-vax, is licensed for use in certain risk groups in Australia. Members agreed that this issue should be referred to the Joint Committee on Vaccination and Immunisation for views on the efficiency and effectiveness data for Q-vax and its potential use in the UK for certain occupational risk groups, either routinely or under outbreak circumstances.

- Research findings and guidance on isolation facilities

Members were updated on the results of research commissioned by Department of Health's Estate and Facilities Division, and carried out at the Building Services Research and Information Association, into the performances of isolation facilities. Further results are awaited and it was agreed that ACDP would review the results as soon as they become available and make recommendations for isolation room provision and design.

- Re-categorisation of Sterne strain of *Bacillus anthracis*

Members agreed that the degree of attenuation of the *B. anthracis* 'Sterne' strain was such to permit its handling at lower containment than for non-attenuated strains. However the most appropriate control measures (e.g. microbiological safety cabinets) needed to be based on an appropriate risk assessment of the activity being undertaken and include effective means of inactivating effluent/waste.

## 6. ACDP WORKING GROUPS

### 6.1 Transmissible Spongiform Encephalopathy Working Group (TSE WG)

The TSE WG was reconfigured in 2004 with the following terms of reference:

*“To provide practical, scientifically based advice on the management of risks from transmissible spongiform encephalopathies (TSEs), in order to limit or reduce the risks of human exposure to or transmission of TSEs in healthcare and other occupational settings. To provide advice to ACDP, SEAC and Government Departments, as requested, and to handle issues referred to those bodies, taking into account the work of other relevant bodies.”*

The TSE WG met four times in 2007 on the 20<sup>th</sup> February, 16<sup>th</sup> May, 5<sup>th</sup> September and 5<sup>th</sup> December.

At each meeting, members received an update on the numbers and epidemiology of both CJD and BSE cases and a progress report on current research. Members also received feedback from the ACDP, and related committees such as the CJD Incidents Panel, the Spongiform Encephalopathy Advisory Committee, the Advisory Committee on the Microbiological Safety of Blood, Tissues and Organs and the Engineering and Science Advisory Committee on the decontamination of surgical instruments, including prion removal.

The following key issues were considered by the TSE Working Group in 2007:

#### British Dental Association advice on infection control (A12)

The Chairman had requested that the TSE WG was consulted on the revision of the BDA A12 document which provides a guide to all aspects of infection control in dentistry, including the potential transmission of CJD, on the basis that more detailed advice is available elsewhere. Following presentation of the draft document at a TSE WG meeting the Chairman wrote to DH with the TSE WG's comments. The revised document has not yet been published.

#### Information sheet for funeral directors, relatives and others following a CJD death

This is a new document produced in conjunction with the CJD Support Network and the National CJD Surveillance Unit in Edinburgh. It has been produced as a guidance note for relatives, and for funeral directors, when dealing with a CJD death. It addresses issues such as viewing, dressing and washing the hair of the deceased, and transportation of the body. Guidance already exists on these topics in a few HSE and DH publications, but it was hoped that this simple guidance note, summing up all the issues in one document, would go some way in helping in the difficult situations some relatives are currently facing when wishing to view their deceased relatives.

This document was approved by the ACDP TSE Working Group, the CJD Support Network and the ACDP Chair, and put up on the guidance website as an adjunct to Annex H – “After Death”. The document was also disseminated to funeral directors and other relevant bodies.

#### Brainstem extraction techniques

The TSE Working Group were consulted on alternative methods for brainstem extraction in cattle. An alternative method to brainstem extraction by spoon has been sought by several cattle processing plants. These are proposed in an attempt to

minimise the risk of damage to brainstems during removal, resulting in the sample being classified as unsuitable to test. The two alternative methods are water extraction and air extraction, and these were presented to Members, and the hazards to workers discussed.

Three members visited an abattoir in Shrewsbury in August 2007 to see the extraction techniques first hand. Members were happy that the procedures and protocols for extracting the brainstem with a jet of water were safe for the workers involved, in terms of TSE transmission risk, providing that it is performed by trained staff with appropriate PPE.

### Infectivity in urine

The issue of prion infectivity in urine was discussed at a TSE Working Group meeting. The Secretariat had prepared a review paper on this subject, outlining recent studies on prion infectivity in urine, and prion detection in the kidney.

The possible excretion of prions in urine has been considered for some time, and the presence of infectivity in urine may have implications for:

- the collection of urine for the manufacture of therapeutic gonadotrophin;
- disease transmission and the nursing care of patients with CJD;
- the potential development of a diagnostic test that would rule out the need for invasive testing and perhaps allow earlier diagnosis

Members reassessed the possibility of prion infection in urine, and agreed that, at the present time, there was not enough evidence to suggest that human prion infectivity was definitely present in urine.

### Surveillance of occupational exposure to TSEs

The issue of whether a surveillance system for occupational exposure to TSEs should be introduced is under review. The Working Group was asked to consider a briefing paper prepared by the HPA on this issue, and they agreed to revisit this following discussion at the CJD Incidents Panel in 2008.

### Ophthalmology

The Secretariat and Department of Health have been contacted on a number of occasions by clinicians requesting clarification on infection control advice relating to ophthalmology. There is confusion over current guidance documents, whose advice is conflicting, and it is felt that a review and re-issue of up-to-date guidance on CJD infection control in ophthalmology, based on clear scientific evidence, is needed.

An ophthalmology subgroup has been set up, with Mr Ian Pearce, a consultant ophthalmologist, who is a member of the CJD Incidents Panel, as Chairman. The first meeting of this subgroup was held on 19<sup>th</sup> November 2007 at Department of Health buildings in London. The meeting went extremely well and members were assigned to topic groups to review and discuss various issues for presentation at the next meeting in April 2008.

### Pathology guidance

There has been concern for some time about what additional measures, if any, need to be taken in the Pathology laboratory with specimens or tissues from patients who have

been designated as at risk of CJD/vCJD. The National CJD Surveillance Unit in Edinburgh, and the ACDP TSE Working Group secretariat, had received a number of queries relating to this over the years, with requests for advice.

It was decided that, in light of these queries, a new Annex ('K') would be a useful addition to the current TSE Working Group infection control guidance document, outlining procedures for the treatment of tissues from known or suspected cases of CJD or from persons 'at risk' of CJD.

A meeting was held on the 14<sup>th</sup> June 2007 to agree on the content of the new Annex between representatives from the Working Group, the National CJD Surveillance Unit in Edinburgh, the Royal College of Pathologists and the British Neuropathological Society. Following this meeting, an outline draft annex was produced by the Secretariat, and members of the drafting group were asked to prepare sections for the annex. The annex will be presented to ACDP in 2008 for approval.

#### Advice on specialised equipment

Annex G has been offline for some time due to ongoing discussions about its contents. It was agreed that this annex should be re-issued as soon as possible, to include information on electrodes, dialysis machines, haemofilters, diafilters and diathermy forceps. Information in the current draft of the annex needs to be verified by clinical professionals before it can be published.

#### Clinical waste management and disposal

Advice in Annex C and Part 4 of the TSE Working Group's infection control guidance needs to be updated to take into account the new guidance on disposal of clinical waste, published in 2006. At present, the fate of low risk clinical TSE waste is undecided, and all waste is incinerated. A subgroup will be set up to update these guidelines.

#### Transport of TSE-infected material

Annex D of the TSE Working Group's infection control guidance is now out-of-date due to new transport of infectious substances regulations issued in 2007. This Annex is therefore being revised to take into account these new regulations.

#### Part 4 – Infection control of CJD and related disorders in the healthcare setting

Part 4 of the TSE Working Group guidance "Transmissible spongiform encephalopathy agents: safe working and the prevention of infection" was updated to include information on the four cases of vCJD infection via blood transfusion. In addition, new information on the Standards for Better Health were added, and the formatting of the clinical algorithms was updated. [www.advisorybodies.doh.gov.uk/acdp/tseguidance](http://www.advisorybodies.doh.gov.uk/acdp/tseguidance)

#### Annex A1 – Distribution of TSE Infectivity in human tissues and body fluids, and Annex A2 – Distribution of TSE infectivity in animal tissue and body fluids

A revised version of the WHO *Guidelines on tissue infectivity distribution in transmissible spongiform encephalopathies* had been published in June 2006 following an international workshop to consider new evidence. Consequently, a number of amendments to A1 and A2 were suggested, and agreed, by Working Group members to ensure consistency with the WHO guidelines and current evidence. [www.advisorybodies.doh.gov.uk/acdp/tseguidance](http://www.advisorybodies.doh.gov.uk/acdp/tseguidance)

## Annex F – Decontamination of endoscopes

Annex F of the TSE Working Group guidance was revised to take into account the TSE Working Group's decision that a negative post-mortem finding for an asymptomatic patient at risk of CJD could not exclude the possibility of infectivity being present due to the sensitivity of the current tests used for detection of abnormal prion. It was thus agreed that the text in Annex F should be revised to state that endoscopes used in a patient at risk of CJD should be removed from use immediately, not "quarantined pending diagnosis". Endoscopes used on possible CJD or vCJD patients may be quarantined until the diagnosis is confirmed as they are symptomatic and have not been identified as at risk of CJD for public health purposes. In addition, a new paragraph was added outlining the decontamination of endoscope cleaning equipment.

In May 2007, endoscopy was again discussed at the TSE Working Group. Annex F recommends that any endoscopic procedure that could contaminate the working channel of an endoscope with tissues including lymphoid aggregates should lead to quarantining of the endoscope used. There have been concerns, particularly from endoscopy units serving haemophilia centres, that their pool of endoscopes could become depleted with no readily available funding for replacement. There is also concern from the UK Haemophilia Centre Doctors' Association that their patients may be denied optimal endoscopic diagnosis and treatment.

It was agreed that Annex F should be updated to include ways of reducing the risk of contaminating the working channel during an invasive endoscopic procedure. In addition, the Chairman of the TSE Working Group wrote to the CMO, in conjunction with the Chairman of the Engineering and Science Advisory Committee Endoscopy subgroup, outlining the concerns above and raising the possibility of refurbishment of endoscopes used on patients at risk of vCJD. The CMO agreed to provide ring-fenced funding to facilitate this, thus allowing the return of certain endoscopes to routine use.

Annex F has since been updated and published:  
[www.advisorybodies.doh.gov.uk/acdp/tseguidance](http://www.advisorybodies.doh.gov.uk/acdp/tseguidance)

## Annex J – pre-surgery assessment to identify patients with or at risk of CJD

Professor Don Jeffries, Chair of the TSE Working Group, attended the ACDP meeting on the 2<sup>nd</sup> October 2007 to present proposed changes to Annex J. These were:

- All patients about to undergo any surgery or endoscopy should be asked if they have ever been notified as at risk of CJD or vCJD for public health purposes. This is due to the growing numbers of patients who have been informed that they are at increased risk of CJD or vCJD, and the special precautions that need to be taken for medium and high risk surgery
- In addition, those patients about to undergo surgery or endoscopy which may involve contact with tissues of potentially high level TSE infectivity ("high risk tissues") should be assessed for CJD/vCJD risk through a set of detailed questions relating to possible exposure to CJD/vCJD

In addition, new information was to be added in three key areas:

- The use of human pituitary-derived gonadotrophin treatment was discontinued in the UK in 1973, but may have continued in other countries after that time

- Emergency surgery or endoscopy involving contact with high risk tissues – if the patient, a family member, or someone close to the patient is unable to answer the CJD/vCJD risk questions then the patient's general practitioner (GP) should be contacted for information concerning the patient's CJD risk following the surgery or endoscopy. All instruments used during the surgery or endoscopy should be quarantined until the information is obtained
- The actions that should be taken if a patient is identified as at risk of CJD/vCJD in the pre-surgery assessment will be clearly defined

Annex J has now been updated and published at:  
[www.advisorybodies.doh.gov.uk/acdp/tseguidance](http://www.advisorybodies.doh.gov.uk/acdp/tseguidance)

## **6.2 Revision of the 1996 ACDP Guidance Management & Control of Viral Haemorrhagic Fever**

Following the Key Players meeting in 2006, the next step in the revision of the ACDP guidance was to convene a number of sub-group meetings to look specifically at patient management aspects (including secondary containment, waste disposal issues, transportation of patients) and laboratory aspects (sample handling and transportation, laboratory testing arrangements) in further detail.

The first meeting of the Clinical Management subgroup was held on the 16<sup>th</sup> April 2007. The meeting comprised ACDP members, representatives from the two high security infectious disease units in London and Newcastle (HSIDU), and from the fields of patient transportation, virology, microbiology and public health.

Following this first subgroup meeting, there were still some outstanding issues to be addressed by the group, including:

- Waste disposal from the HSIDU
- Laundry from the HSIDU
- Last offices and the care given to a deceased person
- Room ventilation
- PPE for healthcare workers
- Transportation of patients (including by ambulance)
- Terminal cleaning

Some members of the Clinical Management subgroup attended an air isolator exercise at RAF Lyneham on the 1<sup>st</sup> November 2007 to observe the procedures for evacuating a patient, and the equipment used.

The first meeting of the ACDP VHF Diagnostics subgroup was held on the 26<sup>th</sup> June 2007. The meeting addressed the proposed two risk category system and its implications for diagnostics, routine testing of patients, testing for Hazard Group 4 viruses in the laboratory, and transportation of specimens.

The draft algorithm for determining the VHF risk of a febrile patient was finalised following comments from members of the Clinical Management and Diagnostics subgroups. This algorithm is for use in both a clinical environment and at port health units, and will form the basis of the new guidance document.

Colleagues at HSE were scheduled to start drafting sections of this guidance in August 2007; however, due to the outbreak of Foot and Mouth disease in Surrey they were called to Pirbright to be involved in the investigation, and were thus unable to

concentrate on drafting the new ACDP guidance. However, the drafting process will be put back on track in 2008.

### **6.3 Steering Group for revision of the ACDP guidance on Blood-borne Viruses**

The steering group, under the chairmanship of Professor Will Irving, made steady progress with the revision of the 1996 ACDP guidance "Protection against blood-borne infections in the workplace: HIV and hepatitis" in 2007. In particular, progress was made in respect of the virology; legal; containment/control; and sector specific annexes. Although the steering group did not meet during 2007, members contributed comments on draft sections of the revision via email circulation.