Health Protection Agency
Annual Report and Accounts 2009

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Protecting Health, Preventing Harm, Preparing for Threats

Who we are

The Health Protection Agency is an independent UK organisation that was set up by the government in 2003 to protect the public from threats to their health from infectious diseases and environmental hazards.

It does this by providing advice and information to the general public, to health professionals such as doctors and nurses, and to national and local government.

What we do

The agency identifies and responds to health hazards and emergencies caused by infectious disease, hazardous chemicals, poisons or radiation.

It gives advice to the public on how to stay healthy and avoid health hazards, provides data and information to government to help inform its decision making, and advises people working in healthcare.

It also makes sure the nation is ready for future threats to health that could happen naturally, accidentally or deliberately.

The agency combines public health and scientific knowledge, research and emergency planning within one organisation – and works at international, national, regional and local levels.

It also supports and advises other organisations that play a part in protecting health.

The agency's advice, information and services are underpinned by evidence-based research. It also uses its research to develop new vaccines and treatments that directly help patients.

Although set up by government, the agency is independent and provides whatever advice and information is necessary to protect people's health.

The agency exists to help protect the health of everyone in the UK; our ambition is to lead the way by identifying, preparing for and responding to health threats.

Who we work with

- The general public
- The NHS
- Government departments and the governments of Scotland, Wales and Northern Ireland
- Other government agencies
- Local authorities
- Industry
- International health organisations.

Our staff and structure

Our expertise is provided by around 3,850 staff, which includes doctors and nurses, scientists, technicians, emergency planners and administrators.

Around half the agency's staff are based at four major centres: the Centre for Infections; the Centre for Radiation, Chemical and Environmental Hazards; the Centre for Emergency Preparedness and Response; and from 1 April 2009 the National Institute for Biological Standards and Control (NIBSC). There is also a small central office in London.

The remaining staff are based locally, throughout England, working with the NHS to provide health protection expertise for the community.

The agency is governed by a Board, which is led by a Chairman. This sets the organisation's long-term direction, objectives and strategy.

The delivery of these, along with the day-to-day management of the agency, is the responsibility of the Chief Executive and the Executive Group.

History

The Health Protection Agency was established as a special health authority in 2003. It became a non-departmental public body on 1 April 2005 following Royal assent of the Health Protection Agency Act 2004.

This organisation replaced the HPA special health authority and the National Radiological Protection Board, with responsibility for radiation protection incorporated in its remit. NIBSC became part of the agency on 1 April 2009.

Some highlights from 2008/09

// APRIL

The HPA's website technology and systems are updated to provide new tools to improve access to content for users.

The HPA reports there were 1,548 cases of malaria among UK travellers in 2007, with five deaths. The agency emphasises the importance of seeking medical advice before travelling to where malaria is a risk.

The HPA investigates the death of a child in London. The most likely explanation is diptheria infection, which is extremely rare in the UK because of the childhood immunisation programme. The agency recommends people stay up to date with their routine immunisations.

// MAY

The HPA's *Chemical Incident Surveillance Review 2006-07* reveals that 1,015 chemical incidents were recorded in England and Wales in 2007 – up 5% on 2006.

The HPA Board recommends that UK Building Regulations and Standards should be changed to ensure that all new property incorporates the basic materials and measures necessary to reduce internal radon levels.

HPA Chairman Sir William Stewart announces the agency will investigate possible adverse health effects from magnetic resonance imaging (MRI) machines. This follows recommendations to the Board from an HPA advisory group.

The HPA reminds consumers about advice on the safe storage of sliced-at-the-counter cooked meats. Laboratory tests for listeria bacteria in freshly sliced cooked meats from a number of retailers found that 7.3% of samples were contaminated.

// JUNE

An outbreak of H7 avian influenza is confirmed in chickens in Oxfordshire. The HPA works closely with partners to ensure that all the necessary steps are being taken to protect those people who may have been exposed to the virus.

The HPA and the MoD's Defence Science and Technology Laboratory (DSTL) announce collaboration on a £3.5m research programme to combat the threat of chemical terrorism.

The HPA gives the green light to a multi-million pound investment in North East laboratory services. Its regional laboratory provides expert diagnostic and confirmatory testing for a wide range of infectious illnesses.

Sexually transmitted infections among people over 45 are on the increase, according to an HPA study published in the *Journal of Sexually Transmitted Infections*. This examined episodes of STI between 1996 and 2003 and found a rise in the number of older people visiting genitourinary medicine clinics.

// JULY

The HPA hails 60 years of NHS success. HPA Chief Executive Justin McCracken congratulates the NHS on its achievements over the 60 years since its inception.

The HPA's report *Sexually transmitted Infections and Young People in the UK* shows people aged 16-24 are the group most at risk of being diagnosed with an STI, accounting for 65% of all chlamydia, 50% of genital warts and 50% of gonorrhoea infections in 2007.

The European Space Agency announces the HPA will be among the experts brought in to define the requirements and initial concept for a biocontainment facility to safely handle any samples that may be brought back from Mars.

The HPA announces the creation of a National Nanotoxicology Research Centre (NNRC) to study the possible health effects of human exposure to nanoparticles.

// AUGUST

The HPA welcomes the chief medical officer's MMR catch-up programme, which urges GPs to identify individuals not up to date with their MMR and offer catch-up immunisation. Research carried out by the HPA suggests there is a real risk of a large measles outbreak affecting 30,000-100,000 people.

// SEPTEMBER

An HPA study shows the measles component of the MMR vaccine to be highly effective in preventing measles infection. Analysis shows that one dose of vaccine provides over 95% protection, while two doses provide almost 100% protection.

The HPA issues guidance on blood glucose testing after infection control breakdowns in residential care homes resulted in onward transmission of hepatitis B.

The HPA evaluates a new meningitis vaccine that could protect against 80% of meningococcal serogroup B strains. If further trials achieve the expected results the vaccine could be ready for inclusion in the childhood immunisation programme in 2-3 years.

HPA Chairman Sir William Stewart announces that the Department of Health has provided funding to enable design work on proposals for the redevelopment of the Porton Down site.

The HPA launches eHealth, an online education and training service for healthcare professionals, exclusively for the NHS. It is funded by the Department of Health and covers chemical, biological, radiological and nuclear injuries and incidents.

The HPA reports an increase in the number of enquiries relating to cocaine abuse among young people. A report from the National Poisons Information Service, which was

commissioned by the HPA, also reveals increases in the number of enquiries related to ketamine, methamphetamine and benzylpiperazine.

The HPA's mandatory surveillance of MRSA bloodstream infections shows a 14% drop in cases from the previous quarter, with 836 cases reported in England during April to June of 2008. The figure is 35% lower than the corresponding value in 2007.

The HPA welcomes new guidelines from the British HIV Association, the British Association for Sexual Health and HIV and the British Infection Society to increase the offer of HIV testing to ensure fewer people go undiagnosed.

The HPA's contribution to UK initiatives to address global health challenges is acknowledged in the government's new Global Health Strategy. An extra £1.9m of funding over five years is announced to support the agency's international work.

// OCTOBER

Some energy-saving compact fluorescent lights can emit ultraviolet radiation at levels that, under certain conditions of use, can result in exposures higher than guideline levels, the HPA reports. It calls on the European Union, product standards bodies and industry to improve product standards for lights.

HPA *Clostridium difficile* figures for England in patients aged 65 years and over show an 18% fall in cases on the previous quarter.

The HPA responds to an isolated case of inhalation anthrax. Inhalation anthrax is very rare and is not passed from person to person.

One-third of injecting drug users have reported having an abscess, sore or open wound at sites of injection, reports the HPA. These bacterial infections are thought to cost the NHS around £47m a year.

The upward trend in tuberculosis seen in recent years is beginning to stabilise, according to HPA figures. There were 8,417 cases reported in the UK in 2007, compared with 8,495 in 2006 and 6,726 in 2000.

// NOVEMBER

The HPA reports that almost half (42%) of all African individuals diagnosed with HIV in the UK are diagnosed late and so have a lower life expectancy.

An HPA project is developed to teach children about antibiotic use and the importance of good hygiene. The eBug project, created by HPA and European partners, will be available for schools throughout Europe in 2009.

A food study by the HPA and the Local Authorities Coordinators of Regulatory Services (LACORS) reveals the presence of salmonella bacteria in a small number of ready-to-eat fresh herb samples.

An estimated 77,400 people were living with HIV in the UK in 2007, with more than a quarter unaware of their infection, according to HPA figures.

Healthcare workers were still being put at risk of bloodborne viruses in 2006/07 through occupational exposure even though many of these incidents are preventable, according to an HPA report. Four healthcare workers developed hepatitis C as a result.

// DECEMBER

Many hepatitis C infections in the UK stem from recreational drug use that began in the 1960s, according to an HPA report.

A DVD to support infection control training programmes in care homes is produced by the HPA and distributed free of charge.

// JANUARY

The risk of developing cancer among radiation workers increases with the dose of ionising radiation they are exposed to, according to a study by the HPA. It also shows that overall mortality in the UK's 175,000 radiation workers is lower than that in the general population.

After a young woman from Northern Ireland dies of rabies following a dog bite in South Africa, the HPA works with colleagues in these countries to trace and test others who may be at risk.

The HPA confirms that a patient is receiving treatment for Lassa fever at the high security infectious diseases unit at the Royal Free Hospital. The patient became infected in Nigeria.

// FEBURARY

The HPA recommends that measures are taken to ensure that any potential radiation exposure arising from the disposal of solid radioactive waste is as low as reasonably achievable, and below a maximum of 0.15 mSv per year. The average annual dose that a person receives from natural radiation is 2.2 mSv.

A study by the HPA and LACORS reveals salmonella and *Escherichia coli* bacteria in a small number of ready-to-eat dried seed samples.

Avian influenza in poultry is confirmed on two premises in the East of England. The HPA works closely with local and national veterinary colleagues, and no staff fall ill.

// MARCH

A study by the HPA and LACORS reveals that 5% of salads and sauces served in kebab takeaway restaurants contain 'unsatisfactory' and 'unacceptable' levels of bacteria.

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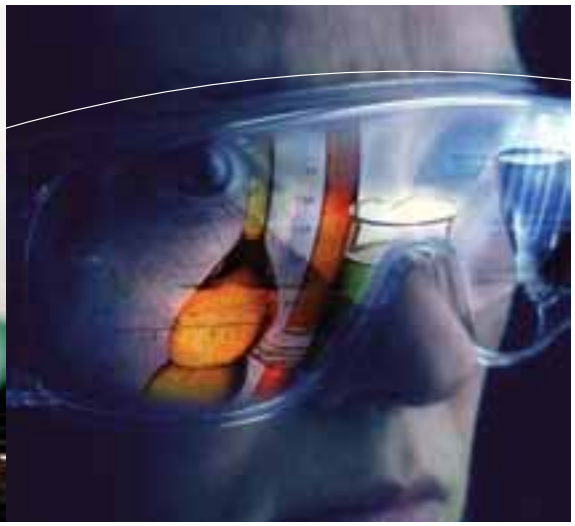


Dr David Heymann
CHAIRMAN

Chairman's foreword

It gives me great pleasure to introduce the Health Protection Agency's sixth annual report and accounts. The achievements of the HPA as demonstrated by this report would not have happened without the efforts of all HPA staff, and it is fitting that I single one out for particular tribute – Sir William Stewart, the chairman of the past six years, who stepped down at the beginning of April 2009.

Sir William has guided the HPA to the strong position it enjoys today, and prepared it well for the effective response we have seen to the pandemic risk caused by the 'swine flu' influenza A/H1N1. He leaves an organisation that combines public health skills, scientific knowledge, research and emergency planning – and one that operates at international, national, regional and local levels to protect people's health.

It has been a challenging yet successful year for the HPA, which has again demonstrated its importance and value to UK and international public health. Since its creation the HPA has consistently demonstrated that it has the skills, commitment and enthusiasm to deliver expertise and services at the right place and time.

And I know from initial discussions with many HPA staff that the aspiration is to do more. The HPA wants to drive standards higher for the whole of public health, lead the way in health protection and grow its reputation as a globally recognised expert organisation.

During 2008/09 the agency began the next phase of its development. It has published a challenging vision for where the agency will be in five years' time, and it aims to publish strategic priorities and programmes next year, in a strategic plan for 2010-2015.

This next stage in the HPA's development is timely. In less than four years the agency will be providing the health protection and surveillance services infrastructure for the world's greatest sporting event – the London 2012 Olympic Games. The world's eyes will be on the UK and this provides a tremendous opportunity to showcase the work and capabilities of the HPA. As every Olympian knows, preparation is the key to success – which is why key staff members of the HPA travelled to Beijing in 2008 to learn the challenges in health protection that surrounded those games.

'We want to drive standards higher for the whole of public health and lead the way in health protection'

I have been at the HPA since May and enjoyed my time here enormously. I have had a chance to meet many HPA staff, and to witness the superb operational effectiveness and teamwork shown during the containment phase of the influenza A/H1N1 swine flu threat.

At the same time I have learned more about other HPA successes over the years, and can see the potential for an even stronger and unified HPA in the future.

I take over the role of chairman feeling very proud of what has been achieved by the HPA to date, and with great anticipation for achievements in the coming years.

Justin McCracken
CHIEF EXECUTIVE

Chief Executive's statement

It gives me great pleasure to introduce this report. It shows that this has been another eventful year for the Health Protection Agency.

Staff working in our major centres and throughout our local and regional bases have dealt with a wide range of incidents and issues – from Lassa fever to lightbulbs and rabies to radon – and carried out the essential research and surveillance to ensure the public has the very best possible protection against hazards to health, and that we are well prepared for a range of emergencies.

The value of this ongoing work has been demonstrated by our rapid, coordinated and thorough response to the swine flu outbreak that began in late April 2009. We have been providing expert advice and guidance on the new virus to government, healthcare professionals and the public; using our laboratories to test samples; and responding locally via health protection units.

In addition, our experts are researching the properties and spread of the virus to determine all possible ways to protect the public, including the development of a vaccine.

Our action on swine flu has been widely praised. For example, Alan Johnson, the Secretary of State for Health when the outbreak struck, said: 'The general air of smooth efficiency has impressed so many of my colleagues in other government departments. It's great to know that whether or not it's in the news, we can depend upon you to be quietly getting on with the job and offering the reassurance and protection that the public in affected areas so appreciate.'

Our handling of the outbreak demonstrates the strengths of a unified HPA, on international, national and local levels. It also demonstrates how effectively we work in partnership with NHS organisations and other stakeholders – both in emergency situations and through ongoing activities to prevent harm and protect the public.

During our short history we have grown significantly, both organically and through mergers. This process continues into 2009/10 with the incorporation of the National Institute for Biological Standards and Control. I am delighted to welcome this truly excellent organisation, with its superb skills and enviable international position and reputation, into the HPA.

This level of organisational change means there is a real challenge to develop and manage the HPA as one organisation, drawing on the considerable collective expertise and resources to ensure we are more than the sum of our parts.

Now is the right time, as we enter the next phase of our development, to reflect on the successes to date and to set new and ambitious targets.

It is a pretty inspirational journey so far, and I am very proud to have the opportunity to help write the next chapter of the Health Protection Agency's story.

The development in 2008/09 of our vision – to lead the way in health protection – along with our corporate values, signals the start of a period of continual transformation that will see the agency evolve into a truly integrated organisation with a global reach.

The vision established ten challenging strategic aims that will provide the foundations we shall build on over the next five years. These provide us with a framework for decisions on priorities in the HPA. These strategic aims are tabulated overleaf.

This year we will review and refine our strategy to ensure that it continues to reflect our role and our new vision for the future.

We deliver services to the public through a focus on 11 key health protection programmes and we seek to develop the organisation through 10 other high level priorities. Not all the work of the agency is covered by these programmes, but they represent our priority areas for action in 2009/10 and beyond.

This year's annual report reflects these priorities and reviews the progress made in the key areas.

Our strategic aims	
1	To be the primary expert force in delivering health protection
2	To be trusted by all in providing advice and services to the public, health professionals, government and others
3	To be the first choice for authoritative, independent advice and advocacy
4	To be expert and mature in effective partnership working with the NHS and others at local, national and international levels
5	To be respected by the scientific community for excellence in relevant sciences
6	To be recognized internationally as a world-class health protection body
7	To be forward-looking, expert in both managing risks and anticipating future challenges, with an emphasis on prevention
8	To be one cohesive organisation
9	To be equipped with state-of-the-art facilities appropriate to deliver consistent, cutting-edge services
10	To be an employer of choice, which values and respects staff

OUR STAFF

Our 2008 Employee Opinion Survey showed that 97% of HPA staff are positively committed to the success of the organisation. I am very grateful for this support. During a challenging period they have continued to work with great professionalism and dedication to deliver the best possible service.

Since my arrival at the start of 2008/09 I have been enormously impressed by our employees and their willingness to drive the agency forward. I thank them unreservedly. While we face a challenging year ahead, I believe that our strategy, our aims and our people have combined to create a solid foundation that enable us to face the future with confidence.

Following the merger with NIBSC we now have around 3,850 members of staff. It is vital that they all understand the part that they have to play in attaining our objectives. Our new vision and values are the first steps to encouraging an even greater sense of teamwork and belonging, and aim to show how everyone in the agency can contribute towards our overall goals.

THE FINANCIAL CLIMATE

Despite the financial crisis that has gripped many parts of the UK and global economies the HPA has had a successful financial year, generating increased operating income to augment the grants we receive from government. This makes an important contribution to our work to protect people's health.

The organisation intends to progress a number of significant developments during 2009/10, including:

- The full integration of NIBSC.
- The publication and communication of a new strategic plan for 2010-2015.
- The establishment of key performance indicators that measure how well we are delivering our priority work.
- The development of a case for replacing the outdated high containment facilities at our Porton Down centre.

'It's an inspirational journey so far, and I'm very proud to have the opportunity to help write the next chapter of the Health Protection Agency's story'

We are now entering a new phase as we capitalise on the foundations put in place so far. Much work is already in hand but there is more to do to ensure we can respond to ever growing service expectations, and the pressures to make ever more efficient use of our resources – so that the 'whole' of the agency achieves more than the sum of its parts could.

OUR FOCUS ON DELIVERY

The HPA has a strong track record of delivery. We have proved that we will deliver what we promise and we have proved that our commitment to research and innovation really makes a difference to people's health.

My thanks go to all those who have moved on from the Health Protection Agency in the past year for their contribution. I would also like to thank everyone, both within the agency and in our partner organisations (such as the NHS, Department of Health and local authorities), for their unflagging effort, enthusiasm and commitment to achieving our objectives.

In particular, I would like to thank our inaugural chairman, Sir William Stewart, who retired in April 2009, for his inspirational leadership and dedication to the HPA that has given us such a solid foundation to build upon.

In summary 2008/09 was a year of considerable achievement for the agency, despite challenging conditions. We can be in no doubt that the coming year will be equally challenging – if not more.

Our vision, with its emphasis on investment performance, innovation, stakeholder focus and corporate responsibility, will play an important role in the demanding times that lie ahead.

The more that I see the results we deliver with others to protect people's health, and the more I see our people responding to challenges, the more convinced I am that the HPA will continue to do great things in the future.

Justin McCracken
CHIEF EXECUTIVE
12 June 2009

Our strategic pathway

Our structure

As an independent specialist organisation dedicated to protecting the health of the population of the UK, the HPA provides impartial advice and authoritative information on health protection issues to the public, to health professionals and to government.

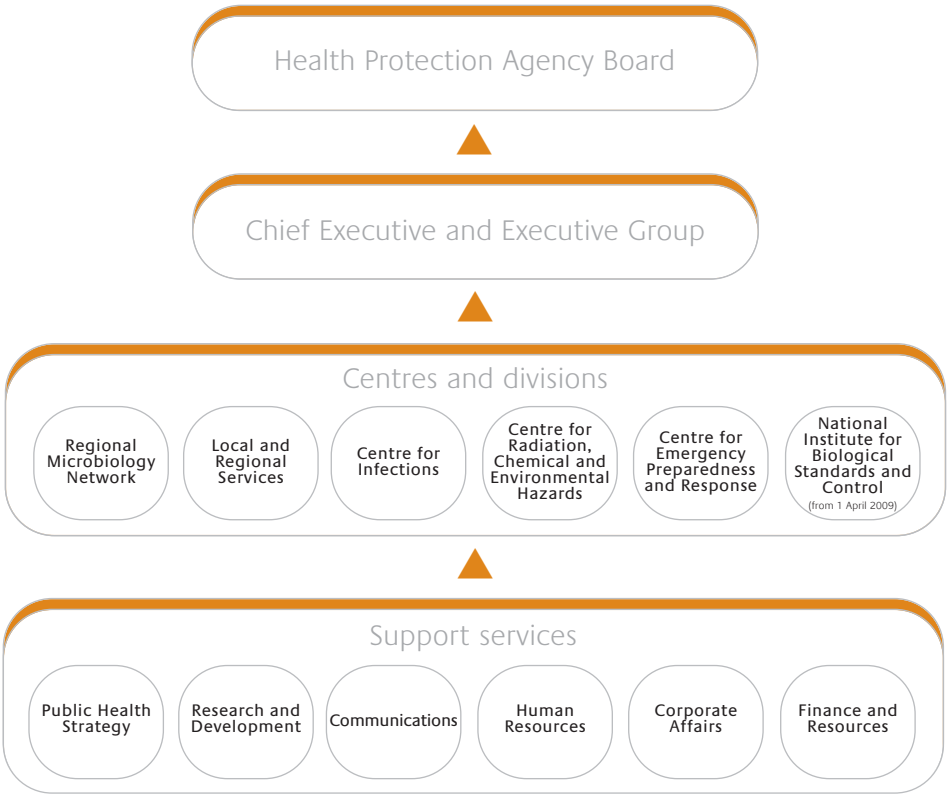
Everything the organisation does is based on expert skills and knowledge applied to strong frontline services. The HPA works at international, national, regional and local levels to identify new threats to health, to prepare for them, prevent them where possible and, should they arise, to reduce their impact on public health.

The HPA combines public health, scientific and health protection expertise, research and emergency planning within one organisation.

It provides an integrated approach to protecting UK public health through the provision of support and advice to the NHS, local authorities, emergency services, other 'arms length bodies', the Department of Health and the devolved administrations.

Our workforce includes doctors and nurses, scientific and technical staff from many specialist disciplines, administrative staff and emergency planners. They work with, and are supported by, colleagues in corporate services.

During 2008/09, the HPA employed an average of 3,503 full-time equivalent staff. They were based in Local and Regional Services, the Regional Microbiology Network, and a number of centres (the Centre for Infections in north London; the Centre for Radiation, Chemical and Environmental Hazards in Oxfordshire; and the Centre for Emergency Preparedness and Response in Wiltshire). There is also a small headquarters in London. A location map of HPA sites is shown on p110. The National Institute for Biological Standards and Control joined the HPA on 1 April 2009.



REGIONAL MICROBIOLOGY NETWORK

This consists of eight regional laboratories and 35 collaborating laboratories. These provide frontline diagnostic and public health microbiology services to NHS trusts and the HPA's health protection units. During 2008/09 the HPA has restructured its food, water and environmental (FW&E) microbiology laboratories, reducing from 26 to 12 laboratories, of which nine are directly managed by the HPA and the remainder are located in collaborating laboratories in NHS trusts.

LOCAL AND REGIONAL SERVICES

The Local and Regional Services division aims to reduce the threats to the population from acute infections and chemical emergencies and to reduce the related disease by providing specialist health protection intelligence, advice, operational and strategic support directly to all primary care trusts, strategic health authorities, regional directors of public health and all local authorities in England. Epidemiological support to Northern Ireland is also provided. Services in England are provided through nine regional offices (corresponding to the Government Offices of the Regions). There are 26 health protection units, each covering an area with a population of about two million.

CENTRE FOR INFECTIONS

Based at Colindale in north London, this centre is responsible for a number of essential and frontline national services including infectious disease surveillance and epidemiology, specialist and reference microbiology laboratories for a wide range of human pathogens, and new vaccine modelling and clinical trials. It also provides expert support to colleagues in Local and Regional Services and the Regional Microbiology Network as well as directly supporting customers. Expert staff are on call 24 hours a day for normal business and to ensure an immediate response to national emergencies.

CENTRE FOR RADIATION, CHEMICAL AND ENVIRONMENTAL HAZARDS

This centre is based in Chilton, Oxfordshire, with offices and laboratories in Birmingham, Cardiff, Leeds, London, Glasgow, Gloucestershire, Manchester, Newcastle and Nottingham serving regional needs. The centre covers a diverse range of issues associated with the risks to public health resulting from exposure to chemicals and poisons, and to ionising and non-ionising radiations.

CENTRE FOR EMERGENCY PREPAREDNESS AND RESPONSE

Based at Porton Down in Wiltshire, this centre coordinates emergency preparedness across the HPA. It works closely with the NHS, local authorities and the emergency services, identifying and strengthening countermeasures. Exercises to test responses are conducted across the country with UK and EU partners, further improving emergency planning and preparedness.

The centre possesses a combination of research, developmental production and licensed bio-pharmaceutical manufacturing capabilities. This means that it is ideally placed to undertake translational research, being able to take potential healthcare products from concept, through scale-up to proof of concept and into manufacture for clinical trials. By partnering with industry, academia and government the centre is able to assist the UK and the wider research base to develop new and important healthcare products. The centre has high-containment laboratories for diagnosis of imported dangerous pathogens like Ebola or agents that could be used in a deliberate release. It conducts research on diseases such as tuberculosis, meningitis and on prions. Anthrax vaccine is manufactured for the UK Government and defence vaccine research is carried out for the UK and US governments.

NATIONAL INSTITUTE FOR BIOLOGICAL STANDARDS AND CONTROL

NIBSC is the world leader in developing and distributing standards to support the development of biological medicines and to ensure they are safe and effective. It is also the UK's Official Medicines Control Laboratory for biological medicines, carrying out independent testing of products such as blood products and childhood vaccines before their release onto the European market, and following up on any product-related problems that may arise after they are administered.

// FOR MORE INFORMATION VISIT
www.hpa.org.uk/annualreport
for more details on the roles and functions of the centres and divisions.

These operational centres and divisions are supported by six support services:

Public Health Strategy
This department was created in 2009, and aims to ensure the continued development of the HPA's strategy for supporting health protection planning and delivery in the UK and internationally.

Research and Development
The Research and Development division assesses the HPA's research governance arrangements and develops new procedures to ensure they meet national and international standards. This process has been informed by the Department of Health's review of the HPA's research (the Dixon report) and the recommendations from the HPA's Internal Audit Service. The terms of reference of the HPA Research and Development Group (formerly the R&D Committee) has been reviewed and revised and the membership strengthened.

Communications
Specialists in publications, design, branding, media relations, stakeholder engagement, public involvement and internal communications provide comprehensive support for the HPA's work at all levels, from local and regional to national and international. The division strives to ensure that the entire HPA's communications activities, whether advice, information, publications or stakeholder communications, fully support the strategic goals and priorities and contribute to their successful delivery.

Human Resources
Following a major staff restructuring in 2008, the Human Resources division has two major functions — the provision of expert advice to line managers on organisational change, equality and diversity, employee relations, learning and development, and workforce planning issues through a integrated HR business partner model; plus new streamlined HR operational systems covering recruitment, occupational health, payroll and pensions, and general HR administration such as security checks for all staff.

Corporate Affairs
This division supports the Board and the Executive Group on secretariat matters and takes the corporate lead on a number of HPA activities including business planning and risk management, governance, health and safety, quality and environmental policy, security, legislation and non-commercial legal issues.

Finance and Resources
This includes the departments of Finance; Estates and Facilities; Information Systems; Information Systems and Internal Audit. The division provides the HPA with efficient, effective and economic financial and resource management services to enable the HPA to achieve its strategic goals.

Additional corporate information

HUMAN RESOURCES POLICIES AND PROCESS DEVELOPMENT
The HPA continues to develop and review a wide range of employment policies and processes in partnership with staff representatives, designed to improve the employment experience and to develop a vibrant working culture. All new and revised policies during 2008/09 were developed with the National Institute for Biological Standards and Control (NIBSC) to ensure a consistent approach following the merger with the HPA. All employment policies are now subject to equality and diversity impact assessments.

Our corporate learning and development plan, supplemented by local workshops run by senior human resources staff, covers the needs of line managers in understanding and implementing these policies consistently across the HPA. New centralised recruitment and payroll processes have been developed during 2008/09 for full implementation across the HPA in early 2009/10.

EMPLOYEE RELATIONS

The HPA promotes positive employment relations and partnership working with staff and their representatives, and a recognition and procedure agreement is in place with the relevant trade unions. Recognition has also been given to the University and College Union, representing a significant number of staff at NIBSC.

Quarterly meetings of the National Joint Staff Committee, plus regular meetings of the Local Negotiating Committee of the British Medical Association, provide the mechanism for continuous and constructive consultation on a wide range of workforce issues. Proposals for the introduction of additional local consultative committees for all centre and divisions were developed and implemented during 2008/09.

STAFF COMMUNICATIONS AND ENGAGEMENT

A new communications strategy was launched during 2008/09, which included a comprehensive series of vision and values workshops held across the country in late 2008. The workshops invited every employee's input into making the new HPA vision, *Leading the way in health protection,* part of their everyday work. A set of values and behaviours was developed through the workshops, which are being embedded into all HPA job descriptions, plus selection and recruitment materials and relevant employment policies. The behaviours will form part of future 360-degree feedback (part of the staff appraisal process) starting with Executive Group members in 2009/10.

In addition, a 'storytelling' programme drove a major staff engagement initiative. This explained the HPA's story to date, its future journey to lead the way in health protection, and helped individuals to identify how each can play their part in that journey. This process started with the most senior managers and was then communicated to all staff in early 2009.

Further staff engagement initiatives are planned including a single staff recognition scheme from 2009/10 to recognise staff contributions 'above and beyond' normal responsibilities.

EQUALITY AND DIVERSITY

The HPA undertakes to promote equality and diversity and not to discriminate between employees or job applicants in respect of age, sex, sexual orientation, marital status, race, colour, ethnic or national origin, disability, religion, gender reassignment, HIV status or trade union membership.

There was significant effort in this area during 2008/09, facilitated by the HPA's first Equality and Diversity Project Lead, who started in July 2008. More information was captured in respect of the diversity of our workforce, and an action plan was approved by the Executive Group and Board. The three key strategic objectives for 2009/10 are:

- To develop a Single Equality Scheme for the period 2009/10 to 2011/12.
- To implement use of equality impact assessments throughout the agency.
- To deliver equality and diversity training to all HPA staff.

Looking forward, the Equality and Diversity Group continues to oversee the handling of all equality and diversity issues. Dr Barbara Bannister accepted the role of the Board's Equality and Diversity Champion from 1 April 2009. Each centre and division has appointed its own champion, to encourage greater understanding of equality and diversity among managers and staff.
The HPA currently operates a Disability Equality Scheme in accordance with the requirements of the Disability Discrimination Act 1995, a Race Equality Scheme, in compliance of the Race Relations (Amendment) Act 2000, and a Gender Equality Scheme, in accordance with the Equality Act 2006. Relevant principles and practices are incorporated into training programmes for staff involved in recruitment and selection procedures.
All three schemes will be incorporated into the Single Equality Scheme during 2009/10.

PENSIONS

The majority of HPA employees are covered by two pension schemes: the NHS Pension Scheme and the Combined Pension Scheme. A few employees have retained their individual membership of the Principal Civil Service Pension Scheme, or have exercised other options available as a result of the

Social Security Act 1986. All three schemes are defined benefit schemes, and each prepares separate scheme statements which are readily available to the public. Further details are included in Note 5 to the accounts.

HEALTH AND SAFETY

The aim of our Health and Safety Management strategy and arrangements are to protect the health of staff and to comply with health and safety legislation and best practice requirements.

Corporate health and safety direction is set by the HPA Board. The Executive Group leads on improving health and safety performance and monitors progress regularly. The HPA engages and consults with staff through a network of safety representatives and continues to hold regular Health, Safety and Welfare Committee meetings with these representatives.

Responsibility for local implementation of policies and improvement in health and safety performance remains with the directors of each centre or division. This is managed through a corporate health and safety plan and centre/divisional plans.

Health and safety reports to the Board have noted a decrease in incidents reported under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations, 1995 (RIDDOR). The overall number of RIDDOR reports in 2008/09 was 19, compared with 23 in 2007/08.

ENVIRONMENTAL MANAGEMENT AND SUSTAINABILITY

The HPA remains fully supportive of the UK government commitment to sustainable development and is in the process of implementing its sustainable development action plan. This is integrated with the HPA's strategy to deliver on the commitments within its environmental policy. The Environmental Strategy Group leads on this process on behalf of the Executive Group and the HPA Board, and progress has been made in several areas, including:

- Work on identifying energy reduction programmes has continued and the Carbon Trust has been engaged to assist in this process. A scoping study has been completed and a carbon management

programme will be implemented in 2009/10.
- An energy policy outlining a framework for achieving better use of natural resources across the organisation has been drafted and will be implemented in 2009/10.
- The HPA-wide waste policy and guidance document was implemented in 2008/9.
- Guidance has been issued on organising sustainable events.

In line with guidance from the Sustainable Development Commission, the HPA's sustainable development action plan sets out the organisations plan for future sustainable development strategies that includes clear actions in areas such as energy management, carbon footprint calculation and reduction, sustainable procurement and implementing the organisation's waste strategy.

REGISTER OF INTERESTS

The HPA's Register of Interests is subject to inspection by auditors, and is open to public inspection. The register is maintained and held by the Board Secretary at the HPA Central Office and may be viewed by appointment during office hours. Please call 020 7759 2710 to make an appointment.

INFORMATION ACCESS REQUESTS

During 2008/09 the HPA received 257 (2007/08: 232) information access requests, including requests transferred to the Agency from other public authorities.

Most requestors cited the Freedom of Information Act but the figure also includes requests handled in part or exclusively under other information access legislation.

Specifically, three (2007/08: two) requests were handled under the Environmental Information Regulations and ten (2007/08: 13) were subject access requests for personal information (made by the data subject or agents acting on their behalf) and were handled under the Data Protection Act.

PARLIAMENTARY QUESTIONS

A total of 190 Parliamentary Questions (PQs) were referred to the HPA during 2008/09 (2007/08: 259).

The majority of PQs concerned infectious diseases and micro-organisms, and almost a half of all PQs were on healthcare-associated infections and antibiotic resistance, and HIV/AIDS and sexually transmitted infections.

There were increased numbers of PQs on tuberculosis, and on chemical, radiation and environmental hazards to health, and decreased numbers of PQs on other infections and microbiology.

COMPLAINTS

A total of 22 complaints (2007/08: seven) were received from members of the public, patients and service users during the year and were handled in accordance with the HPA's Complaints Procedure, which is available from our website.

PUBLIC AND STAKEHOLDER INVOLVEMENT

Following the Board's approval of an initial public involvement strategy, a working group was set up to oversee the development and delivery. The group commissioned Ipsos MORI to conduct a public opinion survey on health protection issues. More details on this can be seen on p42.

REPORTING OF PERSONAL DATA RELATED INCIDENTS

The agency records incidents involving personal data through local reporting mechanisms into a central system. There are no incidents in the report period which fall under the criteria for reporting to the Information Commissioner's office. In addition, there were no information losses whose release could have put individuals at risk of harm of distress.

2 Operating Review

Delivering health outcomes

The Health Protection Agency is structured to deliver four major health outcomes, which were formulated following extensive consultation with relevant stakeholders.

The HPA's structure is based around the concept of centres of expertise (see p13), yet it aims to optimise its performance and deliver the four major health outcomes through cross-agency programmes and priorities.

Principal activities fall into two categories:

A. Key health protection programmes. These operational activities aim to meet the main purpose of the HPA (public health protection).

B. Other high level priorities. These activities provide crucial support to the key programmes, as well as helping to deliver the Board's long-term strategic aims.

These programmes and priorities are not bounded by geography or specific expertise. They cut across the organisation's hierarchical management structure and therefore require a matrix approach to the management of resources and the measurement and reporting of performance.

The following pages contain highlight reports of the HPA's activities in its key health protection programmes and other high level priorities.

Health Outcome:

Reduction of key infections

KEY HEALTH PROTECTION PROGRAMMES

p22 To reduce the incidence and consequences of healthcare-associated infections

p24 To reduce the incidence and consequences of infection with hepatitis B and C

p26 To reduce the incidence and consequences of HIV and sexually transmitted infections

p28 To reduce the incidence and consequences of tuberculosis

p30 To reduce the incidence and consequences of gastrointestinal diseases

p32 To reduce the incidence and consequences of infection with vaccine preventable diseases

Health Outcome:

Minimised health impact from environmental hazards, including radiation, chemicals and poisons

KEY HEALTH PROTECTION PROGRAMMES

p34 To protect against the adverse health effects of acute and chronic exposure to chemicals, poisons, and other environmental hazards

p36 To improve protection against the adverse effects of exposure to ionising and non-ionising radiation

Health Outcome:

Reduction in harm arising from incidents and emergencies

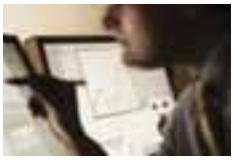
KEY HEALTH PROTECTION PROGRAMMES

Health Outcome:

Support through the safe and effective development of biological medicines

KEY HEALTH PROTECTION PROGRAMMES

OTHER HIGH LEVEL PRIORITY PROGRAMMES



* This work was undertaken by NIBSC during 2008/09. The operating review is available in the NIBSC 2009 Annual Report and Accounts at www.nibsc.ac.uk.

** These new programmes were established in late 2008/09. The first operating review will be published in the HPA 2010 Annual Report and Accounts.

To reduce the incidence and consequences of healthcare-associated infections and antimicrobial resistance

Key aims for 2008/09

- To provide expert advice, information and training to hospital trusts, primary care trusts, strategic health authorities and GPs, including advice on antibiotic usage.
- To further develop and implement sentinel surveillance of antimicrobial resistance.
- To continue to develop the skill mix and experience of health protection units.
- To strengthen capacity in healthcare epidemiology in the HPA to support the NHS.
- To undertake research and development activities.

The aim of this programme is in line with the Department of Health (DH) national programme to reduce healthcare-associated infection (HCAI) and antimicrobial resistance (AMR). It coordinates all HPA activities related to HCAI/AMR including diagnosis and surveillance, and develops the scientific evidence needed to inform and determine priorities for prevention, control and research.

The HPA's role is to reduce episodes of HCAI and AMR by giving proactive advice and support to the NHS in prevention, control and management. Formal responsibility for the control of HCAI/AMR lies with the NHS, while responsibility for performance management of acute trusts and NHS bodies rests with the PCTs, SHAs and the Care Quality Commission.

The HPA also provides support and expert advice for the new DH Advisory Committee on Antimicrobial Resistance and Healthcare Associated Infection (ARHAI).

CLOSTRIDIUM DIFFICILE

The HPA has made a major contribution to help trusts to control *Clostridium difficile* and improve patient safety by raising awareness, providing advice and support, training and using site visits to demonstrate good practice at local, regional and national levels through direct engagement with NHS trust boards and executive groups, and frontline healthcare staff.

There were 36,097 *C. difficile* infections reported in England in 2008/09 (in patients aged two years and over), which represents a 35% fall on the 55,499 total for 2007/08.

The NHS is on track to achieving the national target of reducing *C. difficile* infections by 30% by 2010/11 against the 2007/08 baseline.

In January 2009 the HPA and DH published the report *Clostridium difficile infection: How to deal with the problem*.

The HPA established a *Clostridium difficile* Ribotyping Network for England (CDRNE) in 2007 to help investigate outbreaks. It consists of eight regional microbiology laboratories in England. This service will help local teams to understand the epidemiology of *C. difficile* infection. The paper-based system of requesting and reporting for users of the CDRNE service was replaced by a web-based system in July 2008 to enhance data analysis.

MRSA

Agency figures on MRSA bloodstream infections showed there were 2,933 cases reported in England in 2008/09. This represents a 34% fall on the 4,451 total for 2007/08.

PANTON-VALENTINE LEUKOCIDIN (PVL) STAPHYLOCOCCUS AUREUS

In November the HPA jointly published with the DH guidance on the diagnosis and management of PVL-associated *Staphyloccocus aureus* infections (PVL-SA) in England. This offers advice on the recognition, investigation and management of cases.

OTHER ACTIVITY

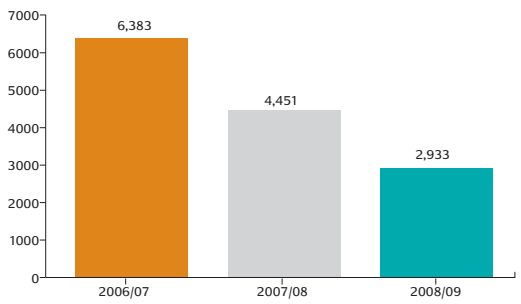
In February the HPA produced a DVD to give care home staff an introduction to infection prevention and control. Produced in conjunction with the DH and the Infection Prevention Society, it provides practical assistance to help comply with the DH code of practice.

The HPA is leading a European DG SANCO-sponsored project called eBug, to develop and disseminate a school antibiotic and hygiene education pack across Europe. The pack, developed in line with each country's national curriculum, is accompanied by a website

www.e-bug.eu containing teaching materials and hosting games, presentations, graphics and interactive quizzes. The launch is planned for September 2009 and eBug packs will be distributed free to schools to use during the 2009/10 academic year.

The HPA has endorsed the national rollout of healthcare-associated bacteraemia surveillance in neonatal units. This is a collaborative venture between the HPA and the Royal College of Paediatrics and Child Health, and will link infection data with the Standardised Electronic Neonatal Database.

MRSA bloodstream infections



PUBLICATIONS

The HPA has published several key yearly data reports as well as mandatory surveillance data quarterly reports. Analyses of the main pathogens causing bloodstream infections are published on the HPA website. Papers on the role and responsibilities of the HPA have been published in leading journals.

SENTINEL SURVEILLANCE OF AMR

The HPA's sentinel surveillance of AMR comprises regular outputs from analyses of laboratory data, the European Antimicrobial Resistance Surveillance System, a study funded by the DH on the incidence of MRSA bacteraemia in children, and the bacteraemia surveillance programme sponsored by the British Society for Antimicrobial Chemotherapy (BSAC), with the work undertaken by the Antibiotic Resistance Monitoring and Reference Laboratory (ARMRL). Automated sensititivity testing equipment has been installed in all eight HPA regional laboratories. This will further enhance surveillance of AMR.

In 2008/09 the DH issued microbiology alerts on novel emerging resistances (carbapenem resistance in Gram-negative bacteria and high-level azithromycin resistance in gonococci), which were detected as a result of HPA activities.

SURGICAL SITE INFECTION

The web-based data collection system for the HPA's Surgical Site Infection Surveillance Service (SSISS) was redeveloped in 2008 to enable hospitals to submit and use their data more effectively.

SSISS is a major contributor to the ECDC-managed surveillance of infections in seven major categories of surgical procedure and also manages the submission of data on bloodstream infections and ventilator-associated pneumonias from a small number of intensive care units that have established surveillance systems based on the Hospitals in Europe Link for Infection Control through Surveillance (HELICS) methodology.

'The new infection control DVD was a very good training aid. It was particularly useful because it was applicable to staff from all departments'

FRAN ROBERTS, NURSING HOME MANAGER, AVON

To reduce the incidence and consequences of infection with hepatitis B and C

Key aims for 2008/09

- To reduce the incidence and prevalence of infection in individuals injecting for less than three years from 21% to 15% or below.
- To reduce the national incidence of acute hepatitis B to below 500 cases per year.
- To increase the number of people receiving National Institute for Health and Clinical Excellence recommended treatment to over 4,000 per year for hepatitis C.
- To continue the drive to increase the number of people in high-risk groups being tested for hepatitis C so that specific treatment can be offered.
- To reduce the number of people developing severe liver disease due to hepatitis C infection. These are currently predicted to be 1,890 in 2010 and 2,670 in 2015.

Hepatitis B and C remain significant sources of preventable long-term ill health in the UK. This programme aims to minimise mortality and morbidity from hepatitis by influencing, involving and collaborating with many other stakeholders.

The HPA conducts surveillance to identify major routes of transmission of hepatitis, coordinates response and public health management of infections, and evaluates the effectiveness of major intervention programmes, including screening, vaccination and health promotion activities. Data is collected by calendar rather than financial year.

Although diagnoses of hepatitis C virus (HCV) infection have been increasing since the Department of Health's Hepatitis C Action Plan for England in 2004, it is estimated there could be around 100,000 people with undiagnosed long-term hepatitis C.

HCV ON THE RISE

The number of laboratory confirmed diagnoses of HCV infection in England reported to the HPA in 2007 (the most recent year for which figures are available) was 7,540 – a rise of 12% on 2006, suggesting that more diagnosis is taking place and that more infected individuals are being identified.

Data from the Unlinked Anonymous Prevalence Monitoring Programme (UAPMP) survey in England showed that in 2007 HCV prevalence in injecting drug users (IDUs) continued to exceed 40%, with around one in four reporting that they share needles and syringes.

Of the IDUs taking part in the survey who were infected with hepatitis C, over half (52%) were aware of their status, compared with 54% in 2006 and 52% in 2005. Some 25% of IDUs still report never having had a voluntary confidential test for hepatitis C.

The prevalence of overall hepatitis infection in individuals injecting for less than three years was 21% in 2007, the same level that was seen in 2006.

The number of people

40%

Proportion of injecting drug users who are infected with hepatitis C

developing severe liver disease due to hepatitis C infection was 1,287 in 2006/07 (the last year for which accurate data is available), compared with 1,260 in 2005/06 and 1,060 in 2004/05.

HELPING VULNERABLE GROUPS

In Manchester the HPA is collaborating in a research partnership to improve our understanding of how prisoners access hepatitis C care in prison and community settings. The increasing availability of non-invasive testing, such as oral fluid testing, should help improve performance in these settings.

The HPA has worked with the British Liver Trust and the Department of Health to develop a range of educational resources for use in UK prisons. A four-page leaflet aimed at male offenders has been widely distributed in England and Wales, while material aimed at female offenders is being developed.

A mapping exercise by health protection units showed that HCV testing of current or past drug users is available in 67% of prisons in England.

Many infections are likely to be present in people who have injected drugs in the past and are no longer in contact with drug services, or in those who acquired infections through other routes, such as transfusions.

HELPING PROFESSIONALS

Raising awareness among healthcare professionals and the public is key to reducing undiagnosed infections. In May 2008 the first World Hepatitis Day brought together 200 patient groups from across the world to raise awareness of long-term viral hepatitis.

To help with the commissioning of hepatitis C services, the HPA developed a tool to help primary care trusts estimate the prevalence of hepatitis C.

A network of hepatitis leads within each region and each local health protection unit has been established to help disseminate models of good practice around the country.

SURVEILLANCE

The HPA's sentinel surveillance of hepatitis shows that among those in whom hepatitis C has been diagnosed, genotypes 1 and 3 still predominate, representing 90% of diagnosed infections. Given the markedly greater success of antiviral treatment in those with non-1 genotype infection, an apparent shift towards the diagnosis of relatively more genotype 3 infections in England is encouraging.

Improving hepatitis care through research

The HPA has helped to research long-term HCV infection in people born in the Indian subcontinent. A study coordinated by St Bartholomew's and The London School of Medicine and the Hepatitis C Trust screened over 5,000 people in England. A very low prevalence was found in people born in India and Bangladesh, suggesting similar levels of infection to the general population of England and Wales.

However, the prevalence was higher in people originating from Pakistan, exceeding 2%. There was no evidence of infection among those born in the UK to parents from abroad. The results suggest that people born in Pakistan may be at particular risk of infection.

The results of enhanced surveillance of hepatitis C infection in men who have sex with men (MSM) in London and south-east England show that HCV continues to be a cause for concern in those who are co-infected with HIV.

It is hoped that enhanced surveillance of newly acquired HCV in MSM will provide an early warning system and help to improve prevention and control measures in this community.

There is currently no national surveillance system in existence to monitor treatment of HCV in England. The DH has funded a pilot mechanism by the HPA for collating national data on the number of patients being referred and treated for HCV infection, and the outcome of treatment.

To reduce the incidence and consequences of HIV and sexually transmitted diseases

Key aims for 2008/09

- To reduce the annual number of new HIV diagnoses in men who have sex with men by 50%.
- To reverse the recent upward trend in incidence of sexually transmitted infections in men who have sex with men.
- To reduce the prevalence of chlamydia and of chlamydia-attributable pelvic inflammatory disease in young adults in areas where screening of over 35% of the target group has been maintained for two or more years.
- To reduce the risk of human papillomavirus-induced cervical cancer.

The government's national strategy for sexual health and HIV aims to reduce the spread of sexually transmitted infections through more rapid detection and treatment. To support this, the HPA is helping to improve diagnostic, treatment and prevention services and identifying areas for intensive action.

To determine recently acquired HIV infections the HPA has created a serological testing algorithm for recent HIV seroconversion (STAHRS) as part of the routine public health monitoring of these infections. Of the 1,312 samples received and tested during 2008, 22% were likely to have been recently acquired.

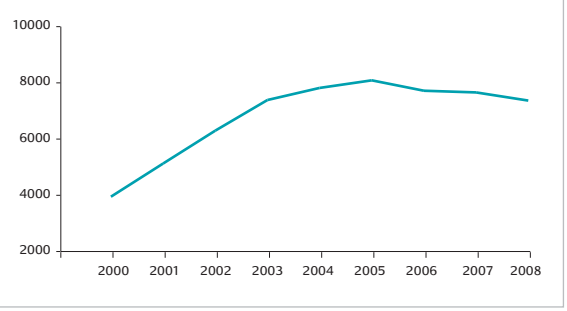
The HPA has developed standards for health protection units to increase their engagement in local sexual health prevention initiatives.

HIV INFECTIONS IN 2008

Some 7,370 individuals were newly diagnosed with HIV in the UK in 2008, a slight fall on the 2007 figure of 7,660. This is mostly due to the decline in cases diagnosed among those people who were infected heterosexually in sub-Saharan Africa. The 2008 figures equate to 16 new diagnoses per 100,000 men and nine per 100,000 women.

For men who have sex with men (MSM) the number of new diagnoses in 2008 was 2,830, which although slightly down on the 2007 figure of 3,050, is still the second-highest level since recording began.

New diagnoses of HIV in the UK



569,591

Young people screened for chlamydia in 2008

DEVELOPING SEXUAL HEALTH SERVICES

The HPA, in partnership with MedFASH and the London Health Observatory, produced Sex and our City, a Department of Health-commissioned project to ensure sexual health is factored into health service commissioning.

The HPA is collaborating with the South West Public Health Observatory on another DH-funded project, the Balanced Scorecard for Sexual Health, which is due in summer 2009. This will provide sexual health profiles for each English primary care trust.

Local planners need rates of diagnoses and testing of STIs to develop appropriate services. The HPA and the British Association for Sexual Health and HIV, in consultation with the DH, collaborated to specify an electronic dataset that collects data for monitoring public health priorities in sexual health. The GUM activity dataset (GUMCAD) replaces the paper-based system. GUMCAD data from all GUM clinics in

Tackling chlamydia in young people

Genital chlamydial infection remained the most commonly diagnosed STI in GUM clinics.

The National Chlamydia Screening Programme (NCSP) in England aims to control the infection by offering regular tests to young adults at healthcare and community settings outside of GUM clinics. It is coordinated by the HPA and covers all PCTs.

The main objective for 2008/09 was to support local programmes to increase screening coverage and develop sustainable services.

In April 2008 the HPA surveyed laboratory chlamydia testing activity, finding that 30% of the 447,435 tests among 15-24 year olds were carried out in non-NCSP or non-GUM clinic settings.

There were 569,591 young people screened in 2008, compared with 267,899 in 2007. In addition a new web-based application was launched to improve result data flow and feedback.

It is estimated that at least 30-50% of the target population needs to be screened annually. The HPA is working with stakeholders to develop a method of collecting data on chlamydia testing from laboratories.

England is expected during 2009/10.

The HPA is piloting the collection of GUMCAD from non-GUM clinic providers such as general practices offering enhanced sexual health services. GUMCAD should eventually provide the basis of reporting STIs diagnosed in all settings in England.

The Sexually Transmitted Bacteria Reference Laboratory (STBRL) and supporting organisations have developed a test for the diagnosis of syphilis because of delays in early diagnosis. This will ensure the comparability of diagnostic information from different laboratories and promote public health and patient confidence in healthcare services. An audit of laboratory diagnostic methods for syphilis in England and Wales has been published.

The HPA identified high-level resistance to the antibiotic azithromycin for the first time in England and Wales, through its Gonococcal Resistance to Antimicrobials Surveillance

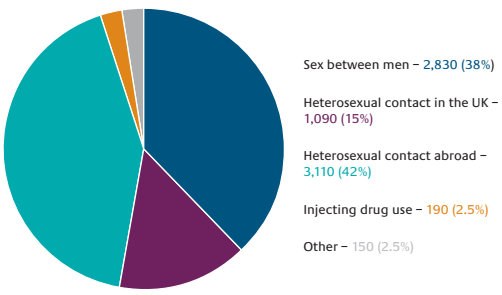
Programme, and issued a resistance alert. The antibiotic is not recommended to treat gonorrhoea but those with the disease are often exposed to small doses during the treatment of concurrent chlamydia infection. This is of public health concern as it increases the risk of treatment failure in cases where gonorrhoea is inappropriately treated with azithromycin. It highlights the importance of specifically treating gonorrhoea at the same time as chlamydia in cases of concurrent infection.

The agency is developing guidelines for gonorrhoea diagnosis using nucleic acid amplification tests. Concerns have been raised about these tests because of the risk of overestimating positive results. The guidelines should be issued in 2009/10.

EUROPEAN SURVEILLANCE

The HPA's role as coordinator of the European Surveillance of Sexually Transmitted Infections (ESSTI) network since 2002 came to an end in December 2008, with responsibility being handed to the European Centre for Disease Control (ECDC). The HPA will continue to collaborate on European STI surveillance through ECDC expert groups and as the official UK contact point for STI surveillance data.

Exposure for new UK diagnoses of HIV in 2008



To reduce the incidence and consequences of tuberculosis

Key aims for 2008/09

- A progressive decline (of at least 2% per year) in rates of tuberculosis in population groups born in England.
- A reduction in the incidence of disease among people who entered the country and became resident here within the previous five years.
- No more than 7% of new cases resistant to the anti-tuberculosis drug isoniazid and 2% multidrug resistant.
- At least 70% of patients with pulmonary tuberculosis have the diagnosis confirmed by laboratory culture of the organism.
- All patients diagnosed with tuberculosis have the outcome of their treatment recorded and at least 85% successfully complete their treatment.

Tuberculosis continues to be one of the leading causes of deaths worldwide. The growth of multi-drug resistant tuberculosis around the world, including XDR or 'extensively drug resistant' disease, is a growing and serious problem.

In the last two decades in England and Wales, the number of new cases has risen steadily and in some areas, such as London, rates of infection are particularly high.

The HPA supports the Department of Health and NHS in the control of tuberculosis including the diagnosis, treatment and prevention of the disease. It provides this support through a combination of regional and national reference microbiology services, local, national and international surveillance, prevention and control support to local NHS services, a programme of research, and provision of advice and information.

This programme was established to focus, coordinate and develop the activities within the HPA on the disease in support of the DH national action plan of 2004. The overall aim is to contribute to a reduction in tuberculosis levels in England.

INCIDENCE

There were 8,679 tuberculosis cases in the UK in 2008, a rise of 2% on the 8,496 seen in 2007. However, the rise was not uniform across the UK and many regions saw a fall in cases compared with 2007.

The London region accounted for the largest number of new cases (3,413), followed by the West Midlands (1,027) and the North West (749). Overall the figures equate to around 14 cases per 100,000 people in 2008.

In October the HPA revealed that in 2007 (the most recent year for which data are available) 7.4% of cases in the UK were resistant to at least one first-line drug, with 6.8% being isoniazid resistant and 1.2% multi-drug resistant.

This is similar to levels seen in recent years. Drug resistance was more common among cases born outside the UK, those with a previous history of tuberculosis, and cases aged less than 45 years.

The proportion of people with tuberculosis infection reported to have completed treatment was 79%, the same figure as seen in the previous year.

Treatment completion was lower among males, older cases, those born in the UK and those with disease affecting their lungs. The proportion of all UK cases that were confirmed by laboratory culture in 2007 was 60%, which is slightly lower than the 2006 figure, although the proportion rises to 70% among those with disease affecting their lungs.

39%

Proportion of tuberculosis cases being in London

DEVELOPMENTS

The HPA has published a study looking at anti-tuberculosis drug resistance patterns in the UK. Levels of tuberculosis and drug resistance among the general population continue to be low, though there are some areas such as inner cities where the rates remain higher. The greatest burden of the disease continues to affect certain

populations including ethnic minorities, individuals born in countries with high levels of tuberculosis, the homeless and people who misuse drugs.

The agency has developed a National Tuberculosis Strain Typing Service in line with the DH action plan and the HPA strategic plan will help to identify previously unrecognised epidemiological links between cases, and allow outbreaks to be recognised and controlled more rapidly at local, regional and national levels.

LEADING TB RESEARCH

The HPA has a major programme of research devoted to tuberculosis vaccine development and evaluation. It is also working with other organisations committed to taking new tuberculosis vaccines into human clinical trials. In particular, it is supporting the two major European Union-funded consortia, TB-VAC and Mucosal Vaccines Against Poverty Related Diseases (MUVAPRED) by performing critical preclinical assessments on the leading European tuberculosis vaccine candidates.

The HPA has also collaborated with the Veterinary Laboratory Agency to support its goal of developing vaccines to control tuberculosis in cattle.

In November 2008 the HPA held its third annual tuberculosis research and development day.

A number of challenges in the laboratory diagnosis of tuberculosis were highlighted, including the need to standardise drug sensitivity testing for second line antibiotics, the interpretation of Interferon Gamma Release Assay (IGRA) results for latent tuberculosis, and future developments in polymerase chain reaction testing when used on particular clinical samples.

COLLABORATIONS

The HPA has a wide range of international collaborations in tuberculosis work. The national Mycobacterium Reference Unit, for example, continues to implement a wide-ranging international research-based health programme in Russia as well as with the World Health Organization, particularly in Africa and within the WHO Global Project on Drug Resistance.

The HPA contributed much of the evidence leading to changes in WHO policy on the global use of rapid liquid culture systems for diagnosis and drug susceptibility testing and molecular-based line probe assays for screening for multi-drug resistance. The agency also performs TB vaccine evaluations for EU-funded projects. Nationally, the HPA network of tuberculosis reference laboratories have been involved in developments in three main areas:

- The introduction of rapid liquid culture based methods for second-line drug susceptibility testing for all multi-drug resistant tuberculosis cultures
- A joint research and policy review with the WHO and partners to identify second-line drugs for which there are no reliable assays
- The development of a strategy for the rapid molecular typing of isolates using variable number of tandem repeat mini-satellite techniques.

Responding to a London outbreak

In July the HPA worked closely with the NHS to respond to a cluster of tuberculosis cases at a nursery in Westminster, London.

The agency was first alerted to the problem when an adult associated with the nursery was diagnosed with tuberculosis.

Seven children received antibiotic treatment, while a further 26 children who came into contact with the patient but did not have signs of disease, needed a short course of antibiotics.

Tuberculosis cases in the UK

To reduce the incidence and consequences of gastrointestinal infections

Key aims for 2008/09

- This programme has been established to reduce gastrointestinal diseases and to develop the scientific evidence needed to inform and determine priorities for prevention and research.

Gastrointestinal diseases can be caused by a variety of pathogens. Symptoms of gastrointestinal infection, which can include diarrhoea and vomiting, are caused by the organisms, the toxins and the human body's reaction to these. Infectious intestinal disease affects as many as 1 in 5 members of the population each year.

Gastrointestinal infections are now considered a strategic priority by the agency following discussions with the Department of Health and the Food Standards Agency. As a result a new HPA Gastrointestinal Infections (GI) Programme was created in autumn 2008. The GI Programme Board is in the process of developing a five-year strategic plan.

The HPA becomes aware of possible outbreaks of gastrointestinal infections from various sources including the national laboratory reporting scheme, consultants in communicable disease control, environmental health officers, microbiologists and the HPA reference laboratories.

In 2008 faecal isolates of the common GI infections were as follows: campylobacters 49,656 (2007: 51,842), salmonellas 9,852 (2007: 12,030), cryptosporidium 4,140 (2007: 3,052), rotavirus 13,924 (2007: 13,040) and shigellas 1,413 (2007: 1,503) (2008 data provisional). The trends since 1989 are shown in the graph below.

TAKING ACTION ON VTEC

The HPA coordinated an investigation into a national increase of an uncommon type of vero-cytotoxin producing *Escherichia coli* (VTEC PT 33 VT2). The investigation concluded that the increase was due to a food-borne outbreak centred on premises in the Lincolnshire coast with a number of secondary household outbreaks.

Following this incident and other similar outbreaks of VTEC, the HPA has set up enhanced surveillance for VTEC infections to accurately assess their impact on the public.

The surveillance will collect, collate and analyse standard data relevant to the exposures and microbiology for (primary indigenous) cases reported in England and make this data available at all local, regional and national levels. The aim is to identify links between cases, improve investigation and allow a better understanding of different strain types of the bacteria in England. It will document the severity and impact of VTEC-related diseases, including hospitalisations and severe complications.

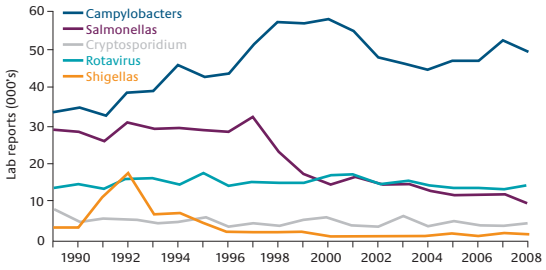
OUTBREAKS

A number of salmonella outbreaks have been investigated over the last year. This includes an international outbreak of *Salmonella* Agona PT39 associated with Irish meat, *Salmonella* Typhimurium U320 associated with supermarket foods, *Salmonella* Typhimurium U321 linked to salad contamination and *Salmonella* Typhimurium 191a associated with reptiles. There were also outbreaks of *Salmonella* Typhimurium DT104, *Salmonella* Saint-paul, *Salmonella* Poona, *Salmonella* Mikawasima and *Salmonella* Enteritidis PT12.

Some of these presented locally, some nationally and others were international. The HPA responded with local, national and international investigations involving trawling questionnaires and case-control studies.

An unusual outbreak of cryptosporidiosis

The incidence of common GI infections



associated with a rabbit strain of cryptosporidium was investigated in Northampton following the contamination of a drinking water supply. A 'boil water' notice was issued and the contaminating source removed. The Cryptosporidium Reference Unit in Swansea typed the strains. The rabbit strain had not been reported as a cause of human illness previously.

OTHER ACTIVITIES

Guidance on flooding was updated for the anniversary of the Shrewsbury floods to provide even clearer information about the risks from gastrointestinal and other infections.

An initiative to improve communication has been introduced to ensure better internal collaboration in the investigation of gastrointestinal infections. Regular meetings between staff within different areas of the HPA have been established to achieve this.

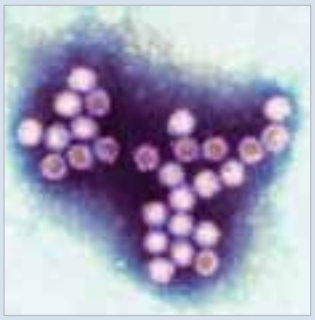
The HPA continues to be a part of the FSA-funded project on infectious intestinal diseases (IID) that is designed to look at the occurrence of these diseases within the community. The HPA is involved in the isolation, molecular identification and archiving of strains from this study and contributes to reports.

LOOKING AHEAD

The HPA has created a new Gastrointestinal, Emerging and Zoonotic Infections (GEZI) department. It comprises around 60 laboratory and 30 epidemiological staff. In the coming year GEZI aims to complete the process of integration of Laboratory of Enteric Pathogens (LEP) and Food Safety and Microbiology Laboratory (FSML) to form the Laboratory for Gastrointestinal Pathogens (LGP).

Members of GEZI will work with agency colleagues to achieve the objectives of the HPA GI Programme and maintain and strengthen existing systems for recognising, assessing and managing emerging health threats involving zoonoses, including potential deliberate release incidents.

Keeping watch on norovirus



Norovirus is a frequent cause of outbreaks of gastroenteritis within NHS hospitals. From week 1 to week 21 of 2009 there were 339 hospital norovirus outbreaks reported in England. The purpose of establishing this surveillance was because information on such outbreaks was incomplete. At the end of 2008 the HPA launched a new secure web-based system for real-time surveillance of norovirus outbreaks in hospitals to determine the number of outbreaks and ward closures.

This will provide timely information to assess the impact of outbreaks in hospitals and provide a useful epidemic intelligence tool for local infection control and public health teams. This will also help in detecting the emergence of new epidemic norovirus variants.

Martin Kiernan, president of the Infection Prevention Society, said: 'Infection prevention practitioners often have to make difficult recommendations with regard to ward closures and patient movements based on a minimal amount of information.

'The intelligence provided by this scheme will improve practitioners' awareness of local and regional norovirus activity and assist clinicians when difficult decisions must be made. It is a good example of a system that has immediate benefits to users and I look forward to its continued development.'

'The HPA scheme will improve awareness of norovirus activity and assist clinicians when difficult decisions must be made'

MARTIN KIERNAN, PRESIDENT OF THE INFECTION PREVENTION SOCIETY

To reduce the incidence and consequences of infection with vaccine preventable disease

Key aims for 2008/09

- Through working with PCTs, to support improvements in delivery of routine immunisation programme and support decreasing inequalities in uptake.
- To improve uptake of MMR in cohorts older than five years.
- To actively encourage and facilitate inclusion of immunisation training in pre and or post-graduate education for GPs, nurses, pharmacists and midwives.
- To support DH and the NHS with the development of evidence-based guidelines.
- To work with local partner organisations to ensure local planning and implementation of new HPV vaccine programme for adolescent girls.
- To carry out enhanced measles and rubella surveillance.
- To carry out enhanced national surveillance of lab confirmed pneumococcal, HiB and meningococcal C disease.
- To undertake a national seroprevalence survey for measles, mumps and rubella for samples collected in 2007.
- To ensure clarity with PCTs about respective roles in immunisation.
- To conduct clinical trials of novel vaccines and novel schedules with licensed vaccines as well as proof of principle studies to inform the scientific basis of immunisation in various age groups.
- To evaluate benefit of extended valency pneumococcal vaccines for use in paediatric schedule.

The HPA is responsible for monitoring infectious diseases in the UK and vaccine-preventable diseases are a key element of this work. The vaccine-preventable disease programme aims to support national efforts to reach the WHO target of measles and rubella elimination by 2010, maintain polio elimination status and decrease the incidence of other diseases covered by the national immunisation programme.

To achieve these objectives, the HPA needs to influence, involve and collaborate with many other stakeholders. Its role involves providing support, evidence, guidance and recommendations to the statutory bodies with responsibility for control and prevention programmes. Support and advice are also provided to individual healthcare workers and other professionals delivering the national vaccination programme or working with groups at increased risk of infection.

The HPA works closely with the Department of Health through the Joint Committee on Vaccination and Immunisation (JCVI) to inform national policy on health and with other relevant government departments including the devolved administrations in Scotland, Wales and Northern Ireland as well as national regulatory agencies such as the Medicines and Healthcare products Regulatory Agency.

MEASLES AND MMR

HPA surveillance of measles showed there were over 1,300 confirmed cases across England and Wales during 2008. This is the highest number since the current surveillance system, based on oral fluid diagnostics, was introduced in 1995. The upsurge reflects the reduced levels of MMR vaccine coverage achieved through the routine immunisation programme over the past decade.

Epidemiological data and modelling information from the HPA predicted a nationwide measles epidemic in children and young adults. As a result, the DH started an MMR catch-up campaign that

80%

Uptake of HPV vaccine among girls aged 12-13

started in August 2008, targeting children from 13 months to 18 years.

The HPA has supported primary care trusts in designing local interventions and responding to cases and to local outbreaks.

SERO-EPIDEMIOLOGY PROGRAMME

Collection of residual sera through the sero-epidemiology project was successfully enhanced during 2008. A national measles sero-prevalence survey is underway to identify susceptible populations and inform intervention measures. The results will be reported in mid 2009.

VACCINE IMMUNISATION COVERAGE

The NHS is responsible for delivery of the national immunisation programme. The HPA has worked with PCTs to improve local routine vaccine uptake through provision of local coverage information and advisory support.

The HPA, in collaboration with the devolved administrations, collates UK immunisation coverage statistics for children. At the end of December 2008 coverage at 12 months of age in England for completed courses of DTaP/IPV/Hib (diphtheria, tetanus, acellular pertussis, inactivated polio and *Haemophilus influenzae* type b), meningitis C and pneumococcal vaccines was 91%, indicating high acceptance of all vaccines offered in the first year of life. The figure for the UK was 92%.

IMMUNISATION TRAINING

The HPA has developed and delivered training resources to help healthcare staff who may give immunisations. It is also working with NHS Core Learning to create an immunisation e-learning package.

GUIDELINES

The HPA has supported the development of new evidence-based guidelines for the prevention of secondary *Haemophilus influenzae* type b and the public health management of clusters of serious pneumococcal disease. These guidelines have been shared across the organisation.

MODELLING AND HEALTH ECONOMIC WORK

The HPA has provided information to the JCVI on the potential effectiveness and cost-effectiveness of several new vaccine options, including the introduction of vaccination for varicella-zoster and rotavirus, and the potential role of new higher-valency pneumococcal conjugate vaccines containing additional pneumococcal serotypes.

Protecting girls from cervical cancer

In September the DH rolled out the adolescent school-girl human papilloma virus (HPV) vaccination programme across the NHS. HPV has been shown to cause a high proportion of cervical cancers. The HPA established a vaccine uptake monitoring system and worked with the NHS at local level to ensure the scheme was successful.

Provisional data (to January 2009) for girls aged 12-13 indicates an uptake in excess of 80% for the first dose of HPV vaccine and 70% for the second.

TACKLING MENINGITIS

Meningococcal B disease remains a leading cause of bacterial meningitis in children and young adults. There are several meningitis B vaccine candidates on the horizon and the agency has played an important role in assisting the development of these, principally through the provision of assay support.

The HPA has also evaluated its own novel vaccine approach through a phase 1 safety and immunogenicity clinical trial of a vaccine prepared from the commensal *Neisseria lactamica*. The analysis of clinical trial sera is ongoing.

To protect against the adverse health effects of acute and chronic exposure to chemicals, poisons and other environmental hazards

Key aims for 2008/09

- To improve detection, planning, preparedness, response and public health management of acute and chronic incidents involving exposure to hazardous chemicals and poisons.
- To reduce the risk of harmful exposure to environmental hazards through early identification, risk assessment and expert advice.
- To contribute to national and international development of information and intelligence in order to reduce the burden of disease caused by chemicals in the environment and by the development of risk communication systems.

This programme focuses on providing scientific and medical advice to government, NHS and other bodies on the known health effects of chemicals, poisons and related environmental hazards.

In 2008/09 the HPA provided a 24-hour, 365-day specialist advice service on the health implications of chemical incidents for its health protection units and other organisations, including the NHS and emergency services.

In 2008 the HPA's Chemical Incident Surveillance System recorded 871 incidents (a small rise on the approximately 840 incidents in 2007). Of these, 34% were fires, 17% leaks (of these 17% were carbon monoxide leaks), 14% spills and 9% releases.

The HPA has also advised doctors and nurses, via the National Poisons Information Service, on the best way to manage patients who have been poisoned. In 2003 there were 45,404 TOXBASE website hits for chemicals, which increased to 50,698 in 2008. The number of calls to NPIS in 2003 was 137,458, which reduced to 54,586 for 2008/09.

Staff from a number of divisions have developed a new environmental and public health service in England based around four supra-regional teams in Birmingham, Nottingham, Chilton and London to provide more locally responsive services to the frontline.

STAYING ALERT AND RESPONSIVE

National and international alert and response systems and surveillance systems are essential in dealing effectively with incidents – along with the capacity and expertise to manage 24-hour evidence-based clinical and public health advisory services.

A comprehensive training programme covering the competencies required to be on-call as environmental scientists and toxicologists has been developed. The HPA has also produced standards for advice and support offered in the event of a chemical incident and audit against those standards.

The HPA has produced an online information series on chemical hazards for the public and public health professionals. This covers issues such as general information, incident management and toxicology. This year detailed information on 12 chemicals was published.

50,698

TOXBASE poisons information website visits in 2008

The HPA's Environmental Health and Risk Assessment Unit has piloted a mechanism for a national environmental public health tracking programme, in collaboration with other organisations including the Environment Agency. The aim is to bring environmental hazard, exposure and health data together to routinely assess the impact on health and monitor the effect of interventions. This programme will develop indicators for monitoring effects and make suggestions for

further analysis focusing resources on areas with the greatest potential for health gain. The HPA will continue to focus on the impact on potentially vulnerable groups such as children and deprived communities.

GUIDANCE LEVELS FOR CHEMICALS

During the year an advisory group reviewed and assessed the application of acute emergency guidance levels (AEGLs) developed by the US Environmental Protection Agency for specific chemicals in respect of emergency planning, prevention and response programmes. Such guidelines do not currently exist in the UK. The advisory group concluded that the AEGLS should be adopted by the HPA.

CROSS-AGENCY WORKING

The HPA's Chemical Hazards and Poisons Division and Radiation Protection Division have been developing ways to exploit their different scientific approaches to environmental concerns. Over the past year staff from the divisions have exploited opportunities to come together to further develop work in each of the key responsibilities of the centre. This has led to the publication of the report *Comparison of Processes and Procedures for Setting Standards – Chemicals, Ionising Radiation and Non-Ionising Radiation*.

939

Chemical incidents dealt with in 2008/09

Cross-cutting targets in the current business plan are to establish the National Nano-toxicology Research Centre (NNRC), funded by the HPA research and development fund, and to assess the impact of long-term chemical exposure.

A cross-agency steering group was also formed to take forward collaborative work on the health-related aspects of climate change/flooding. Other cross-cutting work included collaborations with staff based at the Centre for Emergency Preparedness and Response on the use of geographical information systems.

LOW-LEVEL EXPOSURE

The HPA has continued its research to improve understanding of long-term consequences of low-level exposure to chemicals and poisons especially in relation to reproductive health; asthma; cancer; chemical, biological, radiological and nuclear chemicals; and nanomaterials.

Responding to major disasters

In September the HPA unveiled a new environmental sampling process to help assess the risks to human health from major chemical disasters. There was no single UK agency responsible for monitoring this. The HPA has built on its existing sampling capacity for radioactive contamination to develop teams capable of collecting soil and herbage samples after the fallout from large chemical incidents.

It can now respond to a major chemical disaster by rapidly deploying up to 20 experts to gather key data on environmental contamination from a range of inorganic and organic chemicals.

'The HPA is bringing together experts from both military and civilian backgrounds to ensure that the UK and its partners are best placed to deal with terrorist incidents'

SIR WILLIAM STEWART, EX-CHAIRMAN, HEALTH PROTECTION AGENCY

To improve protection against the adverse effects of exposure to ionising and non-ionising radiation

Key aims for 2008/09

- To reduce the risk of cancer and other health effects.
- To improve our understanding of the effects of the environment on health.
- To reduce the impact of accidents and incidents involving radiation and chemicals.
- To address public anxiety by risk assessment and communication.
- To identify new technologies that could potentially have harmful effects.

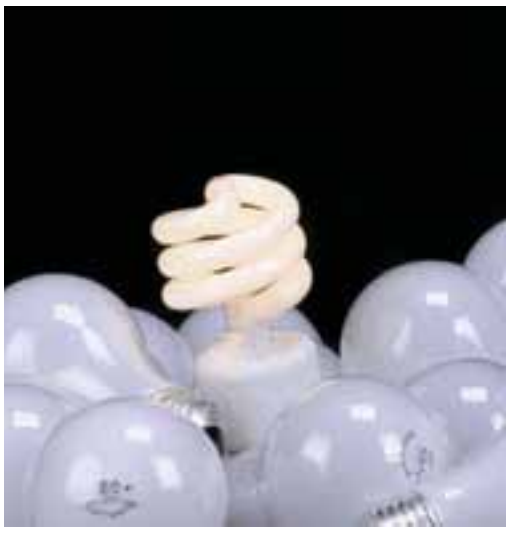
This programme focuses on the exposures and health effects of ionising and non-ionising radiation, radiological protection services and training, and the development of radiological protection advice.

Scientific oversight is managed through the HPA Board subcommittee for Radiation, Chemical and Environmental Hazards. Membership of the subcommittee includes external experts in relevant fields who are able to scrutinise the agency's scientific work and progress. Meetings are also held with stakeholders to discuss the development of specific advice.

SAFETY OF MRI SCANS

In May 2008 the HPA's Advisory Group on Non-Ionising Radiation (AGNIR) published a report on the short and long-term health effects of exposure to static magnetic fields, as used in magnetic resonance imaging (MRI) and a range of other applications.

It recommended the need for an epidemiological study of possible adverse health effects from the unusually high static magnetic fields associated with MRI in occupational settings. In response to this, the HPA Board set up an expert scoping group to review what would be necessary for such a study.



ADVICE ON LIGHTBULBS

In October the HPA issued precautionary advice to the general public for the use of certain types of compact fluorescent lightbulbs (CFLs). New research by the agency found that some energy-saving CFLs can emit ultraviolet radiation at levels that, under certain conditions of use, can result in exposures higher than the International Commission on Non-Ionising Radiation Protection's exposure guideline levels.

400,000

Radiation dosemeters issued, to over 65,000 individuals in 2008/09

RADON AND BUILDING REGULATIONS

In May 2008, at the request of the Department of Health, the HPA advised that the building regulations should be amended to ensure that all new buildings include basic radon protection measures and that new buildings requiring full protective measures, because they are in areas with higher radon levels, have radon tests.

RESEARCH

The decommissioning of nuclear, oil/gas and other industrial sites as well as recent major incidents and legislation to remediate

contaminated land has led to a need for combined chemical and radiochemical analytical expertise. In response to this, and in addition to the research described on p46, the HPA has developed facilities in Glasgow to measure chemical contaminants in a range of matrices.

JOINED-UP WORKING

Laboratory studies on the effects of combined exposure to ionising radiation and chemical genotoxins have continued with external grant funding. The long-term strategy is to develop a set of departments within which related work on radiation and chemical hazards can develop in tandem. This will maximise scientific outputs, harmonise protection standards and increase management efficiency.

The largest such project to date has been to establish the National Nano-toxicology Research Centre, funded by the HPA research and development fund. The full commissioning of the inhalation facility has been subject to minor delays due to unforeseen needs for additional refurbishment of the laboratory areas.

OTHER ACTIVITIES

Following a DH commission, the HPA consulted on and produced the *Children's Environment and Health Strategy for the United Kingdom*. Plans for implementing this will continue to be developed into 2009/10.

The impact of the forthcoming debate on energy policy in the UK is likely to increase demand on the HPA for assessments of exposure and risks from nuclear and other means of generating and distributing power. It is too early to quantify the impact of this work on the established objectives and targets of the agency, but it may be considerable.

The science of the small

Nanotechnology uses materials of dimensions measured in nanometers (1×10^{-9}m or 0.000001mm). Such materials can have unusual properties that make them useful in medicine, electronics, optical-electronic systems and imaging. They are also used in cosmetic and food products.

The HPA has set up a new centre to study the possible health effects of human exposure to nanoparticles. The National Nanotoxicology Research Centre has been developed in collaboration with the Universities of Birmingham, Cardiff, Edinburgh, Imperial College and King's College London, and the Medical Research Council's Toxicology Unit.

It will focus initially on the behaviour of nanomaterials that enter the body via the lung and skin. The transportation of nanomaterials in the body will be studied and special emphasis will be placed on investigating the biokinetics of nanoparticles. This will involve studies of their entry into the body, their distribution within and their removal from the body.

'This will increase our commercial viability in providing services to nuclear, oil/ gas and other industrial stakeholders when they are decommissioning'

ROGER COX, DIRECTOR OF THE CENTRE FOR RADIATION, CHEMICAL AND ENVIRONMENTAL HAZARDS, ON COMBINING THE HPA'S CHEMICAL AND RADIOCHEMICAL ANALYTICAL EXPERTISE

To prepare and respond to emerging health threats and emergencies including those caused by emerging disease and deliberate release

Key aims for 2008/09

- To ensure the HPA's emergency preparedness work programmes are informed by a sound understanding of current and potential future threats and risks.
- To ensure that the HPA has robust and fit-for-purpose plans and business continuity arrangements, which allow an effective response to incident and emergencies.
- To provide an effective and resilient health protection service in support of the Department of Health, government departments, health services, the public and others including devolved administrations in their preparedness and response to health emergencies.
- To maintain a set of standards for the HPA in relation to preparedness and response.
- To further develop contingency arrangements to underpin the national risk assessment taking account of arrangements of the HPA's partner organisations.

Emergencies, outbreaks of disease and chemical incidents have the potential to cause disruption for communities on a large scale and can develop very rapidly, so preparation and emergency planning are essential components in minimising the impact on the public.

The HPA provides authoritative scientific and medical information and advice on both the planning and operational responses to major incidents and the wider public health implications.

STRATEGIC PLANNING

In 2008/09 an Executive Group workshop was organised to review the HPA's overarching *Incident and Emergency Response Plan*, which was published in November. A series of workshops were held throughout the year to help develop an overarching business continuity strategy, from which a corporate plan on the issue has been developed.

TRAINING

A programme of agency-wide training in emergency response roles has been developed. Training has already started in business continuity and the HPA's alerting system, while training courses have been delivered for incident directors. An e-learning module has also been developed and delivered to all staff to raise awareness of the HPA's emergency response function.

More than 20,000 doctors have received training covering chemical, biological, radiological or nuclear (CBRN) emergency response via e-learning modules hosted by the external supplier Doctors.net. In September this service was replaced by the launch of eHealth, a new e-learning portal, delivered on behalf of the Department of Health.

The eHealth site offers training modules in generic incident management and smallpox, with more modules under development covering casualties suffering from radiation, chemicals, burns and blasts.

EXERCISES

In December the HPA won a European Commission contract to deliver a four-year programme of training, exercises and case studies. This work began with training emergency managers and operations room staff to use the health emergency operations facilities and information management systems previously purchased by the EC. This phase of training was tested by Exercise United Endeavour.

This year's effort culminated in Exercise Aeolus, an EC-wide command post and communications exercise run over two days and engaging all member states.

In November the HPA took part in Exercise Green Star, which was led by the Department for Environment, Food and Rural Affairs

(DEFRA). The aim was to test multi-agency response to the detonation of a series of dirty (radiological) bombs throughout the UK. The exercise tested the national, regional and local HPA response to the incident.

EXERCISE ORPHEUS

A one-day multi-agency exercise, named Orpheus, was held at the Fire and Rescue Service College in Gloucestershire. The event involved over 600 players using scenarios including a chemical attack and a collapsed building. The new Ambulance Service Hazardous Area Response Team and the Fire and Rescue Service's Urban Search and Rescue Group were able to train together in real-time on realistic terrain with 'live' casualties.

This event was one of the most comprehensive tests of the emergency response to a CBRN incident since the Fire Service received its large-scale decontamination equipment as part of the government's New Dimensions funding stream that was set up in response to the 11 September 2001 attacks in the US. Lessons from the exercise were taken forward in Orpheus 2 in July, which involved the John Radcliffe Hospital in Oxford processing the chemically contaminated casualties 'rescued' in the original exercise.

DH EXERCISES

The HPA runs an exercise programme on behalf of the DH. Over the past year this has included:

- Exercise Maximus – a large explosion in central Manchester creating mass casualties. One aspect was to test the flow of information and data between 60 participating NHS control rooms.
- Exercise Southbank – a severe flooding event creating a complete power loss affecting the St Thomas' hospital site in London, triggering a whole site hospital evacuation.
- Exercise Green Capella – used the same scenario as Exercise Green Star but took place earlier, in the West Midlands, to look at the response phase of the dirty bomb scenario. A radioactive device detonated in a vehicle in the Queensway tunnel, blocking both exit lanes and causing contamination of an area in Birmingham city centre. The exercise explored the liaison between the NHS and others in an incident requiring emergency response arrangements.

OTHER ACTIVITIES

The HPA published a number of documents on emergencies, including the *Health Emergency Planning Handbook for Practitioners*.

The HPA provided expertise at courses delivered at the Police National CBRN Centre and the Fire Service College, and staff delivered a series of scientific and technical cell training modules across the English NHS regions.

A project to create a single, shared GIS resource and single core data repository for use across the agency has been a success. This has greatly improved access to mapping data for emergencies and research projects and reduced duplication of effort.

Safer mass decontamination

Optimisation through Research of Chemical Incident Showering (ORCHIS) was a behavioural research project commissioned by the Department of Health to explore the efficacy of the washing process in mass decontamination. In November around 100 volunteers were 'showered' in the Fire Service chemical decontamination system to see how effective the current process is.

Some elements of the process were varied to look for improvements that could be made to washing effectiveness, with photographs of the volunteers under UV lights confirming how well people had cleaned themselves in the shower. The findings will be used to improve the current procedure and highlight further areas for research.

To combat pandemic influenza

Key aims for 2008/09

- To provide a UK coordinating role for pandemic influenza preparedness arrangements in partnership with the health protection organisations of the devolved administrations, based on global developments and informed through liaison with WHO and other relevant international agencies.
- To provide an expert, evidence-based modelling capability to inform strategic pandemic influenza-related decision making.
- To coordinate the development of appropriate UK national guidelines for health professionals based on a sound evidence base and relevant expertise as well as epidemiological and scientific developments.
- To develop the capability and capacity to assess and monitor antiviral susceptibility in line with the antiviral deployment arrangements being implemented across the UK and integrated with established influenza virus surveillance activities.
- To assess the functionality of currently available near-patient tests for testing respiratory samples in a pandemic. To develop HPA capacity and capability to undertake laboratory testing and carry out surveillance for other respiratory agents.
- To support the development of improved influenza vaccines.

Pandemic influenza (flu) is the illness that will be caused if a strain of the virus appears and spreads rapidly, causing widespread epidemics in countries around the world. A pandemic occurs over large geographical areas and affects a significant proportion of the population in each country in which it appears.

The programme focuses on improving UK preparedness for a future pandemic and supporting the government, the NHS and the public in responding to it in the most effective way.

The HPA has completed the development of its global intelligence flu function. This involves researching and preparing regular reports documenting global surveillance on pandemic flu and distributing this via a *Pandemic Influenza Preparedness Update* report every six weeks to the HPA Board. The office also produces an *Influenza Intelligence Update* report every month.

Modelling pandemic flu has continued through a multi-agency group to provide information for planning. In the event of a pandemic it has been recognised that real-time modelling will be required to epidemiologically assess the first few 100 cases. This will inform decisions that have to be made at governmental level. The real-time modelling project has been initiated and the agency is leading this process internationally.

The HPA has advised on and developed a number of guidance documents on pandemic flu, ranging from advice on infection control in the healthcare sector to occupational guidance for the police and the fire and rescue services. The HPA also contributed to the revision of the World Health Organization pandemic flu preparedness guidance.

ANIMAL INFLUENZA VIRUSES

The HPA has revised and streamlined its management action plan (algorithm) relating to novel flu virus cases or incidents. There are now three algorithms to assist in the management of suspected or confirmed human cases, contacts of confirmed cases and people exposed where flu is suspected or confirmed.

The HPA continues to play a pivotal role in the detection and monitoring of resistance to oseltamivir (Tamiflu), the antiviral drug used in the treatment of flu viruses.

In the 2008/09 flu season all but one of the H1N1 strains isolated in the UK were oseltamivir-resistant. Fortunately, in the UK the predominant virus strain during the flu season, H3N2, was fully sensitive to the drug.

The HPA was involved in an avian flu incident

during June 2008, when there was an outbreak of the H7N7 strain at an Oxfordshire chicken farm. All of the birds were culled and no human cases were identified.

Since 2006 seven avian flu incidents affecting poultry and wild birds have been investigated in the UK. The HPA has tested over 400 people in the course of these incidents, with only five human cases of avian flu being identified. All of the infections occurred in people not wearing personal protective equipment while handling or in the vicinity of infected birds.

RESEARCH

The HPA has continued to work on immune responses to flu vaccines and vaccine development. This ranges from support of vaccine trials in the NHS and vaccine efficacy studies with a range of partners, to the development of testing methods.

Vaccine work will be aided by the National Institute for Biological Standards and Control (NIBSC) from 1 April 2009. Collaboration has already been focusing on a number of areas – H5N1 candidate vaccine development, the development of a library of candidate vaccine strains and their reagents, techniques to improve the yield from vaccine viruses, setting antibody standards for vaccine testing, and work on pre-pandemic vaccines.

INTERNATIONAL WORK

The International Monetary Fund and the World Bank have recognised the enormous progress made by the UK in pandemic flu preparedness – and it is now widely acknowledged to be one of the most prepared countries in the world. The UK has stockpiled millions of doses of antiviral drugs, which would enable services to cope with the scenario of an infection rate that could affect up to half the population.

Tracking the first cases

The First Few 100 (FF100) project involves the collection of information about a limited number of the earliest confirmed cases of pandemic flu in the UK. This data will be necessary to:

- Gain an early understanding of some of the key clinical, epidemiological and virological parameters of the pandemic virus.
- Enable real-time modelling efforts to make predictions of the future course of the UK pandemic.
- Inform guidance development and policy decisions to manage cases and reduce the spread of the pandemic in the UK.

Data collection will start when the first laboratory-confirmed case is identified in the UK. The project will continue until data is collected for a minimum of 100 laboratory confirmed cases.

‘Having enough antivirals to treat the worst-case scenario, and two different antivirals in case resistance develops, is a first-class example of the UK’s advanced planning’

DAVID HEYMANN, FORMER ASSISTANT DIRECTOR-GENERAL FOR HEALTH SECURITY AND ENVIRONMENT AT WHO AND NEW HPA CHAIRMAN

Raising the understanding of health protection and involvement of the public

Key aim for 2008/09

- To engage directly with the public in order to facilitate their input into shaping HPA services and also to enhance general understanding of key health protection issues and the agency's work. It will seek to do this by means of innovative public outreach and through the provision of clear, reliable, easily accessible sources of information at national, regional and local levels.

The HPA has a wide-ranging public involvement programme designed to consult with and involve the public and stakeholders. The first three phases that laid the groundwork for this programme have been delivered with a public opinion survey that led to the recruitment of a people's panel, stakeholder interviews and focus groups.

Building on the work to date, the agency is committed to following a planned, strategic approach to engagement and consultation. It aims to demonstrate a transparent business culture through active participation of the public in running the organisation.

The HPA now has a model for public engagement and consultation, developed in conjunction with the NHS Centre for Public Involvement.

In May and June six focus groups were held in London, Exeter, Birmingham and Leeds. As healthcare-associated infections had been identified as the top health protection concern in a public opinion survey, 50 participants from the people's panel were asked to provide feedback on healthcare-associated infection information. This feedback was used to redesign a set of HCAI printed materials.

IMPROVING COMMUNICATIONS CHANNELS

The www.hpa.org.uk website is an established source of information and advice, usually attracting approximately 200,000 visitors per month. The site technology and systems were updated in April 2008. Work is ongoing to improve the site to ensure that it is more accessible, user-friendly and useful to the public and health professionals alike.

A new search engine has been launched on the site, improving access to content and, also the HPA Board approved a five-year web strategy for the agency.

Members of the people's panel now receive updates on activities, and the outcomes of the public involvement work is published on a 'Have Your Say' section of the website, demonstrating the value of involving the public and how consultation has informed major decisions.

333

Members of the HPA people's panel

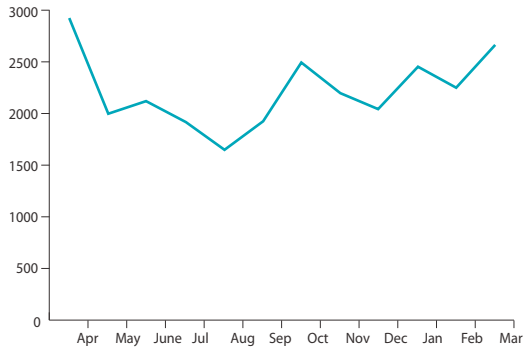
The agency has convened workshops with the people's panel to gather opinion on site design and information access, which has been incorporated into the new design and structure for the website.

The website contains approximately 5,416 pages with 4,865 documents (PDFs, word and multimedia items)

SPECIALIST STAFF

The HPA now has specialist communications staff in all centres and the nine regions.

Website visits in 2008/09



The communications teams handle approximately 300-800 media calls each week on a wide variety of issues.

They work to support delivery of all the HPA's programmes and link with the NHS, local authorities and other stakeholders at regional level through tasks such as coordinating multi-agency communications in response to an incident or emergency, contributing to communications planning for pandemic influenza, building links with local politicians and MPs, and contributing to the communications elements of Local and Regional Resilience Networks.

221,535

Average visits per month to the HPA website in 2008/09

LOOKING AHEAD

A second public opinion survey has been commissioned to continue the process of measuring and benchmarking public perceptions of agency as well as tracking awareness of health protection issues.

A series of regional roadshows will take place in 2009 to highlight the work of the agency for the people's panel and stakeholders as well as members of the public.

'I think the HPA is doing very well'

Jane Malone is a member of the HPA people's panel. She said: 'I've taken part in three HPA focus groups so far. I am very interested in the communication of information to the public and I am often dissatisfied because I do not feel that I get enough.

'I hadn't a clue what the HPA did before, I had not even heard of it.

'I have been impressed by the way in which the HPA discussion groups have been facilitated to focus on particular issues. At the introductory focus group, participants did express doubts that this was just something the HPA was obliged by law to do and they would go ahead and do things their way regardless.

'After receiving feedback, I believe the organisation will genuinely take on board comments from the public. As far as trying to improve communication with ordinary members of the public, I think the HPA is doing very well. I've offered to take part in future focus groups.'

'Providing clear, timely, accurate and authoritative information for the public and professionals is vital for effective health protection'

LIS BIRRANE, HPA DIRECTOR OF COMMUNICATIONS

Contributing to the UK international health objectives to global health

Key aims for 2008/09

- To establish Health Protection Global as a focus for the HPA's international development activities.

Health protection requires close cooperation and the prompt exchange of information both locally and internationally.

The agency's international activities contribute to improving global public health through offering a wide range of expertise and experience on the effects of infections, chemicals, poisons and radiation hazards on human health. The HPA is the formal UK focal point for implementing the International Health Regulations.

In addition, the contacts and information gained through international links improve the HPA's effectiveness and efficiency in handling UK health protection priorities.

The HPA has three key areas of expertise most widely sought internationally: advice and consultancy, research and development, and training and teaching.

As an independent organisation responsible for providing expert advice and services for health protection, the HPA is internationally recognised as a source of expertise and knowledge, including WHO collaborating centres and internationally designated laboratories.

> 'The HPA is uniquely placed to work with international organisations such as the WHO and EU to help improve the health of people globally'
>
> PROFESSOR NIGEL LIGHTFOOT, CHIEF ADVISOR TO THE HPA CHIEF EXECUTIVE

THE GLOBAL HEALTH STRATEGY

The HPA welcomed the publication in September 2008 of *Health is Global*, the government's global health strategy, which sets out a coordinated approach to assessing the impact of the UK's policies on global health.

The strategy awarded the HPA £1.9m in total over five years for new international health work and acknowledged the agency's contribution to the UK's initiatives to address global health challenges such as infectious diseases and environmental, radiation and chemical threats to public health.

1,170

Number of international meetings or events attended by HPA staff, in 72 countries

This funding will be used to strengthen global public health capacity, in particular helping other countries meet their International Health Regulations commitments.

The HPA's expertise in disease surveillance, laboratory diagnosis and intervention strategies means it is in a strong position to help other countries improve their capacity building in respect of public health protection. The WHO is working closely with the HPA to develop partnerships with key international stakeholders. Regular reports will be provided to the Department of Health on expenditure allocated under the global health strategy.

Professor Nigel Lightfoot, chief adviser to the HPA Chief Executive, said: 'The Health Protection Agency has been awarded funding of £1.9 million to further its global health protection work over the next five years. The agency is uniquely placed to work with international organisations such as the WHO, the European Union and a number of other

Preparing for the London Olympics

The HPA is involved in the health sector and emergency response planning for the London 2012 Olympics and Paralympics. This involves close work with many partners, including the chief medical officer for the games, the NHS and security services.

During 2008 the HPA established an Olympics Coordinating Group, with representation from across the organisation. It is working to deliver the Olympics programme from 2009 to 2012. The health protection services for the games will be delivered mainly through the local health protection units, in particular the North East London HPU and North Central London HPU, with other HPA resources supporting them.

Although the games are largely London based, they will have a national impact on the HPA because of the venues outside London, the pre-event training camps around the country and the various associated public events.

As the Olympics are an infrequent event, it is important to learn from previous games. HPA staff attended the Beijing Olympics as part of the London 2012 Observers Programme. They saw the organisation of the event in real time and experienced the impact on the host city and its health services. They met their counterpart health organisations to understand how they had prepared, and spoke with International Olympic Committee officials to assess their expectations.

Work is also underway with several agencies involved in the Winter Olympics 2010 in Canada. An HPA observer attended a major exercise held as part of Canada's Olympic preparations, where they witnessed plans and preparations, made contacts and shared experiences with counterpart organisations.

As part of the preparations, the HPA is working closely with WHO on their 'mass gatherings' project, which provides access to support and expert advice from around the world.

partners to help improve the health of people not only in the UK but globally.'

HEALTH PROTECTION GLOBAL

The HPA explored the potential for setting up a separate charitable arm for international development activities not funded through central government.

However, the HPA Global Health Subcommittee of the Board decided initially to establish Health Protection Global as an internal department for the purpose of managing the DH international funding.

INTERNATIONAL COLLABORATIONS

As part of the HPA's support for UK government Memoranda of Understanding on health collaboration with other countries, the agency has contributed expertise to UK health collaboration initiatives with countries including China, Brazil, Libya and South Africa.

Developing and improving the evidence base through a comprehensive research and development programme

Key aims for 2008/09

- To ensure all research carried out by the HPA complies with UK research governance guidelines and standards for best practice.
- To ensure the recommendations of the DH review of the HPA's research and development are implemented.
- To enable the HPA's research programmes to be at the cutting edge of public health research, both nationally and internationally.
- To ensure the best opportunity to increase funding for research from external sources.

Research and development is a key activity of the HPA and is essential for its continued credibility, viability and vitality. Research is carried out in all centres and divisions and overlaps with the majority of priority programmes.

There have been many collaborations with partners in the UK and overseas. The total value of new external grants awarded in 2008/09 was over £9m, compared with £5m in 2007/08. As part of the objective to increase funding from external funders, the agency is in discussion with Research Councils UK and charities about eligibility criteria for funding.

The HPA's Pump Priming and Small Initiatives Fund made 10 awards, valued at £104,000 in 2008/09, while seven PhD studentships were awarded to agency staff. In addition, the Executive Group agreed that support for each of these studentships should be raised to £35,000 per annum. The largest distribution of internal funds for R&D is made through the Strategic R&D Fund, which supported 13 new projects with a total value of over £2.6m.

DIXON REPORT ON RESEARCH ACTIVITY

In 2006 the Department of Health commissioned an independent review of the HPA's research activities, which resulted in the Dixon report. In response the agency has:

- Established a protocol for the independent review every five years of all research areas.
- Established a process for the regular review of all internally funded research and a timetable for its implementation.
- Consulted on a protocol to facilitate strong internal and external collaborative research networks.
- Consulted on improvements which staff would like made to professional development and training programmes for R&D.
- Set up a subgroup to establish ways of taking research findings and translating them into processes or products to be used by the frontline.

RESEARCH HIGHLIGHTS

The HPA is working to develop an improved tuberculosis vaccine. Part of the work focuses on recognising novel cell surface molecules, with several candidates being evaluated as potential vaccines. A number of patents have been awarded related to the use of these molecules as potential therapeutics.

The HPA has produced a new system for assessing automated washing processes in healthcare facilities. The system uses enzymes that bind tightly to stainless steel to help measure how much protein is removed during the washing process – giving staff a result within two minutes of each wash.

£9m

New external grants awarded to the HPA in 2008/09

It has been a remarkable year in terms of delivery to US partners. Achievements involved an improved capability to safely generate, evaluate and use aerosols of dangerous pathogens, including orthopox viruses, *Bacillus anthracis* (anthrax) and *Burkholderia pseudomallei* (melliodosis).

In addition, details of *Yersinia pestis* (plague) studies evaluating a new vaccine and using aerosolisation equipment were published and presented at an international conference on biodefence in the US.

There is an active research network among health protection units, with increasing

collaboration with local universities.

During an influenza pandemic antiviral drugs and vaccines will be in short supply in many countries. It is thought that statins could play a role in preventing or reducing the severity of acute infections, meaning they could become an important pandemic measure, especially in countries that cannot afford antiviral drugs. The HPA, working with the Royal College of General Practitioners, is examining this question using the RCGP sentinel practice database.

Working with colleagues from universities and the private sector, the HPA is bidding for major funding to begin a series of quarantine-based influenza challenge studies in human volunteers to find out more about modes of influenza transmission and the effectiveness of facemasks and respirators.

After several years of developmental work by the HPA, 2008/09 has seen the successful implementation of a respiratory screen into routine diagnostic use. This work received second prize at the NW Developmental Agency innovation awards and was voted winner of the National Technology Awards for its impact in advancing diagnostics. Collaborative projects with universities investigating meningococcal and pneumococcal disease in Malawi and Nepal have been successful and results have been published in peer-reviewed journals.

The HPA's modernisation fund supported a study to look at the feasibility of using real-time polymerase chain reaction (PCR) testing for major gastrointestinal pathogens including campylobacter, salmonella and *Escherichia coli* O157. The study concluded it will improve laboratory testing, with major advantages in public health management of these infections for surveillance and management.

There is a continuing programme of research in the UK relevant to exposures to radiofrequency fields. The HPA reviews published research on health concerns arising from exposure to power frequency electromagnetic fields and ultraviolet radiation.

In 2008/09 the HPA initiated a new project to assess microwave exposures from WiFi installations in schools. This involves both laboratory-based studies and measurements in schools and will be followed by a review of the health-related aspects of microwave exposure.

In June the HPA announced a collaboration with the Defence Science and Technology Laboratory (DSTL) on a major £3.5m research programme to combat the threat of chemical terrorism. This will focus on decontamination procedures relating to toxic materials. Researchers will use harmless chemical simulants in disaster planning exercises to test emergency services' ability to respond to a chemical terrorist attack.

A programme of research is being developed to investigate the usefulness of biomarkers of chemical exposures and epidemiological approaches to health effects. Some of this work is being commissioned and will be developed in collaboration with national and international partners.

Fighting flu on the buses

Would using public transport increase your risk of catching influenza during a pandemic? An HPA study to answer this was timed to coincide with a period of sustained influenza activity during the 2008/09 winter season. This study involves frontline agency staff and local partners. The results will be published in 2009/10.

7

PhD studentships awarded to HPA staff in 2008/09

Developing a skilled and motivated workforce

Key aims for 2008/09

- To ensure all staff are appraised and their development needs identified.
- To ensure turnover/staff stability are controlled to retain existing essential skills.
- To increase the number of black and minority ethnic staff in senior HPA positions.
- To improve succession planning from the new talent pool.
- To reduce sickness absence rates.
- To reduce formal grievances and disciplinaries.

The programme aims to improve the expertise of staff to deliver better public health, achieve a better skill mix of staff, and strengthen public health, scientific and managerial leadership.

Appraisal is a key process for identifying the development needs of staff and for providing direction and motivation. By the end of March 2009 95.5% of staff had completed an annual appraisal and personal development plan. This was regarded as a good performance and compared favourably to the 90% return recorded in 2008.

The HPA is reviewing its appraisal system and improving the competency framework. The intention is to pilot a new system, including 360 degree feedback for executive directors in 2009/10, with a new system in place for all senior managers in 2010/11 and for all HPA staff by 2011/12.

STAFF TURNOVER

The rolling annual turnover figure at the end of 2008/09 was 12.05% against a target of 12%, a decrease from the figure of 12.88% reported at the end of 2007/08. A Chartered Institute of Personnel Development (CIPD) survey in 2008/09 found that the overall employee turnover rate in the health sector had fallen from 17.2% in 2007 to 13.2%, and reported a 13.5% rate for the public sector overall.

EQUALITY AND DIVERSITY

The HPA has appointed an equality and diversity project leader and an action plan for 2009/10 has been developed to address key aspects of the equality and diversity agenda. This will culminate in the development of a Single Equality Scheme to set out the HPA's arrangements for meeting its statutory obligations on race, gender, disability, sexual orientation, age, religion/beliefs and human rights. Implementation of the scheme will take place over a three-year period.

Equality impact assessments (EIAs) allow the HPA to ensure its employment and service delivery policies and systems are being applied fairly and consistently. Priority areas for EIAs were identified and a pilot for undertaking them took place. Some 25 staff were trained in this way during the year and more training is planned.

Guidance on developing a three-year programme on EIAs for policies, procedures and services has been produced. Equality and diversity champions have been identified and briefed. Implementation of the programme for EIAs will be a target for 2009/10.

LEADERSHIP AND SUCCESSION PLANNING

A series of roadshows to develop a corporate vision and values also identified there is a perceived need for improved leadership across the HPA. The agency has a senior leadership development programme in place, focusing on succession planning.

Following the success of events held in 2007/08 aimed at senior staff, regular management development events are planned for 2009/10 and beyond to develop middle-managers. A new framework covering both leadership and professional staff succession planning has been developed and will be launched in early 2009/10.

An HPA-wide staff policy is under development to recognise and reward staff at all levels who make an exceptional contribution.

SICKNESS ABSENCE

The rolling annual figure at the end of the year shows a sickness rate of 9.2 days

69%

Proportion of staff who say they are proud to work for the agency

lost per employee per year (3.78%), which represents an increase from the 8.4 days per employee (3.58%) reported at the end of 2007/08, though this is still lower than the 9.8 days rate for the rest of the health sector suggested by a 2008 CIPD survey.

The HPA has improved its sickness reporting arrangements and has a target to reduce sickness absence rates to below 3.5% and a longer-term aspiration to reduce the rate to below 3%.

LEARNING

An 'Academy' model will be rolled out to coordinate all professional learning and development activity. In addition, all internal management, development, governance, emergency planning and knowledge management training will be coordinated under this model to support strategic succession planning and career development initiatives.

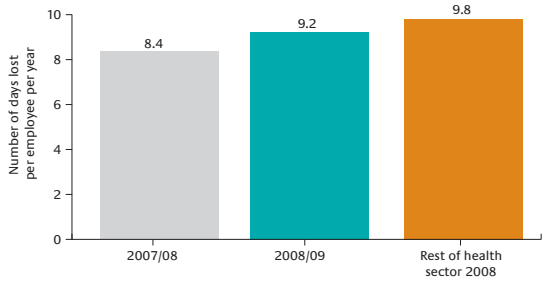
Updated core training modules were published and implemented in 2008/09 to reflect operational priorities and related competency frameworks.

WORKFORCE STRATEGY

The HPA's new workforce strategy provides a framework for predicting future staffing needs and recruiting and retaining suitably experienced and qualified staff. The workforce priority is to integrate the new vision and values into day-to-day operations. In addition, nine workforce planning events were held throughout the regions.

As part of the 2009/10 workforce priorities, comprehensive skill mix reviews will produce a framework of staff competencies to ensure that all posts contribute fully to the HPA's strategic aims, identify skills gaps and provide clear objective evidence for career progression and performance management.

Days lost through sickness absence



Employee opinion survey

The 2008/09 employee opinion survey demonstrated a wide range of opinions:

60% of staff responded to the survey, a slight increase on the previous figure. There was a wide variation in opinion between centres/divisions.

69% agreed or strongly agreed that they are proud to work for the HPA – an improvement on the public sector benchmark of 63% as provided by the British Market Research Bureau.

81% agreed or strongly agreed they had a good day-to-day working relationship with their manager.

78% said they really liked the duties and activities of their job.

35% were extremely or very likely to recommend the HPA as a good place to work. This was an improvement over the previous figure, but still below average for the public sector.

68% were positive about their access to job-related training, but only 17% felt Agenda for Change gave them opportunities to develop into new roles.

Executive Group members have provided action plans on how to address employees' concerns. Actions agreed included addressing the pay reform challenges posed by Agenda for Change and improving the HPA's leadership capabilities. The deadline for completion for most agreed actions under the plan is late 2009, apart from the full functioning of the HPA's learning and development 'Academy', which is planned for 2012/13.

Exploiting our assets to develop new evidence-based interventions

Key aims for 2008/09

- To review and define key assets.
- Identify projects to take these assets forward.
- Review the patent and intellectual property portfolio.
- Upgrade HPA systems for managing customer relationships.
- Ensure we meet our financial goals.

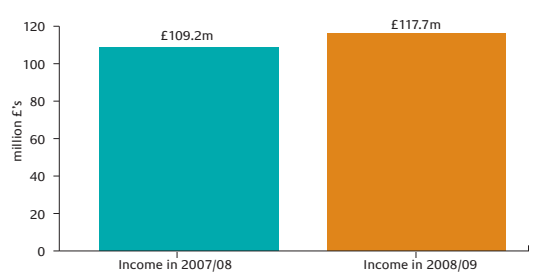
This programme aims to ensure the HPA's assets and skills are translated into health interventions by establishing close links with the programme boards and by developing key performance indicators. It is concerned with the translational activities achieved through external partnerships rather than delivering core services.

During the year the programme developed and gained approval for the interventions strategy and the principles according to which the HPA generates external income. Key appointments have been made in translational research, production and development, and a corporate Business Development Group has been established to oversee the agency's business processes. The HPA gained access to £5m of funding from the Department for Innovation, Universities & Skills for the exploitation of intellectual property.

Five new patent cases have been opened during the year. External income grew from £109.2m in 2007/08 to £117.7m this year.

The number of business enquiries to the Centre for Infections and the Centre for Emergency Preparedness and Response increased from 286 in 2007/08 to 313, opportunity assessment groups were put in place in all parts of the HPA, and a successful audit of business processes was carried out by the British Standards Institution.

External income



TRAINING DEVELOPMENTS

The HPA signed an agreement with the Ministry of Defence's Counter Proliferation and Security Cooperation group to deliver training on the handling of hazardous pathogens to some of the former Soviet Union (FSU) countries. From this a DVD on the safe handling of pathogens produced by the HPA for UK use has been translated into Russian. A series of training events are also being developed for scientists working in FSU countries.

EXERCISES

A range of exercises have been held on avian influenza preparedness in Eastern European states including Albania, Tajikistan and Azerbaijan. These exercises are an important element of these countries' preparedness activities and were funded by bodies including the Food and Agriculture Organization of the UN, WHO and the US Agency for International Development.

PRODUCTS

The HPA Culture Collections has continued to operate as a fully integrated not-for-profit strategic business unit within the HPA. Its role is to preserve and distribute authenticated cell lines and microbial strains of known provenance for use in medical science and laboratory healthcare.

It has improved visibility and global presence by launching a new website that promotes all the collections and by licensing commercial partners to use HPA strains in the manufacture of derived products.

Likewise, the HPA Culture Collections will exploit its own derived products based on the HPA's Lenticule Disc technology, with the

launch of a range of 'NCTC Lenticule Discs' in April 2009. These discs provide an easy-to-use source of control strains suitable for evaluating a range of microbiological procedures and challenging the performance of culture media and reagents.

ROTAVIRUS CHARACTERISATION

Rotavirus is the most common cause of gastroenteritis in infants and is responsible for an estimated 600,000 child deaths worldwide each year. The HPA is regarded as the lead centre within Europe for rotavirus strain characterisation.

The HPA has entered into an agreement with the global Program for Appropriate Technology in Health (PATH) to train eastern European countries in the genotyping and characterisation of rotavirus strains. This agreement provides funding for the project and provides an excellent alignment with the HPA's corporate goals.

EXTERNAL QUALITY ASSESSMENT AND QUALITY CONTROL REAGENTS

The HPA provides a range of products and services to ensure the quality of microbiological testing, supporting the accurate testing of samples and helping to minimise misdiagnosis and false results.

These products and services include quality assessment (proficiency testing) schemes and quality control reagents. Incorrect results from microbiology laboratories can have far-reaching implications such as failing to identify salmonella in a contaminated ready-to-eat foodstuff or identify *Mycobacterium tuberculosis* in a patient with non-specific symptoms. Incorrectly reporting the presence of pathogenic micro-organisms in samples may result in inappropriate patient care or financial consequences.

The HPA provides tools to help microbiology laboratories provide accurate results and has been extending this service internationally over the past year, which also provides income to support the agency's work.

Working to develop meningitis vaccines

The introduction of a vaccine in 1999 has resulted in a sustained fall in the number of numbers of confirmed meningococcal C cases, with only 1,194 confirmed cases in 2008, compared with 1,256 in 2007, and continuing the overall downward trend seen since 1999/2000.

Developing an effective meningococcal B vaccine remains a challenge, however. In addition to its in-house programme, the HPA is working with pharmaceutical and biotechnology companies to investigate novel approaches to this problem and support development of a vaccine that affords protection against a wide range of *Neisseria meningitidis* B strains.

Extensive expertise in the meningitis B vaccine field enables the HPA to provide scientific support to the project, while assays developed by the HPA have been used to determine the effectiveness of vaccine candidates.

TRAINING AND SKILLS CENTRE

The Department of Health has approved a strategic outline case for the HPA to replace its training centre at Porton Down, which is no longer deemed fit for purpose. The £4.6m project, which should be complete by May 2010, will provide training to enable research findings on dangerous pathogens to be translated into health interventions such as vaccines, specialist therapeutics, and state-of-the-art diagnostics and detection methods.

'The first priority in exploiting the HPA's assets is to translate the technology, knowledge and skills into interventions that make a difference to health in the key priority areas'

STEVEN CHATFIELD, DIRECTOR OF THE CENTRE FOR EMERGENCY PREPAREDNESS AND RESPONSE

To strengthen information and communications systems for identifying and tracking diseases and exposures to infection, chemical and radiological hazards

Key aims for 2008/09

- To commence surveillance system integration and new surveillance system development.
- To maximise the use of available information resources.

The early detection of disease outbreaks and chemical or radiological hazards means that informed action can be taken to protect people's health. Good routine data and intelligence are also needed to prevent, control and understand how infections and other hazards affect public health on a day-to-day basis.

The programme has been overseen by the Surveillance Strategy Programme Board, working closely with the HPA's key health programmes. Through this collaboration there has been completion of gap analyses to define surveillance needs, identify requirements for new or amended surveillance systems and evaluate the public health value of existing systems.

It aims to define the information needed for health protection that can be captured by the NHS and built into specifications for NHS information systems. It develops quality standards for surveillance and develops proposals for future investment.

External stakeholders include the Department of Health, NHS Connecting for Health and the devolved administrations of Scotland, Wales and Northern Ireland.

A key achievement this year was the approval of a surveillance strategy produced using the gap analyses and surveillance evaluations completed by HPA programmes.

The strategy will mean that, in five years' time, it should be possible for anyone with the appropriate access permissions, working anywhere in the HPA, the NHS or other partner organisations, to view and manipulate outputs from any surveillance system that is operated by the HPA.

These outputs will support situation analysis and inform public health actions and policy decisions by providing real-time information on disease events, exposures and hazards.

Identifying details to track disease

The Personal Demographics Service (PDS) enables a patient to be identified by healthcare professionals quickly and accurately, with their correct medical details.

In March 2009 certain HPA staff were granted controlled access to this NHS database to help them to trace individuals across the country after an outbreak or incident.

Various HPA activities require the tracing of individuals and key pieces of information about them for identification of outbreaks of infection, incidents and significant trends. Access to the PDS system enables the HPA to respond more swiftly to outbreaks and incidents, reduces effort and time spent tracing patient details, has a positive impact on the public's health and improves the accuracy of HPA demographics data systems.

PDS has been used to locate GPs for patients reported to the HPA as having vaccine-preventable diseases, for patients to whom immunoglobulins are given to ensure appropriate follow-up care after exposure to serious infections, and to locate health protection units and GPs of patients exposed to or infected with serious infections overseas.

In order to issue access, each HPA user must undergo rigorous security checks by a local security of information officer and be individually identified, approved, trained, registered and issued with a user smartcard.

'We have used the Personal Demographics Service to locate GPs for patients reported to us with vaccine preventable diseases, for patients to whom we issue immunoglobulins so that we can ensure appropriate follow-up care after exposure to serious infections, and to locate health protection units and GPs of patients exposed to or infected with serious infections overseas'

MARY RAMSAY, PROGRAMME MANAGER FOR THE HEPATITIS PROGRAMME BOARD

SYSTEM INTEGRATION

In December it was agreed that integration of surveillance systems would begin in four priority areas. These include replacing the existing system for surveillance of diagnoses made by microbiology laboratories; strengthening the HPA's syndromic surveillance by improving the collection of information from general practice and A&E departments; developing a national surveillance system for monitoring environmental hazards and their health effects, in particular chemicals and radiation; and improving systems for monitoring outbreaks and incidents by bringing together existing systems.

NHS INTEGRATION

NHS Connecting for Health supports the NHS in providing better, safer care by delivering computer systems and services that improve how patient information is stored and accessed. The HPA has made significant progress in working with the project this year, including agreement of detailed HPA requirements for laboratory data to be incorporated into the Connecting for Health system specifications, providing input into setting standards for child health information systems, and the documentation of all the information routinely collected from the NHS by the HPA.

Strengthening frontline services in the community

Key aims for 2008/09

- To ensure that all health protection emergencies will be recognised early and managed effectively.
- To continuously improve the quality of services including assessment by stakeholders.
- To further refine the methods of working and, in particular, to continue to strengthen functional working across the HPA for preparing and responding to emergencies, and proactively tackling priority infection and chemical and radiation threats.

HPA staff work at a local level alongside the NHS to provide specialist support in communicable disease, infection control and emergency planning. The agency has nine regional offices that correspond to the government offices of the regions, and 26 health protection units (HPUs), each covering an area broadly corresponding to a county. There are eight HPA regional microbiology laboratories and 37 hospital microbiology laboratories participate as collaborating laboratories.

The HPA's centres support the frontline response by being a source of national specialist expertise and providing operational support for major incidents, as well as contributing to policy making and implementation in partnership with the NHS, local authorities and other agencies.

2,700

Number of incidents dealt with by local and regional health protection units

HPUs effectively and safely dealt with more than 2,700 incidents in 2008/09, across the full range of health protection hazards.

Alongside managing incidents the key developments this year, including the National Framework Agreement with the NHS and Department of Health, research projects and major exercises, have provided a focus for the HPA to build more effective partnership working with local agencies.

In September 2008 the major development project HPZone was initiated, which will bring decision support and incident management technology into the heart of local service delivery.

HEALTHCARE-ASSOCIATED INFECTIONS

HPUs now receive monthly mandatory MRSA and *Clostridium difficile* surveillance data from their regional epidemiology units for each of their local trusts. This readily interpretable data helps to identify problems and facilitate discussions with trust infection control teams.

GASTROINTESTINAL DISEASE

This priority area for the HPA has lead staff in the regions. Support was provided to the Food Standards Agency for the revision and publication of the Department of Health guide *Management of Outbreaks of Foodborne Illness in England and Wales*. Numerous outbreaks of infection were investigated.

HEPATITIS B AND C

Outbreaks of hepatitis B in care homes have been attributed to sharing blood glucose monitoring devices. Investigation of such incidents indicated that standard precautions and recommendations about the reuse of fingerstick devices may not have been followed. The local hepatitis leads have developed guidelines.

The HPA has created a tool for risk assessment in inoculation injuries in schools following requests for advice after several incidents.

SEXUAL HEALTH

Sexual health standards for HPUs have been developed and implemented in units and will be audited in the coming year. At local level the HPA is producing quarterly sexual health profiles and sharing these with partners to influence commissioning decisions.

Regional sexual health leads have worked in collaboration with chlamydia screening facilitators to increase testing and provided support to primary care trusts to collect timely data on vital signs.

VACCINE-PREVENTABLE DISEASE

On a local level the HPA has been actively involved in supporting the MMR catch-up programme and the implementation of the human papillomavirus vaccine programme.

In many areas HPUs have managed measles incidents associated with the recent upsurge in cases, while all HPUs have participated in the enhanced surveillance of measles and rubella. A survey of primary care trusts will be undertaken to assess progress against the target to improve uptake of MMR in those aged over five years.

CHEMICAL HAZARDS AND ENVIRONMENTAL HEALTH

A programme of environmental training for health protection specialists has been established. Tools have been developed to aid risk assessment and risk management for common emergency scenarios, including a model for initial reference sheets for the control of major accident hazards sites and health risk analysis tools for events.

RADIATION

The HPA has hosted two successful training events, one in Leeds and one in London and developed an e-learning package for radiation training, which was delivered this year.

The HPA is reviewing recommendations for radon action levels in individual buildings and the definition of radon affected areas. It is anticipated that a formal consultation document will be released this year, with policy changes likely by 2010/11.

A population exposure and emergency planning project has been established to develop the HPA's emergency response plans and facilities for monitoring people in the event of a radiation emergency.

EMERGENCY PREPAREDNESS

A national generic incident and emergency response plan has been created, together with incident debriefing tools to assess the adequacy of response and learn lessons from incidents. Courses have been developed and will be adapted for local use to implement the HPA's *Incident and Emergency Response Plan*.

PORT HEALTH

Training on port health responsibilities has been delivered to senior HPU staff. An HPA conference led to progress on establishing frameworks for European cooperation on standards and guidance with WHO. New tuberculosis screening equipment is being installed at Heathrow and Gatwick airports.

Keeping children healthy

In 2007/08 there were approximately 300 incidents in nurseries, schools and higher education settings in which the HPA were involved, with the vast majority being infection related.

HPUs work locally with some schools, including training nursery and school staff and providing infection control guidance including hygiene and hand washing advice. An HPA resource pack has been developed for primary schools in England and Wales and is currently undergoing evaluation, including a randomised control trial in collaboration with Bristol University.

PRISON HEALTH

In 2008/09 the HPA led the development of a national multi-agency plan for the management of outbreaks of communicable diseases in prison, which has been agreed with the Department of Health.

The document is designed as a template so that each prison can draw up their own bespoke outbreak plan to be co-signed locally by the prison governor, director of public health and HPU director.

A report on the national survey of health protection services for prisons has been produced. The HPA is developing proposals for standards for the services that every HPU will provide for their local prisons.

Managing knowledge and sharing expertise

Key aims for 2008/09

- To produce a strategy that aligns the knowledge management programme to the key health protection priorities of the HPA, and expresses the management of knowledge as a product of the HPA's business.
- To ensure staff have access to the best available information and expertise to inform them in policy development, decision making and action taking.
- To enable the public and health professionals to reduce the impact of health protection threats, through the provision of the best available information.

This programme has been established to strengthen the knowledge sharing, information dissemination and efficiency of the HPA. It enhances information, knowledge, skills and technology initiatives through cross-organisation project collaborations and innovation between centres/divisions and relevant stakeholders.

The organisation aims to empower professionals to reduce harm and the burden of disease through the provision of information, knowledge and expertise through its publications, websites, guidance and advice.

Effective information and knowledge management is essential to improved public knowledge of health protection threats and how to avoid them.

KNOWLEDGE MANAGEMENT STRATEGY

In January the programme began the development of a strategy to deliver projects and initiatives identified as knowledge management functions, and to provide an advisory and monitoring function for these initiatives. The strategy will ensure that best practice is met and that new developments are assessed, piloted and rolled out, where they can provide a benefit to the organisation.

'Effective information and knowledge management is essential to improved public awareness and knowledge of health protection threats'

INFECTIONS SPECIALIST LIBRARY

In October 2008 the HPA was awarded the contract to provide the NHS Infections Specialist Library. This online resource aims to keep health professionals up to date by providing convenient and comprehensive access to high-quality evidence on the investigation, prevention, treatment and control of infectious diseases.

INTERNAL REVIEW

A review was carried out in early 2009 of the processes to ensure that advice produced by the HPA is sound, consistent and evidence based. Senior staff from across the organisation took part in questionnaires and interviews to assess the current state of knowledge management.

This confirmed that the intranet is the main vehicle for sharing knowledge, and reiterated the importance of having information that is easy to find. The review also found that knowledge sharing is not always systematic and is sometimes informal.

Knowledge management is an essential component of the work of the HPA, and more work will need to be done in 2009/10 to develop further an effective knowledge management system.

Future actions include the need to share knowledge internally, especially across centres/divisions, establishing a framework for identifying specialists/experts and their contact details, and promoting the sharing of knowledge through the staff appraisal process.

The knowledge and management programme board has proposed that in the future knowledge management should be aligned to and delivered by the HPA's key health protection priority programmes.

The financial review

The financial statements on pages 83 to 85 cover the period 1 April 2008 to 31 March 2009, and have been prepared in accordance with Schedule 1 paragraph 22 of the Health Protection Agency Act 2004. A copy of the Act may be accessed online at www.opsi.gov.uk.

The HPA is an executive Non Departmental Public Body, sponsored by the Department of Health (DH), and as such its financial statements are consolidated within the resource accounts produced and published by the DH. These are available online at www.dh.gov.uk.

OUR 2008/09 FUNDING

Funding of the agency's day-to-day costs and capital investment is received as grant-in-aid, through the Parliamentary Supply process, and allocated within the main DH Estimate. This funding takes account of income received from the devolved administrations, as well as receipts for the products, royalties and services which the agency provided to customers. The HPA obtains additional funding from various public and private sector contracts.

The funding received by the HPA in relation to the expenditure in 2008/09 increased by 9.7% to £305.1m (2007/08: £278.0m). Government grant-in-aid accounted for 61% (2007/08: 60%) of total funding, and this limits the agency's exposure to liquidity risk. Note 22 to the Accounts offers additional information on the financial risks.

Agency celebrates another three years' supply of life-saving product

November 2008 marked the third anniversary of the HPA's first Erwinase product sales since the product relaunch with new marketing partner, Eusa Pharma (Europe) Limited. Erwinase is a life-saving drug, used in the treatment of children with acute lymphoblastic leukaemia.

Since the relaunch, the agency has received over £12.5m in product sales and royalties. Sales continue to increase, allowing us to supply more patients with this essential life-saving drug.

Dr Phil Luton from HPA business development said: 'Fulfilling the manufacturing requirements to meet supply demands has only been possible by the hard work and endurance of many staff involved in all aspects of our manufacturing and support activities. Such staff should be proud of their efforts and ability to overcome the many challenges this has brought over the last two years: not only has the agency benefited but so has the health of thousands of patients.'

Source of funding	2008/09 £'000	2007/08 £'000
Revenue grant-in-aid from DH	154,660	144,241
Revenue grant-in-aid from the devolved administrations	1,251	1,142
Products and royalties	26,128	29,002
Contracts and services	91,230	79,873
Other operating income	390	313
Interest receivable	285	400
Total revenue funding	**273,944**	**254,971**
Capital grant-in-aid from DH	30,800	21,038
Other capital grants	356	1,983
Total funding	**305,100**	**277,992**

The agency is pleased to report that customer sales income increased by 7.8% in 2008/09, from £109.2m to £117.7m. Included within this total were royalties of £13.6m, earned mostly on sales of Dysport, which provided a substantial contribution to fixed costs.

Sterling's decline in the currency markets also created some year-on-year currency translation gains from overseas sales.

The agency's business development strategies continue to provide extra funding for important

// YOU CAN FIND FURTHER INFORMATION ABOUT OUR 2008/09 FUNDING WITHIN THE NOTES TO THE ACCOUNTS, ON PAGES 86 TO 108; OR BY VISITING OUR WEBSITE www.hpa.org.uk

health protection activities while reducing the overall burden on the taxpayer for the core public health services provided by the HPA.

THE 2008/09 FINANCIAL RESULTS

The agency met its principal financial target for 2008/09, which was to deliver a balanced budget, within 1% of the total revenue funding received.

Increased staff and outsourcing costs, combined with higher than expected fuel prices, exerted significant cost pressures this year. However, the Efficiency and Effectiveness Programmme continued to deliver cost savings and efficiencies. Those savings, in conjunction with the increase in operational sales and services, helped the HPA deliver a small surplus of £509,000 in 2008/09 which represents 0.19% of our total revenue funding (2007/08: 0.11%).

HOW WE USED OUR RESOURCES IN 2008/09

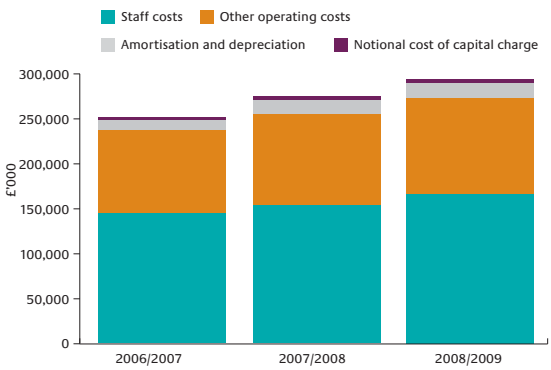
The agency's budget is divided into revenue expenditure, to cover day-to-day operating costs, and capital investment, to replace life-expired assets and to invest in new resources.

REVENUE EXPENDITURE

Internal efficiencies of £6.8m helped control operating charges this year.

These savings offset the increased staff costs, resulting in a net 7.6% increase in gross operating costs, from £269.6m in 2007/08 to £290.2m this year.

Operating costs

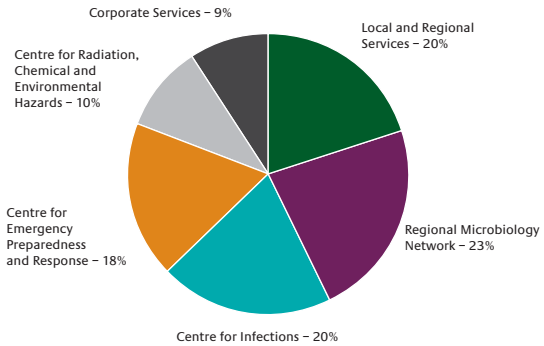


The major components of this year's revenue expenditure are shown, along with comparative figures for the previous two years.

The Local and Regional Services and Regional Microbiology Network actively support the agency's partners in the NHS and local government authorities. They provide the health protection, epidemiology, emergency planning, surveillance, and microbiology services that help safeguard the public.

These geographically dispersed laboratories and offices, along with the operational centres at the Centre for Emergency Preparedness and Response, the Centre for Infections and the Centre for Radiation, Chemical and Environmental Hazards, account for 91% of the agency's total operating costs.

Expenditure by division



CAPITAL INVESTMENT

During 2008/09 £31.0m (2007/08: £20.1m) was invested in some 257 capital projects, with the 20 highest value schemes accounting for £14.0m (2007/08: 162 schemes, 20 highest value, £9.7m) of the total.

The agency spent over £5.2m installing new X-Ray machines at airports, and installing automation equipment in its laboratories, during 2008/09.

The Control of Substances Hazardous to Health Regulations (COSHH) set out the broad legal requirements and the containment levels required when working with biological agents. During 2008/09 the HPA invested a further

Green light for £3m investment in North East laboratory services

The HPA's regional laboratory in Newcastle is on the move. A three million pound investment project to relocate our services to new accommodation in Newcastle was announced in 2008.

The project is based on a special collaboration with the Newcastle upon Tyne Hospitals NHS Foundation Trust and the Environment Agency, and aims to provide effective and efficient microbiological services within purpose-built complexes.

By autumn 2009 there will be joint HPA and Foundation Trust laboratories at both the Royal Victoria Infirmary and the Freeman Hospital in Newcastle.

Regional Microbiology Network director, Christine McCartney, said: 'There is much to do in the coming months to bring all this about. But we are confident that the skill and determination of everyone involved will result in the creation of a microbiology centre of excellence in the North East based on a special collaboration between the HPA, the NHS and the Environment Agency.'

£2.4m in its Containment Level 2, 3 and 4 laboratories. Planning on the £3m project to relocate the Newcastle laboratories is advanced, and the aim is to complete the move in 2009.

The Centre for Emergency Preparedness and Response (CEPR), based at Porton Down, plays an important role in preparing for and coordinating responses to potential healthcare emergencies, including possible acts of deliberate release. It also carries out basic and applied research into understanding infectious diseases and manufactures a number of healthcare products, including vaccines and therapeutics.

During the HPA annual conference in September 2008 it was announced that the DH had recognised CEPR's importance as a national resource, and had agreed to fund the design work on proposals for new, state-of-the-art facilities at the centre. Work has begun on the options for financing this ten-year redevelopment programme.

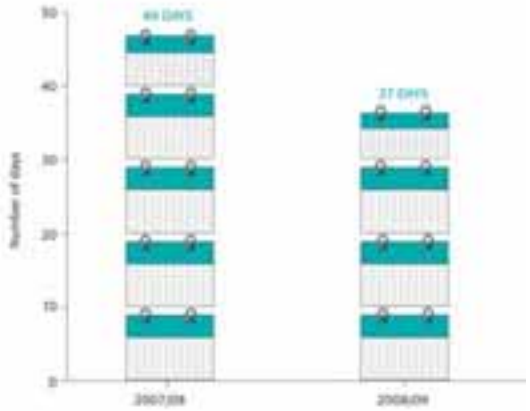
OUR RELATIONSHIP WITH CUSTOMERS

The agency is committed to delivering high quality products, and offering value-for-money, to all customers. It aims to collect undisputed customer invoices in accordance with contractual terms and conditions.

During 2008/09 it continued to develop strong customer relationships and grow operating income.

The agency's trade debtors were reduced by 27%, from £11.6m to £8.5m. During 2008/09 average trade debtor days reduced from 49 days to 37 days. A 24% improvement on 2007/08.

Average trade debtor repayment days



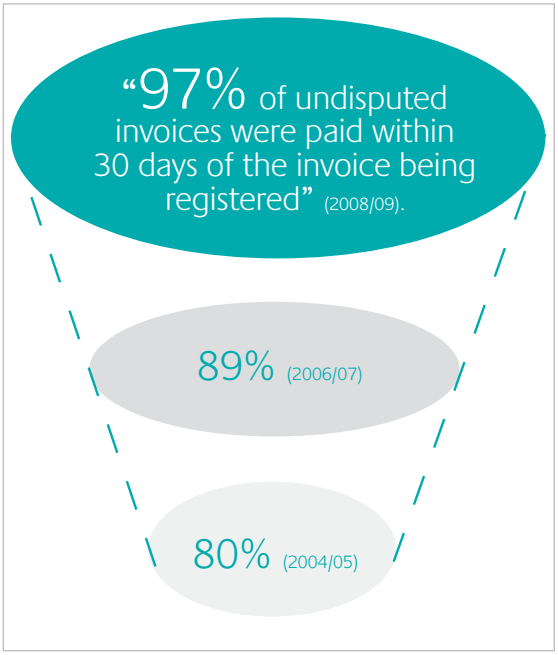
The agency made no claim for interest under the Late Payment of Commercial Debt (Interest) Act 1998 during the reporting period.

OUR RELATIONSHIP WITH SUPPLIERS

The HPA is committed to the prompt payment of bills for the goods and services that it

receives. Its policy is to pay suppliers in accordance with the Better Payments Practice Code. It aimed to settle 90% of undisputed supplier invoices on time, and strived to pay small and medium sized entities within 10 working days in 2008/09.

During 2008/09 the agency registered almost 90,000 invoices, totalling £159.1m (2007/08: 93,987 invoices, £127.1m).



OUR FINANCIAL POSITION

During the year the agency added tangible and intangible assets to the value of £31.0m. With disposals of £1m, depreciation of £16.9m and a valuation reduction of £10.8m, the total value of tangible and intangible fixed assets was £171.1m on 31 March 2009 (2007/08: £167.8m)

'Another successful financial year'

Taxpayer funding is drawn only when it is required, and the HPA aims to keep minimal cash at bank. Its stock, debtor and bank balances remain relatively low, but yet sufficient to meet its liabilities to creditors.

Only 9% of the agency's £57m of liabilities are of a long-term nature. These include provisions for the future costs of early retirement, potential compensation liabilities, as well the cost of minor repairs when it returns leased buildings to their owners. The Revaluation Reserve reduced by £11.9m, reflecting falling land and property values throughout the UK. However, capital and reserves remained relatively unchanged at the year-end.

OUR NEXT STEPS

The agency has had another successful financial year, generating increased operating income and progressing towards the capital needed for the redevelopment of the CEPR site. This, together with a newly focused strategic vision, means that it intends to progress a number of significant developments during 2009/10, including:

- The integration of the National Institute of Biological Standards and Controls (NIBSC) from 1 April 2009.
- The implementation of International Financial Reporting Standards (IFRS) within HPA accounting systems from 1 April 2009.
- The publication and communication of a new strategic plan for 2010-2015.
- The development of new key performance indicators that measure how well the agency delivers its key health protection programmes and other high level priorities promulgated in the strategic plan.

EFFICIENCY AND EFFECTIVENESS PLANS

Previous financial plans have included annual efficiency targets, introduced following the 2004 Gershon efficiency review. The HPA Efficiency and Effectiveness Programme (EEP) delivered annual efficiencies and savings of £28.4m over the three years to 31 March 2009, against a Gershon target of £12.5m. Although Gershon targets ended in March 2009, the agency has adopted a very challenging EEP target beyond that date. It aims to generate further efficiency savings of £5.0m in 2009/10.

GOVERNMENT AND THE HEALTH PROTECTION AGENCY SPENDING PLANS

As a public sector organisation, the HPA is partly protected from developments in global financial markets, the tightening of credit

conditions, and the slow-down in economic growth and demand. However, it remains vigilant to the risks posed to its stakeholders, and the potential impacts that they could have on the organisation's supply chain, demand for HPA services, and future cash flows.

The autumn 2007 Comprehensive Spending Review (CSR) identified what further investments and reforms were needed to equip the UK for the global challenges ahead, and issued indicative budget allocations and public service agreement (PSA) targets.

The agency's agreed funding for 2009/10 is shown below.

The table provides a breakdown of the planned funding for the HPA and NIBSC for 2009/10, as well as the total for the organisation which merged in April 2009.

Source of funding for 2009/10	HPA £'000	NIBSC £'000	Total £'000
Revenue grant-in-aid from DH	157,709	12,356	170,065
Revenue grant-in-aid from the devolved administrations	1,230	870	2,100
Products and royalties	30,909	4,037	34,946
Contracts and services	90,394	7,121	97,515
Other operating income	453	293	746
Interest receivable	98	-	98
Total revenue funding	**280,793**	**24,677**	**305,470**
Capital grant-in-aid from DH	40,000	10,000	50,000
Other capital grants	-	-	-
Total funding	**320,793**	**34,677**	**355,470**

The 2009/10 capital grant-in-aid budget of £50m reflects the planned escalation of the capital expenditure spend, to support the redevelopment of the CEPR site, as well as the completion of NIBSC's new Influenza Resource Centre and UK Stem Cell Bank building.

AUDITORS

The HPA's financial statements have been prepared in accordance with the *Government Financial Reporting Manual 2008-09*, and were audited by the Comptroller and Auditor General (C&AG), head of the National Audit Office (NAO). This year's audit cost was £148,000 (2007/08: £130,000), which included £18,000 for an International Financial Reporting Standards audit. Other than the statutory audit of the financial statements, the C&AG has not provided any other services to the agency during the year ended 31 March 2009.

STATEMENT AS TO DISCLOSURE OF INFORMATION TO AUDITORS

During the audit of these financial statements my staff and I have cooperated fully with the Comptroller and Auditor General. I have taken all feasible steps to ensure that I am fully aware of all information pertinent to the audit and to ensure that this information is notified and made available to the agency's auditors. Consequently, as far as I am aware, there is no relevant audit information which has not been available to the auditors.

GOING CONCERN

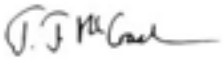
The Board has considered the results for the year, the amounts owed by the agency, its financial position at 31 March 2009, the continuing support of government and the Health Protection Agency Act 2004. Taking all of these factors into consideration, the Board believes it appropriate for the accounts to be prepared on a going concern basis.

SIGNIFICANT EVENTS SINCE THE END OF THE FINANCIAL YEAR

Following the Department of Health's review of its Arms Length Bodies in 2004, the Secretary of State announced that the HPA should merge with the National Institute of Biological Standards and Controls (NIBSC), subject to consultation and legislation. In accordance with The Health and Social Care Act 2008, the merger occurred on 1 April 2009.

DATE OF ISSUE

The Health Protection Agency's accounts were authorised for issue on 18 June 2009.



Mr Justin McCracken
CHIEF EXECUTIVE
12 June 2009

3 Governance

The governance report

THE ROLE OF THE BOARD IS TO:

- Determine the HPA's long-term direction, strategy and business objectives.
- Ensure the HPA has adequate resources to meet its objectives.
- Ensure that it operates an effective risk management system.
- Monitor its performance and ensure it acts ethically and meets its responsibilities to stakeholders.

The Board met on ten occasions in 2008/09. Minutes and papers of public meetings are published on the HPA website at www.hpa.org.uk/board.

The HPA is committed to the highest standards of corporate governance, and to complying with the best practice provisions of the Code of Good Practice on Corporate Governance in Central Government Departments issued by HM Treasury.

OUR LEADERSHIP

The Board

The Board is led by the Chairman, and the executive management of the agency is led by the Chief Executive. The roles of Chairman and Chief Executive are separate and clearly defined within the division of responsibilities set out in the Health Protection Agency management statement, agreed with the Department of Health.

The Executive Group

The Executive Group meets monthly. It consists of executive directors and is chaired by the Chief Executive. It is responsible for the strategic and operational management of the agency and for implementing the policies and strategies agreed by the Board. The Chief Executive is also the Accounting Officer for the HPA, and has responsibility to government for the management of the organisation.

Process for appointing Board members

Non-executive Board members are appointed through a rigorous process of open competition against an agreed specification of the roles and capabilities required. Non-executive Board members are eligible to be considered for reappointment at the end of their term of office.

The agency's Remuneration and Terms of Service Committee determines the policy for the appointment of the members of the Executive Group that report directly to the Chief Executive, and the Chairman and Chief Executive approve those Executive Group members who also attend Board meetings.

Board members' induction and development

On appointment, members are provided with written terms of appointment including details of how their performance will be appraised. Members also receive a full induction programme comprising briefings by senior management, a briefing from the Board Secretary on the Board's responsibilities and procedures and visits to HPA sites.

// FOR BIOGRPAHICAL DETAILS OF HPA BOARD MEMBERS VISIT www.hpa.org.uk

CHANGES TO THE BOARD BETWEEN 1 APRIL 2008 AND 31 MARCH 2009:

Dr Barbara Bannister ceased to be an advisor to the Board on 31 March 2008, and became a full non-executive Board member on 1 April 2008, for three years.

Dr Rosemary Leonard and Professor Debby Reynolds were appointed from 1 April 2008 for three years.

Following the retirement of Professor Pat Troop on 6 April 2008, Justin McCracken joined the Board as Chief Executive on 7 April 2008.

CHANGES TO THE EXECUTIVE GROUP BETWEEN 1 APRIL 2008 AND 31 MARCH 2009:

John Phipps retired as Director of Human Resources on 2 April 2008.

Tony Vickers was appointed Director of Human Resources from 3 April 2008.

Professor Pat Troop was Chief Executive until she retired on 6 April 2008.

Justin McCracken was appointed Chief Executive from 7 April 2008.

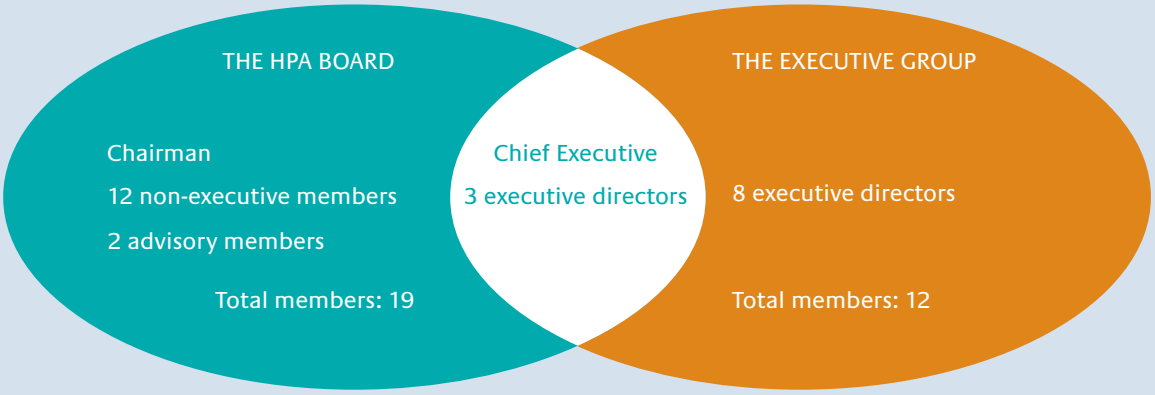
Professor Peter Borriello was Director of the Centre for Infections until he left the HPA on 1 October 2008.

Professor Mike Catchpole acted as Director of Centre for Infections from 1 October 2008 until 28 February 2009.

Professor Maria Zambon was appointed Director of Centre for Infections from 1 March 2009.

Professor Anthony Kessel was appointed Director of Public Health Strategy from16 March 2009.

Composition of the Board and Executive Group on 31 March 2009



Sir William Stewart (Chairman)
Professor Charles Easmon (Deputy Chairman)
Dr Barbara Bannister
Michael Beaumont
James T Brown
Ian Cranston
Dr Paul Darragh
Professor Andrew Hall
Dr Rosemary Leonard
Dr Vanessa Mayatt
John Wyn Owen
Dr Sandy Primrose
Professor Debby Reynolds
Professor William Gelletly (Advisor)
Professor Alan Maryon Davis (Advisor)

Justin McCracken (Chief Executive)
Dr Tony Sannia
Dr Roger Cox
Professor Stephen Palmer

Lis Birrane
Dr Stephen Chatfield
Michael Harker
Professor Anthony Kessel
Dr Christine McCartney
Dr John Stephenson
Tony Vickers
Professor Maria Zambon

CHANGES TO THE BOARD SINCE 31 MARCH 2009:

Dr Paul Darragh, Ian Cranston, Dr Sandy Primrose and Professor Andrew Hall stood down as non-executive Board members on 31 March 2009.

Professor Stephen Palmer stood down as an executive Board member on 31 March 2009.

Sir William Stewart retired on 5 April 2009.

Professor Charles Easmon was appointed acting Chairman of the Board from 6 April 2009, until the appointment of Dr David Heymann on 1 May 2009.

Michael Carroll, Helen Froud, Martin Hindle and Deborah Oakley were appointed to the Board from 1 April 2009.

Dr David Heymann was appointed as Chairman of the Board from 1 May 2009.

CHANGES TO THE EXECUTIVE GROUP SINCE 31 MARCH 2009:

Dr Ruth Gelletlie was appointed Director of Local and Regional Services on 6 April 2009.

Michael Harker stood down as Director of Corporate Affairs and Secretary to the Board on 5 April 2009.

Dr Roger Cox retired on 31 May 2009.

Dr John Cooper was appointed Director of the Centre for Radiation, Chemical and Environmental Hazards on 1 June 2009.

The Board regularly reviews the information it needs to fulfil its responsibilities, and Board members update their knowledge and develop their understanding of the agency through site visits, in-depth presentations on topical issues and meetings with key stakeholders.

Visits and presentations also give non-executive members the chance to meet staff below Board level.

The Board may, if it wishes, take independent professional advice and all non-executive Board members have access to the advice and services of the Board Secretary.

REMUNERATION

Additional information on the appointment, appraisal and remuneration of Board and Executive Group members can be found within the Remuneration Report on page 74.

HANDLING CONFLICT OF INTEREST

All Board members are required to notify and register with the Board Secretary any issues on which they might have a conflict of interest. Declarations of interest are invited at every Board meeting and the Board as a whole considers how it should discuss the matter(s) on which the member may have a conflict.

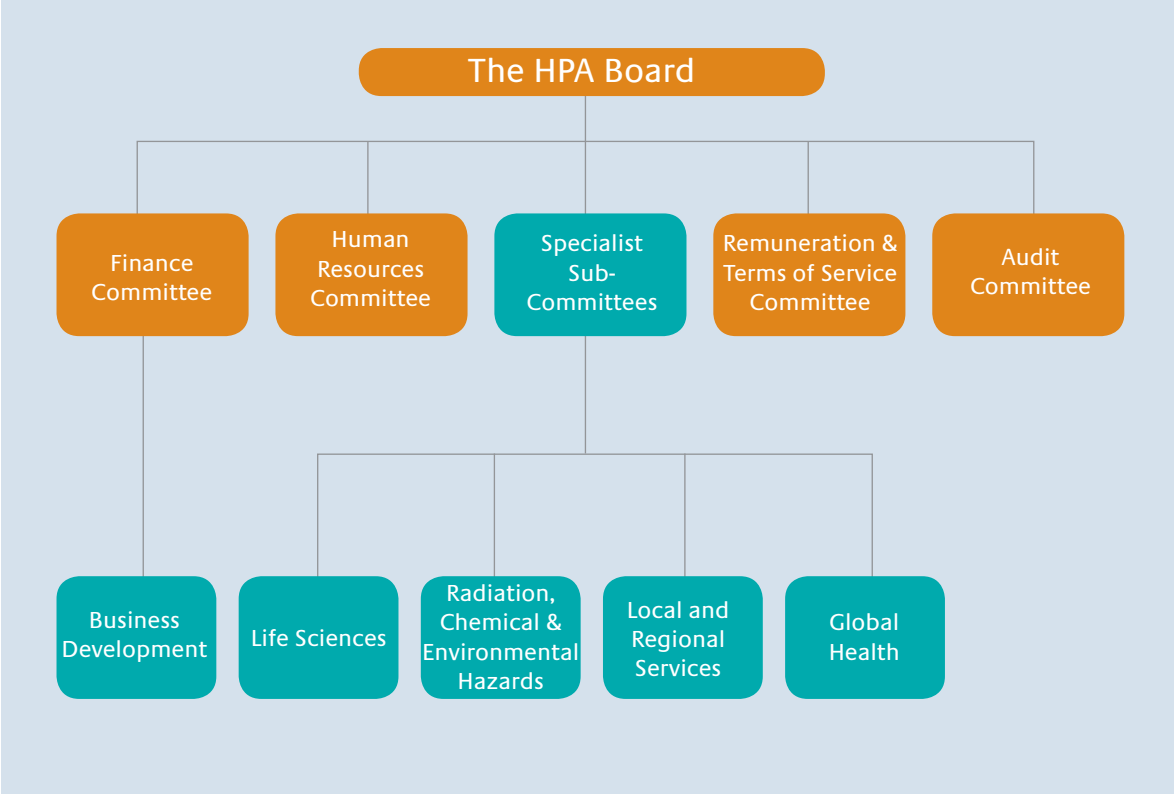
GOVERNANCE

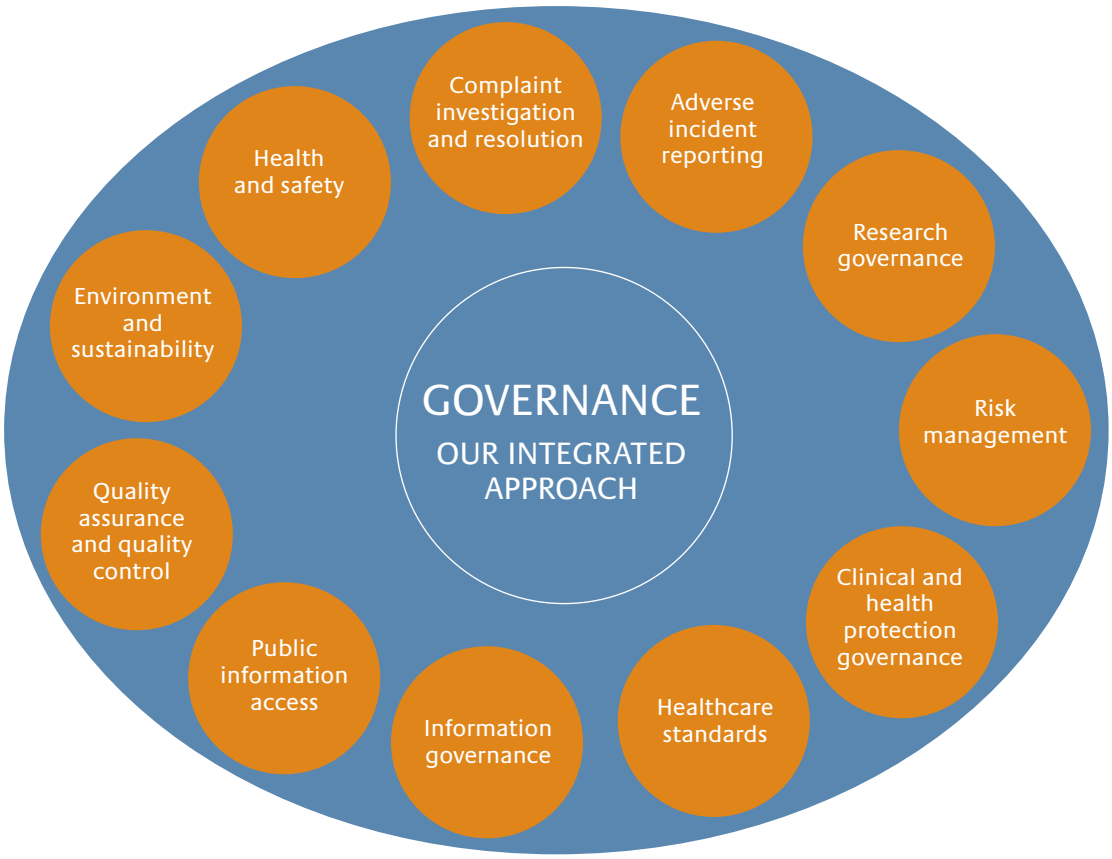
The Board has delegated some of its governance activities to standing Board committees and sub-committees. The committees operate under written terms of reference set by the Board and include independent external advisers where appropriate.

The Finance Committee

The Finance Committee reviews and recommends the annual budget to the Board. It reviews performance against the strategic plan, the business plan and the budget, and considers forecasts. Through its Business Development Sub-Committee, it also considers proposals to maximise external income using the HPA's resources and assets.

The Board committee structure





The Human Resources Committee

The Human Resources Committee receives reports on items of relevance to the effective management of human resources and promotion of best employment practice in the agency. It is responsible for providing guidance on these issues and for reporting on them to the Board. The committee also reviews the overall framework for employment and remuneration of staff throughout the agency, and has oversight of the training and development programme.

The Remuneration and Terms of Service Committee

The arrangements for the Remuneration and Terms of Service Committee are described in the Remuneration Report on page 74.

The Audit Committee

The Audit Committee provides support and assurance to the Chief Executive as Accounting Officer and to the Board in its responsibilities relating to issues of risk, control and governance.

The Audit Committee also reviews the HPA's Annual Report and Accounts, and submits a report to the Board to assist it in its assurance role. In addition, the committee reviews the Statement on Internal Control made by the Accounting Officer on the design and operation of internal controls.

It also meets with the Head of Internal Audit and the external auditors without the presence of management in order to identify any areas of concern. The committee chairman presents the minutes of each meeting at the following Board meeting.

The Audit Committee met four times during the year, to monitor and review the following key areas:

- The standards of risk management and internal control, including the processes and procedures for ensuring that material risks (including risks relating to IT security, fraud and related matters) were properly identified and managed.
- The effectiveness of internal control,

// FOR INFORMATION ON THE MEMBERSHIP OF THE BOARD SUB-COMMITTEES VISIT
www.hpa.org.uk\sub-committees

financial reporting, accounting policies and procedures.
- The agency's internal audit function, including its plans and performance and its relationship with the external auditors.
- The nature and scope of the planned work of the external auditors.
- The findings of audit reports and investigations and management's response.
- The arrangements for dealing, in confidence, with any complaints from employers and others, about accounting, financial management impropriety, or fraud, poor business practices and other matters.
- Other matters the Board has requested.

Board sub-committees

The Board's sub-committees are responsible for considering issues relating to subject areas requiring careful, specialist and professional in-depth strategic analysis, and to make recommendations in a timely manner to the Board.

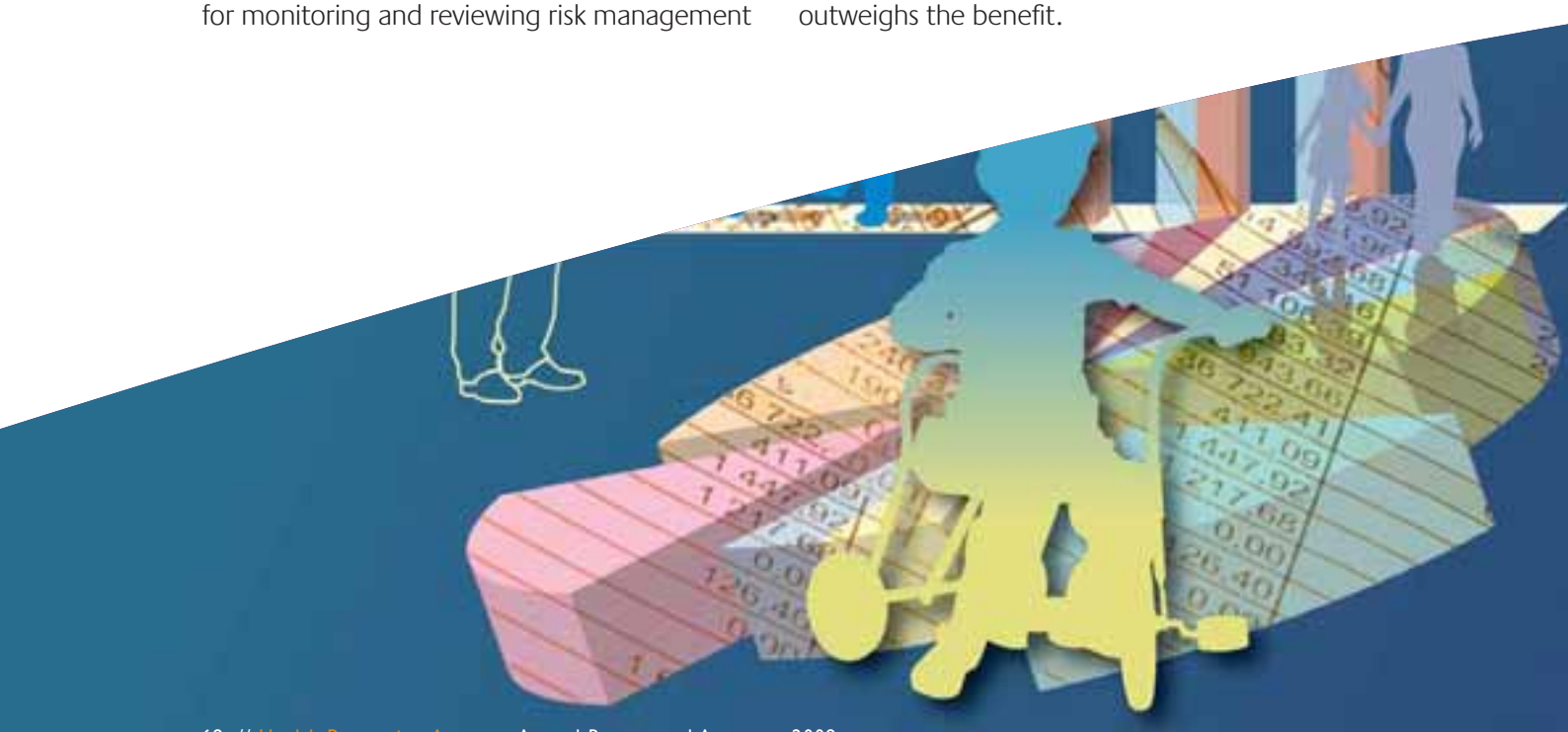
Responsibilities and accountability for risk management

The HPA Board is responsible for the risk strategy and for monitoring and reviewing the level of risk borne by the HPA. The Chief Executive is responsible for ensuring that the strategy is implemented, and is accountable to the Board. The Executive Group is responsible for monitoring and reviewing risk management in the organisation. The Board controls and monitors risk management by reviewing the principal strategic risks facing the agency. It also considers issues referred by the Chief Executive, the Executive Group and the Audit Committee.

Centre and divisional directors are responsible for risk management within their centres and divisions. This includes promoting risk awareness and supporting staff in managing risk. Unit heads are responsible for ensuring that risks are managed in their units, through the assessment of risks relating to the achievement of their objectives and by mitigating these risks. The assessment is carried out in conjunction with the development of the business plan, and is reviewed regularly.

The Head of Internal Audit provides an annual assurance statement to the Chief Executive, the Audit Committee and the Board on the effectiveness of the organisation's risk management arrangements. This is based on work undertaken throughout the year to assess the robustness of the system, to provide information on its strengths and weaknesses, and advise on where improvements are necessary and desirable for good governance.

The risk management arrangements are not designed to reduce risks to zero but to reduce risks to an acceptable level, i.e. the point at which the cost of reducing the risk further outweighs the benefit.



Statement on internal control

SCOPE OF RESPONSIBILITY

As Accounting Officer, I have responsibility for maintaining a sound system of internal control that supports the achievement of the Health Protection Agency's policies, aims and objectives, while safeguarding the public funds and agency's assets for which I am personally responsible, in accordance with the responsibilities assigned to me in Managing Public Money.

The relationship between the Health Protection Agency and its sponsoring department, the Department of Health and the Devolved Administrations, is specified in the Management Statement. The agency's business plan, objectives and associated risks are discussed at the annual accountability meeting, and at the quarterly review meetings with the Department of Health and the Devolved Administrations.

Accountability within the Health Protection Agency is exercised through:

- The Board and the Audit Committee. The agency's Board has established an Audit Committee, under the chairmanship of a non-executive Board member, to support its corporate governance role and me in my responsibility for risk, controls and associated assurance.

- An Executive Group comprising all centre and divisional directors and with myself as the Accounting Officer. Executive directors are personally accountable to me for the management of the risks within their centres and divisions.

THE PURPOSE OF THE SYSTEM OF INTERNAL CONTROL

The system of internal control is designed to manage risk to a reasonable level rather than to eliminate all risk of failure to achieve policies, aims and objectives; it can therefore only provide reasonable, and not absolute assurance of effectiveness. The system of internal control is based on an ongoing process designed to identify and prioritise the risks to the achievement of the Health Protection Agency's policies, aims and objectives, to evaluate the likelihood of those risks being realised and the impact should they be realised, and to manage them efficiently, effectively and economically. The system of internal control has been in place in the Health Protection Agency for the year ended 31 March 2009 and up to the date of approval of the Annual Report and Accounts, and accords with Treasury guidance.

CAPACITY TO HANDLE RISK

The agency's risk management policy and procedure set out responsibilities at all levels including senior-level leadership for the risk management process. In addition, risk management is included as part of all centre directors, divisional directors and senior staff performance criteria. Responsibility for risk management is included in job descriptions and person specifications where appropriate, and is part of the staff appraisal process.

The agency aims to minimise adverse outcomes such as harm, loss or damage to the organisation, its people or property, or those who receive its services, through adequate supervision and training, appropriate delegation, continuous review of processes and the environment, and the sharing of lessons learned and best practice. This is achieved, primarily, through setting standards for professional practice and service delivery. The Integrated Governance Information system is used to manage adverse incidents, with lessons learned being promulgated through the agency's intranet.

Executive directors and management staff receive ongoing training in risk management and workshops are facilitated to assist them in identifying and assessing risks. A new programme of mandatory risk management training has been developed for all levels of staff, and guidance is provided through the agency's intranet.

THE RISK AND CONTROL FRAMEWORK

Following the launch of a new strategic vision

during the year, the Strategic Risk Register was recast. Enhancements have been made to the way it is maintained by the Executive Group and approved by the Board. The agency's centres and divisions each have a risk register which is updated quarterly and risks are fed into the strategic risk register where appropriate. Risk registers are also maintained at one level below the centre or division and for key projects. Risk registers for the agency's programmes are under development. Where a risk cannot be managed at a particular level within the organisation it is escalated to the next level up.

A bottom-up approach is also in place where risks are reported via risk registers, verbally during staff and management meetings, or through written reports. These mechanisms help ensure that the appropriate filtering and delegation of risk management are in place and that the system is embedded throughout the agency.

Assessment of the adequacy of controls is a vital part of our systematic approach that attempts to limit risk to an acceptable residual level, rather than obviate the risk altogether. Staff are encouraged to balance the cost of control with the risk to be mitigated and to help ensure that value for money is achieved. The risk appetite of a complex organisation is difficult to assess but greater clarity has been introduced by developing risk matrices at different levels and providing quantitative information where possible. These matrices are used to help staff assess the risks relating to their specific area of work and to escalate risks to the next level where appropriate.

The agency's Adverse Incident Management policy and procedure which provides a formal mechanism for reporting and learning from incidents across the agency has been revised and reissued. A real-time electronic incident management and investigation system enables management to report and track key issues. The agency also publishes reports on major events and these are used to promulgate lessons learned for both the agency and its partners. The agency has a formal complaints procedure for patients and service users which is published on the Health Protection Agency website.

The Risk Management Group develops the agency's approach to risk management, and identifies crosscutting operational risks. The agency's Clinical and Health Protection Governance Group (CHPGG) helps to ensure that robust clinical and health protection governance systems operate throughout the agency, and that the clinical and health protection governance strategy is fit for purpose.

The agency's arrangements to mitigate health and safety risk include the work of the Health and Safety Strategy Group (HSSG). This group reviews the agency's health and safety strategy and arrangements to ensure that they are appropriate for the future requirements of the agency; and that they continue to meet changing statutory requirements. HSSG has developed, and through the Executive Group has promulgated, health and safety policies and guidance at a national level. HSSG has also ensured that our health and safety reporting processes have been further developed and that the resulting performance data have been reviewed and presented to the Executive Group and the Board on a regular basis.

Performance against the Department of Health's Standards for Better Health, through the Healthcare Commission (now Care Quality Commission) Health Check process, provides a mechanism for assessing controls in significant risk areas. Executive directors are responsible for producing self-assessments for their centre/division that are reviewed by the HPA Healthcare Standards Group. Based on work carried out by this group a single declaration for the agency is agreed by the executive directors, and signed-off by the Board. An assurance register is also available on the agency's intranet.

In relation to information risk, the agency recognises that the flow of information between the agency and its partners is essential to the provision of our services. To ensure that patient-identifiable data are adequately safeguarded, we have a network of individuals

with specific roles and responsibilities, namely Caldicott Guardians and Security of Information Officers. The agency also seeks approval from the Patient Information Advisory Group (now re-named the National Information Governance Board) for permission to continue to handle patient identifiable information, on an annual basis. In addition to this, an Information Governance Working Group has been established to coordinate the agency's response to the NHS Connecting for Health Information Governance Toolkit. The agency is expected to provide assurance by attaining level 2 compliance on 20 key standards and where this level is not achieved to have an action plan in place. An information governance policy and strategy has been implemented to ensure that information risk is assessed and managed in a way that values, protects and uses information for the public good.

The agency's work involves a large number of stakeholders, and work is carried out through partnerships and contractual agreements. The need to ensure a more systematic HPA wide approach to external communications was identified during the year as a strategic risk and a toolkit was produced for use across the agency to ensure stakeholder relationships are managed consistently. Agreements concerning front-line services were also enhanced to provide greater clarity around roles and responsibilities, reducing associated partnership risks. In addition, a further programme of work is proposed to be implemented throughout 2009, which includes offering induction sessions on the work of the agency to NHS non-executive Board Members, developing a quarterly e-bulletin for stakeholders and partners, a wider programme of engagement with parliamentarians including regular briefings at Westminster on health protection topics, and a rolling programme of talks, training and workshops with partners and stakeholders at regional level.

The agency's Emergency Response Development Group ensures that the agency's Incident and Emergency Response Plan is robust, resilient and fit for purpose. A sub-group is in place to ensure that business continuity management is consistent and robust across the agency. Accountability for emergency response lies with centre and divisional directors and through regional directors to local teams. The Health Protection Agency has been involved in, and has undertaken, a number of exercises to improve our preparedness and there is a rolling programme of exercises. Work with partners and other stakeholders to meet the requirements of the Civil Contingencies Act has been carried out at regional and local levels by emergency planners and resilience groups. The agency is heavily involved at present in dealing with the swine influenza outbreak and lessons learned will be promulgated in due course.

REVIEW OF EFFECTIVENESS

As Accounting Officer, I have responsibility for reviewing the effectiveness of the system of internal control. My review of the effectiveness of the system of internal control is informed by the work of the internal auditors and executive managers within the agency who have responsibility for the development and maintenance of the internal control framework, and comments made by the external auditors in their management letter and other reports. I have been advised on the implications of my review of the effectiveness of the internal control system by the Board and the Audit Committee and a plan to address any weaknesses and ensure continuous improvement of the system is in place.

The agency's Board receives regular reports from the Chairman of the Audit Committee concerning risk, control and governance, and associated assurance. The Audit Committee is fully committed to ensuring that corrective action is taken in a timely manner where necessary.

The Integrated Governance Group (IGG), reviews governance activities within the agency and identifies the actions necessary for improvement. The appropriateness, effectiveness and progress of the risk management strategy, policy and approach are monitored by the IGG. The IGG reports and makes recommendations to the Audit Committee. Cross-attendance between the IGG, the Audit Committee and the Health and

Safety Strategy Group helps to ensure that a consistent approach is taken. An electronic system for gathering and monitoring assurances is under development and in future this will be used to inform the agency's response to the Department of Health's Standards for Better Health.

Internal Audit provides an independent, objective assurance and consulting service designed to add value and improve the agency's operations. Its work is based on an agreed audit plan, which is carried out in accordance with Government Internal Audit Standards. This helps ensure that the work undertaken by Internal Audit provides a reasonable indication of the controls in operation across the whole of the agency. Findings from work carried out during the year were presented to the Audit Committee. In addition, the Head of Internal Audit has provided me with an annual written statement setting out a formal opinion on the adequacy, reliability and effectiveness of the systems and controls in place across the agency.

In addition to the independent assurance received from Internal Audit, periodic management assurance is obtained in the form of an annual assurance statement made by each executive director in respect of the effectiveness of controls in areas of key management responsibility. Ongoing management assurance is also available from inspection and compliance teams which provide ongoing review of specific and defined areas including health and safety, clinical governance and quality assurance. Assurances are also received from external accreditation and regulatory bodies, mainly in the field of laboratory practice.

CONTROL ISSUES DURING THE YEAR

In preparation for inspection under the Care Quality Commission's Health Check process, improvement plans are in place to strengthen the agency's compliance by ensuring;

(i) equality and diversity training for staff;

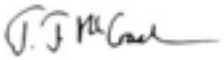
(ii) equality impact assessment of policies, procedures and services; and

(iii) that staff development programmes address the under-representation of minority groups.

The Health and Safety Executive is currently at various stages of investigating four RIDDOR reportable incidents under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations, 1995. Steps have been taken to analyse the root causes of these and other health and safety incidents and to take actions to prevent recurrence. Partly as a result of this analysis a task force was established to review incidents leading to potential exposure of staff to infectious agents. The task force developed a series of proposals and an action plan, which the Executive Group has agreed and which will be fully implemented in 2009/10. This work will be incorporated into the HPA's Health and Safety Action Plan for 2009/10, which also addresses a number of other areas of development and improvement.

Arising from completion of the Information Governance Toolkit, there are eight standards for which the agency has not achieved level two compliance. An action plan is in place to address the issues identified.

The agency has undertaken an assessment against the 67 applicable security requirements contained in the new Security Policy Framework (SPF) issued in December 2008 and concluded that around 37 are fully met or have an equivalent or appropriate measure in place to address the requirement. The remainder are partially met and some further work to meet the requirements is being undertaken. There are no significant security control weaknesses arising from the agency's assessment of its current position in relation to the SPF requirements and there have been no significant security incidents during the year ended 31 March 2009.



Mr Justin McCracken
CHIEF EXECUTIVE
12 June 2009

The remuneration report

ACCOUNTABILITY:

As a committee of the HPA Board, the Remuneration and Terms of Service Committee is accountable to the Board.

ROLE:

The current terms of reference require the committee to consider and make recommendations to the Board on the following issues:

- The overall framework for determining the remuneration and terms of service arrangements for all staff employed by the HPA.
- The remuneration and terms of service of senior executives, including the Chief Executive, other members of the Executive Group and other senior level members who report to the Chief Executive.
- The contractual arrangements for senior executives, including the calculation and scrutiny of termination payments, ensuring that such payments are appropriate and take account of national guidance.
- The mechanism for monitoring the performance of the senior executives and their individual objectives for the forthcoming year.
- The approval of all severance packages with a total cost of £100,000 or more.
- The approval of any premature retirement applications on the grounds of 'the interests of the efficiency of the service'.

This report details the policy on the appointment, appraisal and remuneration of members of the Board and the Executive Group of the Health Protection Agency, for the year ended 31 March 2009.

The report has been prepared in consultation with the Health Protection Agency's Remuneration and Terms of Service committee, and is based upon the provisions contained within the *Government's Financial Reporting Manual 2008-09*.

COMMITTEE MEMBERSHIP

The Remuneration and Terms of Service Committee consists of four non-executive Board members. The members for 2008/09 were:

Members
Sir William Stewart, Chairman
Professor Charles Easmon
Michael Beaumont
Ian Cranston

All four members served on the committee throughout the year

Meetings are attended by Justin McCracken, HPA Chief Executive and Tony Vickers, the Director of Human Resources, other than when their own remuneration is being discussed.

APPOINTMENT AND APPRAISAL OF MEMBERS OF THE BOARD AND THE EXECUTIVE GROUP

Non-executive and advisory Board members

All non-executive Board members are appointed by the Secretary of State for Health as advised by the Appointments Commission, or by the ministers of the devolved administrations, for a defined term. Advisory Board member appointments are made by the Chairman of the Board and are endorsed by the Board.

The HPA applies the same appraisal arrangements to non-executive and advisory Board members. Performance is assessed by

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www.appointments.org.uk

the Chairman of the Board through an annual appraisal process. The appraisal process for the Chairman is conducted by the HPA's Appointments Commission observer and the Department of Health senior sponsor.

Members of the Executive Group

The Remuneration and Terms of Service Committee determines the policy for the appointment of the members of the Executive Group that report directly to the Chief Executive. The members of the Executive Group hold employment contracts which are open-ended until they reach the normal retirement age of 65 with notice periods of three months with the exception of the Chief Executive, which is six months. Early termination by the agency, other than for misconduct, would result in the individual receiving compensation in accordance with NHS terms and conditions or, in the case of Dr Roger Cox, in accordance with the terms of the United Kingdom Atomic Energy Authority Combined Pension Scheme. Any payments for compensation for loss of office would be agreed by the Remuneration and Terms of Service Committee with reference to Department of Health and Treasury guidelines.

The committee also reviews and assesses the annual appraisal process for members of the Executive Group, whose appraisal is undertaken by the Chief Executive. The Chief Executive undertakes an appraisal interview with each member of the Executive Group. Performance is assessed against a range of objectives and a set of core management skills and leadership qualities. The outcome of the appraisal interview is reviewed by the Chairman of the Board.

REMUNERATION POLICY

Non-executive and advisory Board members

Non-executive Board members' remuneration is not performance related, and is determined by the Secretary of State for Health or the ministers of the devolved administrations. The remuneration package is subject to an annual review by the relevant authority.

Members of the Executive Group

The Remuneration and Terms of Service Committee determines the policy for the remuneration of the members of the Executive Group as well as those senior level executive posts directly accountable to the Chief Executive.

There are no performance related bonuses payable to members of the Executive Group. Their remuneration package consists of a salary and pension contributions. In determining the package, the Remuneration and Terms of Service Committee has regard to pay and employment policies elsewhere within the agency as well as the need to recruit, retain and motivate suitably able and qualified people to exercise their different responsibilities.

The salaries of the members of the Executive Group are reviewed annually, having regard to the remuneration policy which takes into account the NHS Very Senior Managers Pay Framework. For the 2008/09 financial year, members of the Executive Group received cost of living increases amounting to an annualised 2.75% (2007/08: 2.00%). The cost of living increases for other employees within the agency was an annualised 2.20% for medical consultants and 2.75% for all other staff (2007/08: 2.00%, 2.50% respectively).

Details of amounts payable to third parties for services of a member of the Executive Group

Professor Stephen Palmer was a member of the Executive Group and the Board for the whole year ended 31 March 2009. He is an employee of Cardiff University. The amount paid by the agency to the university to cover his salary and employer on-costs for the year totalled £190,904 (2007/08: £188,000). This total included a clinical excellence award which is funded by the Department of Health.

The National Institute of Biological Standards and Control (NIBSC) merged with the Health Protection Agency on 1 April 2009. As Director of NIBSC, Dr Stephen Inglis participated as an Executive Group member throughout the year ended 31 March 2009. None of Dr Inglis' remuneration costs were borne by the HPA.

REMUNERATION OF NON-EXECUTIVE BOARD MEMBERS AND EXECUTIVE GROUP MEMBERS

The table below lists all persons who served on the Board or Executive Group during the year ended 31 March 2009. A summary of their employment contract as at 31 March 2009 is accompanied by the total remuneration due to each individual during their tenure in post in 2008/09.

	Date commenced, reappointed or extended	Expiry date of current contract	Notice period	Total salary, fees and allowances	
				Year ended 31 March 2009 £'000	Year ended 31 March 2008 £'000
Non-executive Board members					
Sir William Stewart	1 April 2007	5 April 2009	*	60-65	60-65
Dr Barbara Bannister	1 April 2008	31 March 2011	*	5-10	5-10
Michael Beaumont	1 April 2008	31 March 2011	*	10-15	10-15
James Brown	1 October 2008	30 September 2011	*	5-10	5-10
Ian Cranston	1 April 2008	31 March 2009	*	5-10	5-10
Dr Paul Darragh	1 April 2008	31 March 2009	*	5-10	5-10
Professor Charles Easmon	1 April 2008	31 March 2010	*	5-10	5-10
Professor Andrew Hall	1 April 2008	31 March 2009	*	5-10	5-10
Dr Rosemary Leonard	1 April 2008	31 March 2011	*	5-10	-
Dr Vanessa Mayatt	1 April 2007	31 March 2011	*	5-10	10-15
Dr Sandy Primrose	1 April 2006	31 March 2009	*	5-10	5-10
Professor Debby Reynolds	1 April 2008	31 March 2011	*	5-10	-
John Wyn Owen	1 February 2006	31 March 2011	*	5-10	5-10
Advisory Board members					
Professor Alan Maryon Davis	1 June 2007	31 May 2010	1 month	5-10	5-10
Professor William Gelletly	1 April 2005	Open	1 month	5-10	5-10
Chief Executive					
Professor Pat Troop[1]	1 April 2003	6 April 2008	6 months	0-5	180-185
Justin McCracken[1]	7 April 2008	Open	6 months	205-210	-
Members of the Executive Group					
Lis Birrane	6 October 2003	Open	3 months	95-100	95-100
Professor Peter Borriello[1]	1 April 2003	30 September 2008	3 months	70-75	140-145
Professor Mike Catchpole[2]	1 October 2008	28 February 2009	3 months	70-75	-
Dr Stephen Chatfield	1 September 2007	Open	3 months	140-145	80-85
Dr Roger Cox[1]	1 April 2005	31 May 2009	3 months	130-135	125-130
Michael Harker	1 April 2003	5 April 2009	3 months	120-125	105-110
Professor Anthony Kessel	16 March 2009	Open	3 months	5-10	-
Dr Christine McCartney	1 September 2006	Open	3 months	125-130	125-130
Professor Stephen Palmer [1,3]	25 August 2006	31 March 2012	6 months	-	-
John Phipps	1 April 2003	2 Apr 2008	3 months	0-5	105-110
Dr Tony Sannia[1]	1 April 2003	Open	3 months	140-145	135-140
Dr John Stephenson	1 October 2007	Open	3 months	110-115	55-60
Tony Vickers	1 April 2008	Open	3 months	100-105	-
Professor Maria Zambon	1 March 2009	Open	3 months	15-20	-

[1] Denotes members of the Executive Group who were members of the Board during the year ended 31 March 2009.
[2] Professor Catchpole acted as interim Director of the Centre for Infections from 1 October 2008, before resuming his normal role on 1 March 2009.
[3] Professor Palmer provided services to the agency on secondment as an employee of Cardiff University as detailed in the section immediately below.
* Not applicable as public appointments.

Salary, fees and allowances

Salary, fees and allowances covers both pensionable and non-pensionable amounts and include any allowances or other payments to the extent they are subject to UK taxation. It does not include amounts that are simply a reimbursement of expenses directly incurred in the performance of the individual's duties.

Benefits in kind

During the year ended 31 March 2009 no benefits in kind were made available to any non-executive member of the Board or any member of the Executive Group.

Compensation for loss of office

During the year ended 31 March 2009 no compensation payments were made to any past or present member of the Board or the Executive Group.

Pension entitlements

Non-executive and advisory Board member remuneration is not pensionable.

The members of the Executive Group (with the exception of Dr Cox) are members of the NHS Pension Scheme. Dr Cox transferred to the Health Protection Agency from the National Radiological Protection Board on 1 April 2005 and retained his membership of the United Kingdom Atomic Energy Authority Combined Pension Scheme, which offers very similar benefits to the NHS Scheme. Details of both pension schemes, including benefits payable, are included in the notes to the financial statements.

The pension entitlements of the members of the Executive Group are as follows:

	Real annual increase in accrued pension	Value of accrued pension as at 31 March 2009	Real annual increase in lump sum	Lump sum value as at 31 March 2009	Cash equivalent transfer value as at 31 March 2008	Cash equivalent transfer value as at 31 March 2009	Real annual increase in cash equivalent transfer value
	£'000	£'000	£'000	£'000	£'000	£'000	£'000
Professor Pat Troop[1]	0.0 – 2.5	80.0 – 85.0	0.0 – 2.5	240.0 – 245.0	-	-	-
Justin McCracken	0.0 – 2.5	0.0 – 5.0	0.0 – 2.5	5.0 – 10.0	-	48	34
Lis Birrane	0.0 – 2.5	5.0 – 10.0	2.5 – 5.0	15.0 – 20.0	86	132	31
Professor Peter Borriello	0.0 – 2.5	45.0 – 50.0	0.0 – 2.5	145.0 – 150.0	752	1108	118
Professor Mike Catchpole	2.5 – 5.0	45.0 – 50.0	7.5 – 10.0	145 .0 – 150.0	649	955	84
Dr Stephen Chatfield	0.0 – 2.5	0.0 – 5.0	5.0 – 7.5	5.0 – 10.0	13	53	28
Dr Roger Cox	0.0 – 2.5	55.0 – 60.0	5.0 – 7.5	165.0 – 170.0	976	1338	236
Mr Michael Harker[1]	5.0 – 7.5	60.0 – 65.0	17.5 – 20.0	185.0 – 190.0	-	-	-
Professor Anthony Kessel	0.0 – 2.5	20.0 – 25.0	0.0 – 2.5	70.0 – 75.0	225	369	4
Dr Christine McCartney[1]	0.0 – 2.5	60.0 – 65.0	0.0 – 2.5	180.0 – 185.0	-	-	-
Mr John Phipps[1]	0.0 – 2.5	15.0 – 20.0	0.0 – 2.5	55.0 – 60.0	-	-	-
Dr Tony Sannia	0.0 – 2.5	20.0 – 25.0	5.0 – 7.5	60.0 – 65.0	304	446	94
Dr John Stephenson[1]	5.0 – 7.5	35.0 – 40.0	20.0 – 22.5	115.0 – 120.0	-	-	-
Mr Tony Vickers	5.0 – 7.5	30.0 – 35.0	17.5 – 20.0	90.0 – 95.0	344	551	139
Professor Maria Zambon	0.0 – 2.5	30.0 – 35.0	0.0 – 2.5	100.0 – 105.0	454	669	12

[1] There is no cash equivalent transfer value for those members who were over the age of 60.

Cash equivalent transfer values

The cash equivalent transfer value (CETV) is the actuarially assessed capitalised value of the pension scheme benefits accrued by a scheme member at a particular point in time. The benefits valued are the member's accrued benefits and any contingent spouse's pension payable from the scheme. A CETV is a payment made by a pension scheme or arrangement to secure pension benefits in another pension scheme or arrangement when the member leaves a scheme and chooses to transfer the benefits accrued in their former scheme.

The pension figures shown relate to the benefits that the individual has accrued as a consequence of their total membership of the pension scheme, not just their service in a senior capacity to which disclosure applies. The CETV figures include the value of any pension benefit in another scheme or arrangement which the individual has transferred to the NHS Pension Scheme (or in the case of Dr Cox, to the United Kingdom Atomic Energy Authority Combined Pension Scheme). They also include any additional pension benefit accrued to the member as a result of their purchasing additional years of pension service in the scheme at their own cost. The CETV is calculated within the guidelines and framework prescribed by the Institute and Faculty of Actuaries.

Real increase in CETV

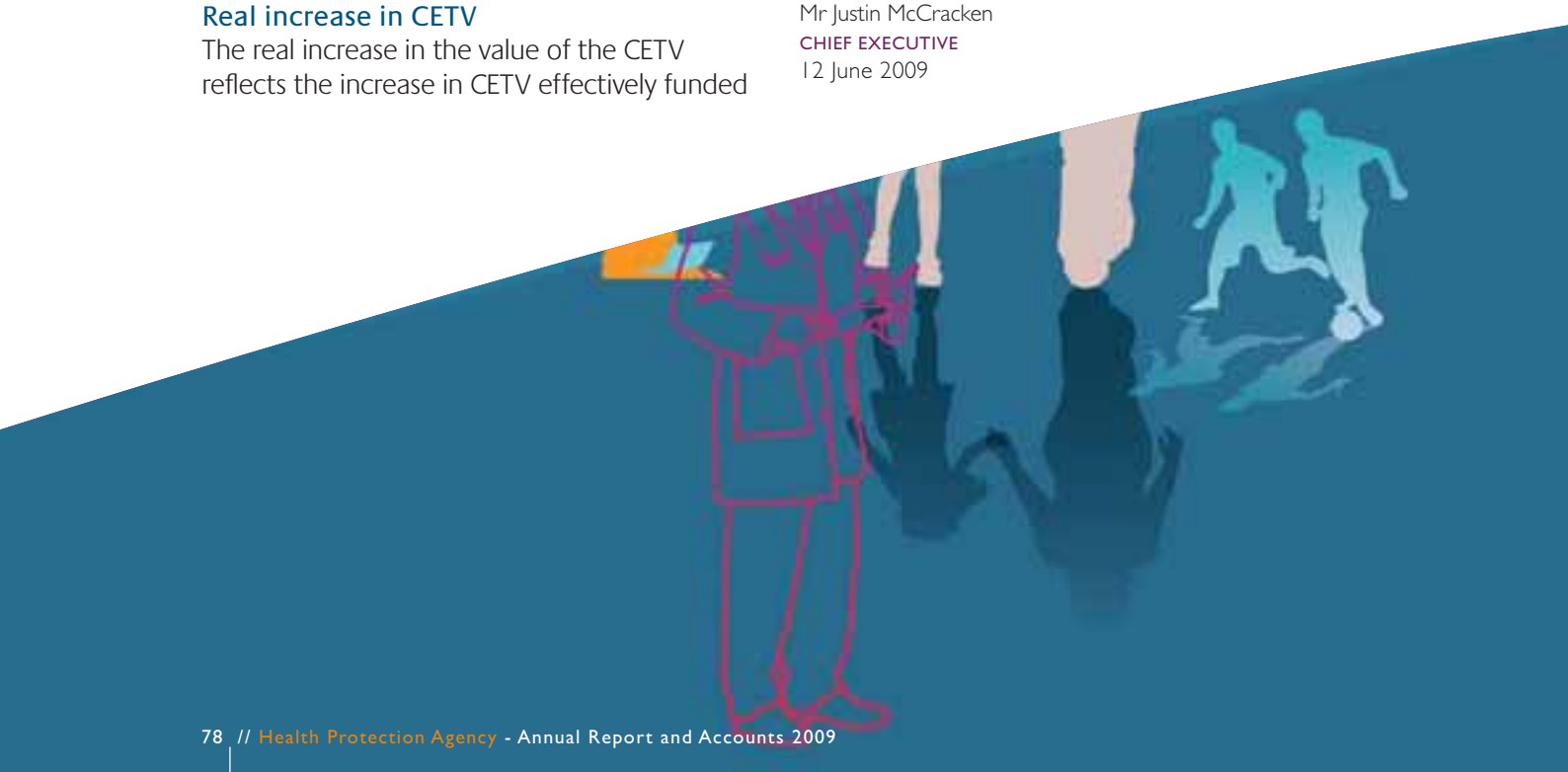
The real increase in the value of the CETV reflects the increase in CETV effectively funded by the employer. It takes account of the increase in accrued pension due to inflation, contributions paid by the employee (including the value of any benefits transferred from another pension scheme or arrangement) and uses common market valuation factors for the start and end of the period.

Changes in the factors used to calculate the CETV, which came into force on 1 October 2008 as a result of the Occupational Pension Scheme (Transfer Value Amendment) regulations, affected CETV real annual increase values. Further regulations from the Department for Work and Pensions to determine CETV from public sector pension schemes came into force on 13 October 2008.

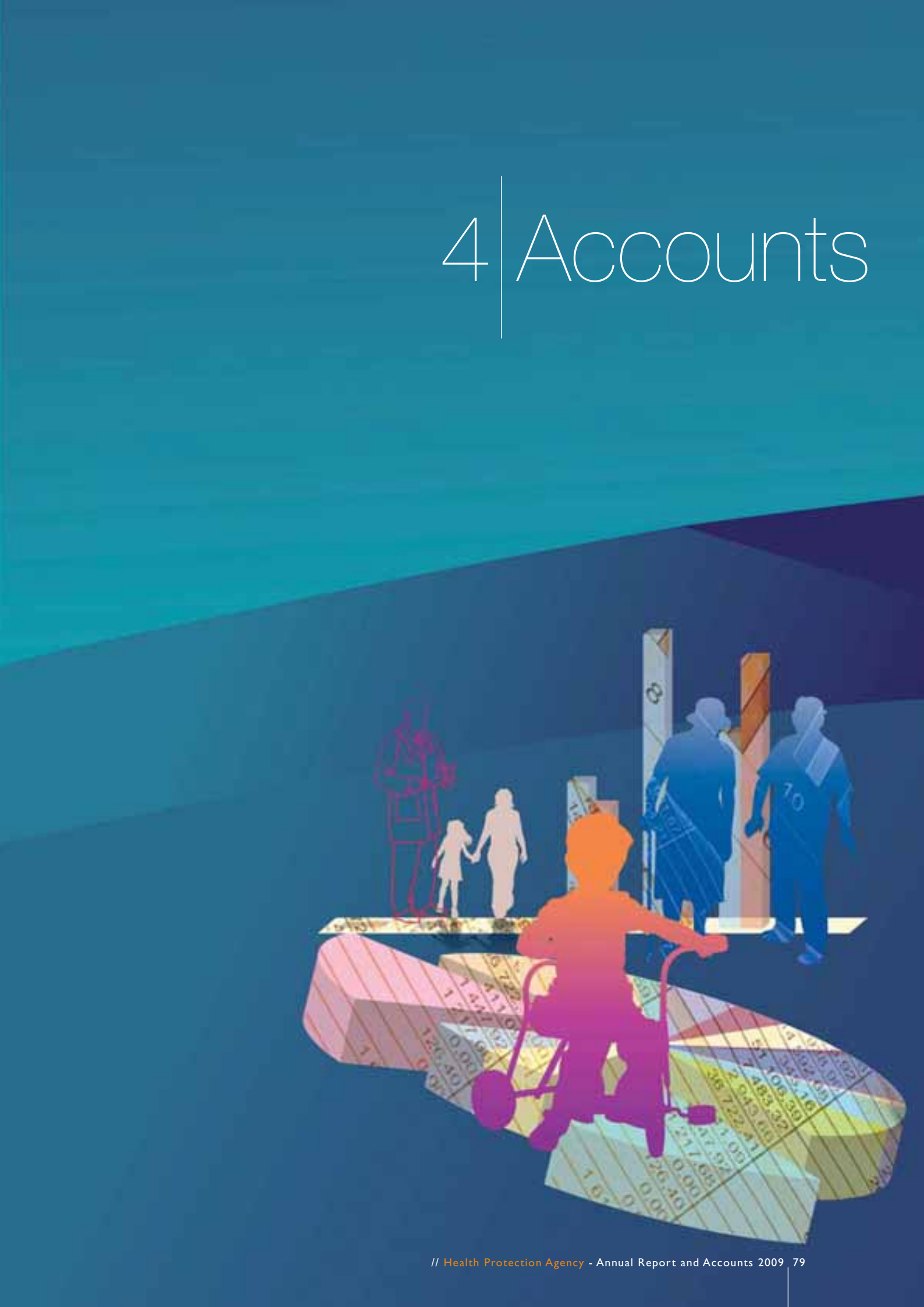
Auditable and non-auditable elements of this report

The tables in this remuneration report, as well as the details of amounts payable to third parties for the services of senior managers, have been subject to audit and are referred to in the Certificate and Report of the Comptroller and Auditor General to the House of Commons. The auditor's opinion is included within the Auditor's Report on page 81.

Mr Justin McCracken
CHIEF EXECUTIVE
12 June 2009



4 Accounts



Statement of Accounting Officer's responsibilities

Under The Health Protection Agency Act 2004, the Secretary of State for Health (with the consent of HM Treasury) has directed that the Health Protection Agency prepare, for each financial year, a statement of accounts in the form and on the basis set out in the Accounts Direction. The accounts are prepared on an accruals basis and must give a true and fair view of the state of affairs of the Health Protection Agency and of its net operating cost, recognised gains and losses and cash flows for the financial year.

In preparing the accounts, the Accounting Officer is required to comply with the requirements of the Government Financial Reporting Manual and in particular to:

- Observe the Accounts Direction issued by the Secretary of State for Health and approved by HM Treasury, including the relevant accounting and disclosure requirements;
- Apply suitable accounting policies on a consistent basis;
- Make judgements and estimates on a reasonable basis;
- State whether applicable accounting standards as set out in the Government Financial Reporting Manual have been followed, and disclose and explain any material departures in the financial statements; and
- Prepare the financial statements on a going concern basis.

The Accounting Officer for the Department of Health has appointed the Chief Executive as the Accounting Officer for the Health Protection Agency. The responsibilities of an Accounting Officer, including responsibility for the propriety and regularity of the public finances for which the Accounting Officer is answerable, for keeping proper records and for safeguarding the Health Protection Agency's assets, are set out in the Accounting Officers' Memorandum issued by the Department of Health.

The certificate and report of the Comptroller and Auditor General to the Houses of Parliament

I certify that I have audited the financial statements of the Health Protection Agency (HPA) for the year ended 31 March 2009 under the Health Protection Agency Act 2004. These comprise the Operating Cost Statement, the Balance Sheet, the Cash Flow Statement and Statement of Recognised Gains and Losses and the related notes. These financial statements have been prepared under the accounting policies set out within them. I have also audited the information in the Remuneration Report that is described in that report as having been audited.

RESPECTIVE RESPONSIBILITIES OF THE HPA, THE ACCOUNTING OFFICER AND AUDITOR

The HPA and Accounting Officer, are responsible for preparing the Annual Report, the Remuneration Report and the financial statements in accordance with the Health Protection Agency Act 2004 and HM Treasury directions made thereunder and for ensuring the regularity of financial transactions. These responsibilities are set out in the Statement of Accounting Officer's Responsibilities.

My responsibility is to audit the financial statements and the part of the Remuneration Report to be audited in accordance with relevant legal and regulatory requirements, and with International Standards on Auditing (UK and Ireland).

I report to you my opinion as to whether the financial statements give a true and fair view and whether the financial statements and the part of the Remuneration Report to be audited have been properly prepared in accordance with the Health Protection Agency Act 2004 and HM Treasury directions made thereunder. I report to you whether, in my opinion, the information, which comprises the operating review included in the Annual Report is consistent with the financial statements. I also report whether in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

In addition, I report to you if the HPA has not kept proper accounting records, if I have not received all the information and explanations I require for my audit, or if information specified by HM Treasury regarding remuneration and other transactions is not disclosed.

I review whether the Statement on Internal Control reflects the HPA's compliance with HM Treasury's guidance, and I report if it does not. I am not required to consider whether this statement covers all risks and controls, or form an opinion on the effectiveness of the HPA's corporate governance procedures or its risk and control procedures.

I read the other information contained in the Annual Report and consider whether it is consistent with the audited financial statements. This other information comprises the operating review. I consider the implications for my report if I become aware of any apparent misstatements or material inconsistencies with the financial statements. My responsibilities do not extend to any other information.

BASIS OF AUDIT OPINIONS

I conducted my audit in accordance with International Standards on Auditing (UK and Ireland) issued by the Auditing Practices Board. My audit includes examination, on a test basis, of evidence relevant to the amounts, disclosures and regularity of financial transactions included in the financial statements and the part of the Remuneration Report to be audited. It also includes an assessment of the significant estimates and judgments made by the HPA and Accounting Officer in the preparation of the financial statements, and of whether the accounting policies are most appropriate to the HPA's circumstances, consistently applied and adequately disclosed.

I planned and performed my audit so as to obtain all the information and explanations which I considered necessary in order to provide me with sufficient evidence to give reasonable assurance that the financial statements and the part of the Remuneration Report to be audited are free from material misstatement, whether caused by fraud or error, and that in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them. In forming my opinion I also evaluated the overall adequacy of the presentation of information in the financial statements and the part of the Remuneration Report to be audited.

OPINIONS

In my opinion:

- the financial statements give a true and fair view, in accordance with the Health Protection Agency Act 2004 and directions made thereunder by HM Treasury, of the state of the HPA's affairs as at 31 March 2009 and of the net operating cost, recognised gains and losses and cashflows for the year then ended;

- the financial statements and the part of the Remuneration Report to be audited have been properly prepared in accordance with the Health Protection Agency Act 2004 and HM Treasury directions made thereunder; and

- information, which comprises the operating review, included within the Annual Report, is consistent with the financial statements.

OPINION ON REGULARITY

In my opinion, in all material respects the expenditure and income have been applied to the purposes intended by Parliament and the financial transactions conform to the authorities which govern them.

REPORT

I have no observations to make on these financial statements.

Amyas C E Morse
Comptroller and Auditor General
National Audit Office
151 Buckingham Palace Road, Victoria, London
SW1W 9SS
18 June 2009

Operating Cost Statement

FOR THE YEAR ENDED 31 MARCH 2009

	Note	2009 £'000	2008 £'000
Gross operating costs			
Staff costs	3	166,221	153.983
Other operating charges	6	107,024	100,845
Amortisation and depreciation	7	16,935	14,777
Notional cost of capital charge		4,964	4,650
Gross operating costs before deduction of notional cost of capital charge		295,144	274,255
Reversal of notional cost of capital charge		(4,964)	(4,650)
Total gross operating costs		290,180	269,605
Operating income	2	(117,748)	(109,188)
Net operating cost before interest		172,432	160,417
Interest receivable		(285)	(400)
Net operating cost for the financial year	17	172,147	160,017

The notes on pages 86 to 108 form part of these accounts. All operations are continuing.

The net operating cost reported above represents the net cost of the public health work funded by Government grant in aid from the Department of Health and the Devolved Administrations.

In addition to the Government grant in aid financing, the agency generates significant operating income from Government and commercial customers and grant funding bodies. This income enables the Government grant in aid to be kept below the full cost of the agency's public health work and enables a wider public health function than would otherwise be possible with Government grant in aid financing alone.

Statement of Recognised Gains and Losses

FOR THE YEAR ENDED 31 MARCH 2009

	2009 £'000	2008 £'000
Unrealised (loss)/gain on revaluation of tangible fixed assets	(11,886)	6,565
(Loss)/gain recognised for the year	(11,886)	6,565

The notes on pages 86 to 108 form part of these accounts. All operations are continuing.

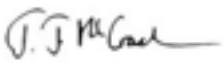
The losses reported above are as a result of the accounting policy on Government grant in aid (note 1c) and are covered by the Government financing reported in note 17 Government Financing. They represent the movement on the revaluation reserve on note 16.

Balance Sheet

AS AT 31 MARCH 2009

	Note	2009 £'000	2008 £'000
Fixed assets			
Intangible fixed assets	8	2,058	594
Tangible fixed assets	9	169,014	167,177
Investments	10	3	3
Total fixed assets		171,075	167,774
Current assets			
Stock	11	3,362	3,419
Debtors	12	31,178	30,058
Cash at bank and in hand	13	22,405	30,415
Total current assets		56,945	63,892
Creditors: amounts falling due within one year	14	(51,017)	(56,359)
Net current assets		5,928	7,533
Long term debtors	12	261	493
Total assets less current liabilities		177,264	175,800
Provisions	15	(6,049)	(8,559)
Net assets		171,215	167,241
Capital and reserves			
Capital grant reserve	16	3,045	3,013
Revaluation reserve	16	6,293	18,179
General reserve	16	161,877	146,049
Total capital and reserves		171,215	167,241

The notes on pages 86 to 108 form part of these accounts. All operations are continuing.



Mr Justin McCracken
CHIEF EXECUTIVE
12 June 2009

Cash Flow Statement

FOR THE YEAR ENDED 31 MARCH 2009

	Note	2009 £'000	2008 £'000
Net cash (outflow) from operating activities	18	(161,982)	(142,131)
Returns on investment and servicing of finance			
Interest received		285	400
Capital expenditure and financial investment			
Payments to acquire intangible fixed assets	8	(875)	(151)
Payments to acquire tangible fixed assets	9, 18	(32,505)	(19,128)
Payments to acquire investments	10	-	(2)
Net cash (outflow) before financing		(195,077)	(161,012)
Financing			
Government revenue grant in aid received	17	155,911	145,383
Government capital grant in aid received	17	30,800	21,038
Other capital grants received	16	356	1,983
Receipts from the sale of assets to the NHS on 1 April 2003		-	109
(Decrease)/increase in net cash in the year	13	(8,010)	7,501

The notes on pages 86 to 108 form part of these accounts. All operations are continuing.

Notes to the Financial Statements

1. ACCOUNTING POLICIES

a) Principal accounting policies

The accounts for the Health Protection Agency have been prepared under the historical cost convention, modified to include the revaluation of fixed assets, and comply with the provisions of the Health Protection Agency Act 2004 (Schedule 1).

Without limiting the information given, the accounts have been prepared in accordance with the Accounts Direction issued by the Secretary of State for Health with the approval of HM Treasury, and are in accordance with:

(i) The Companies Act 2006, as interpreted by the Government Financial Reporting Manual;

(ii) Generally accepted accounting principles in the United Kingdom (UK GAAP); and

(iii) The accounting and disclosure requirements detailed within HM Treasury guidance 'Managing Public Money' and 'The Government Financial Reporting Manual' insofar as these are appropriate to the Health Protection Agency.

The aforementioned direction and guidance require the following departures from the Companies Act 2006 and accounting standards requirements:

(i) The note on historical cost profit and losses required under Financial Reporting Standard 3 'Reporting Financial Performance' has not been disclosed; and

(ii) The historical cost information regarding assets included at valuation as required by Financial Reporting Standard 15 'Tangible Fixed Assets' has not been disclosed.

b) Operating income

Operating income comprises amounts receivable, excluding Value Added Tax, for goods and services supplied. Income on long term contracts is recognised as the work progresses, in accordance with the contractual arrangements and the stage completion of the work.

c) Government grant in aid

Under the Government Financial Reporting Manual, non-departmental public bodies should regard Government grant in aid received for revenue purposes as a financing flow. This is based on the position that grant in aid is, in effect, a contribution from a controlling party and tends to be given to finance the activities of the non-departmental public body rather than to acquire specific goods and services and, therefore does not meet the generally accepted accounting principle (GAAP) definition of income.

Both revenue and capital Government grant in aid received via the Department of Health and the Devolved Administrations is credited to the general reserve as received.

d) Intangible fixed assets

Intangible fixed assets comprise software licences purchased from third parties with a life of more than one year, as well as bespoke software applications operating within the agency. Off-the-shelf and developed software licences with a life of less than one year, or an initial value below £5,000, are not capitalised. Non-capitalised software costs are charged to operating costs as they are incurred.

Where capitalised, software licences are valued at cost, net of amortisation and impairment, or depreciated replacement cost where materially different. The cost or valuation of software licences, less their estimated residual values, is amortised on a straight-line basis over the life of the licence or the life of the related asset where there is no licence expiry date.

e) Tangible fixed assets

Freehold land is valued on an existing use basis. Freehold buildings with a specialised use are valued at depreciated replacement cost and non-specialised buildings are valued at their open market value for their existing use. Independent valuations will be carried out every five years in accordance with guidance issued by the Royal Institute of Chartered Surveyors. The freehold land and buildings were valued on 31 March 2005 by the Valuation Office Agency. In the years where no valuation occurs, land and buildings are revalued using the appropriate indices contained within the NHS Finance Manual.

Leasehold land and buildings with a contract of less than 50 years as at balance sheet date are sub-categorised as short-term leases. All other leasehold assets are sub-categorised as long-term leasehold assets. The useful economic life of all leasehold assets is based upon the lower of the length of the relevant lease, or the life as advised by the Valuations Office Agency.

Individual items with a cost below £5,000 are not capitalised. Tangible fixed assets of the same or similar type acquired around the same time and scheduled for disposal about the same time, or assets which are purchased at the same time and are used, and subsequently disposed of together, are grouped and treated as if they were individual assets.

Other tangible fixed assets are valued at depreciated replacement cost on an existing use basis. The depreciated replacement cost is calculated by applying, annually, the appropriate indices contained within the NHS Finance Manual. Expenditure on tangible fixed assets is recorded at historic cost under assets under construction until the point at which the assets are brought into use. They are then reclassified as fixed assets, under the appropriate asset category, depreciated from the date on which they were brought into use and revalued as at the 31 March in line with the policy set out above.

The difference between the net book revaluation of tangible fixed assets at 31 March and the net book value at historic cost is credited (in the case of a surplus) or debited (in the case of a deficit) to the revaluation reserve.

Capital grants receivable for the purchase of specific capital assets are credited to a capital grants reserve and released to operating income to match the depreciation charged over the life of the capital assets concerned.

Impairment losses resulting from short-term changes in price that are considered to be recoverable in the longer term are taken in full to the revaluation reserve to the extent that gains have been recorded previously in the revaluation reserve. Beyond this, a charge is made to the Operating Cost Statement, unless the recoverable amount exceeds the revalued amount. These include impairments resulting from the revaluation of fixed assets.

f) Investments

Unlisted investments are valued on a historic cost basis, until such time that a readily ascertainable market value can be obtained.

g) Depreciation

Depreciation is provided on all tangible fixed assets from the month of purchase, but not in the month of disposal, at rates calculated to write off the cost of valuation of each asset evenly over its expected useful life as follows:

Asset category	Expected useful life
Freehold buildings	Up to 50 years as advised by the Valuation Office Agency
Leasehold land and buildings	Over the life of the lease
Fixtures and fittings	Up to 20 years as advised by the Valuation Office Agency
Plant and equipment	5 to 20 years
Vehicles	7 years
IT equipment	3 to 5 years

Freehold land, investments and assets under construction are not depreciated.

h) Stock

Stocks are valued at the lower of cost, or net current replacement cost if materially different, and net realisable value. For stock held for resale, net realisable value is based on estimated selling price less further costs expected to be incurred to completion. Work in progress is valued at cost, less the cost of work invoiced on incomplete contracts and less foreseeable losses. Cost means direct cost plus production overheads. Where necessary, provision is made for obsolete, slow moving and defective stocks.

i) Research and development

Research and development expenditure is charged to operating costs as incurred.

j) Income and Corporation Tax

The agency, as a body corporate, is subject to the provisions of the Income and Corporation Tax Act 1988. As the majority of operations are funded by Government grant in aid, no provision is required in these accounts for any Corporation Tax liability.

k) Value Added Tax

The Health Protection Agency is registered for Value Added Tax (VAT). VAT is charged on invoices for business contracts relating to products, services and research activities. The Health Protection Agency recovers part of its input VAT proportionate to its business activities in relation to total income. Expenditure is shown net of recoverable VAT. Non-recoverable VAT is charged to the most appropriate expenditure or capitalised if it relates to a fixed asset.

l) Operating leases

Operating lease costs are charged to operating costs on a straight line basis over the lease term.

m) Foreign currencies

The functional and presentational currency used by the agency is pounds sterling (GBP). Transactions denominated in foreign currencies are translated into GBP at the exchange rate prevailing on the transaction date or at the contracted rate if the transaction is covered by a forward exchange contract. At each balance sheet date, foreign currency monetary balances are translated into sterling at the exchange rate prevailing at the end of the financial year. Exchange gains and losses are dealt with in accordance with Financial Reporting Standard 23.

n) Pensions

The Health Protection Agency provides pension schemes for the benefit of the majority of its employees, and participates in three defined benefit schemes:

1. The National Health Service Pension Scheme (NHSPS);
2. The United Kingdom Atomic Energy Agency (UKAEA) Combined Pension Scheme (CPS); and
3. The Principal Civil Service Pension Scheme (PCSPS).

Although each is an unfunded scheme, they each receive contributions, partly from participating employees and partly from the agency. Details of each scheme are included in the notes to the financial statements (note 5). Each scheme is multi-employer, and the scheme administrators prepare separate accounts which are subject to audit and regular actuarial review. Because of this, HM Treasury's Financial Reporting Manual 2008/09 (paragraph 6.5.2) requires the pension schemes to be treated as defined contribution schemes within these financial statements. The amount charged to operating costs is the employer's contributions payable for the year.

In certain circumstances, employees taking early retirement are entitled to an enhanced lump sum and ongoing pension. The Health Protection Agency is responsible for meeting the additional cost of the lump sum, the full cost of the pension until normal retirement age and the enhanced element of the pension thereafter. Payment is made in full for all early retirees from the NHS pension scheme in the year of retirement; for all other pension schemes, provision is made for the estimated future cost of early retirements at the time when the employee retires. Further details are provided within note 15.

o) Provisions for liabilities and charges

The Health Protection Agency maintains balance sheet provisions, as allowed by Financial Reporting Standard 12, for a number of significant future liabilities arising from past events where the timing and amount of the liability is uncertain. These provisions are reviewed annually as at the balance sheet date and are adjusted to reflect the latest best estimate of the liability. These adjustments are reflected in the Operating Cost Statement for the year. Details of the provisions are contained in note 15.

p) Notional Costs

Operating costs include a notional charge for the cost of the Government funded capital employed during the year. The charge is calculated at 3½% of the average net assets for the year, excluding cash balances held with the Office of the Paymaster General and fixed assets funded by grants other than Government grant in aid. There are no other notional costs.

2. OPERATING INCOME

	2009 £'000	2008 £'000
Products and royalties	26,128	29,002
Contracts and services	91,230	79,873
Other operating income	390	313
Total operating income	117,748	109,188

No segmental reporting disclosures have been made as all the agency's activities are inter-related and contiguous and have the single objective to further the health protection functions stated in the Health Protection Act 2004.

3. STAFF COSTS

	2009 £'000	2008 £'000
Salaries and wages	125,985	115,827
Social security costs	11,190	10,679
Other pension costs (note 5)	17,015	15,502
Total costs of staff employed	154,190	142,008
Interim and seconded staff	11,532	10,757
Redundancy and early retirement costs	327	384
Transfer to provision for future costs of early retirement (note 15)	5	647
Total costs of employed and other staff	166,054	153,796
Manufacturing staff costs transferred from finished goods	167	187
Total staff costs	166,221	153,983

4. EMPLOYEE NUMBERS

The average number of full-time equivalent staff employed during the year was as follows:

	2009	2008
Medical	255	258
Nursing	194	189
Professional, administrative and operational support	1,087	982
Scientific and technical	1,731	1,731
Total employee numbers	3,267	3,160

The above figures relate to staff with a United Kingdom employment contract, and include those staff on maternity, sick, special or paternity leave and those on career breaks, but only where they are being paid by the Health Protection Agency.

In addition, during the year ended 31 March 2009, the HPA engaged staff on various interim, secondment and similar arrangements for variable time periods. Due to the nature of these engagements it is not possible to quantify the precise number of full-time equivalent persons engaged. It is estimated that the average number of persons engaged on these arrangements amounted to approximately 236 (2008: 234) whole time equivalents.

5. PENSION SCHEME

a) Pension scheme participation

The majority of the agency's employees are covered by two pension schemes; the National Health Service Pension Scheme (NHSPS) and the United Kingdom Atomic Energy Agency (UKAEA) Combined Pension Scheme (CPS). A few employees have retained their individual membership of the Principal Civil Service Pension Scheme (PCSPS), or have exercised other options available as a result of The Social Security Act 1986. The pension schemes available to Health Protection Agency employees are defined benefit schemes, all of which prepare separate scheme statements, which are readily available to the public. Details of the major pension schemes are provided below.

b) The NHS Pension Scheme

The NHSPS is an unfunded multi-employer defined benefit scheme, the provisions of which are contained in the NHS Pension Scheme Regulations (SI 1995 No. 300). The Scheme is notionally funded, payment liabilities are underwritten by the Exchequer. The agency is unable to identify its share of the underlying assets and liabilities. Scheme accounts are prepared annually by the NHS Business Services Authority and are examined by the Comptroller and Auditor General. The Government Actuary's Department (GAD) values the NHSPS every four years, and those quadrennial reports are published. The Scheme has a money purchase Additional Voluntary Contribution (AVC) arrangement which is available to employees to enhance their pension benefits.

Between valuations the GAD provides an update of the scheme liabilities on an annual basis. The latest assessment of the liabilities of the Scheme is contained in the Report of the Actuary, which forms part of the NHS Pension Scheme & Compensation for Premature Retirement Scheme Resource Accounts, published annually. These accounts can be viewed on the NHS Pensions website at www.nhspa.gov.uk. Copies can also be obtained from The Stationery Office.

Under NHSPS regulations, the agency and participating employees are required to pay contributions, as specified by the Secretary of State for Health. These contributions are used to defray the costs of providing the NHSPS benefits. Employer contributions are charged to operating costs as they become due.

The pre-April 2008 funding arrangements required manual staff to make contributions of 5% and all other staff paid 6%. Employers also contributed 14% of pensionable pay for each employee. In 2008/2009, contribution rates remained unchanged for manual workers, but changed to a tiered system for all other staff, and were based on their pensionable pay in 2007/08 scaled to the full year, full time equivalent for part-time employees. The rates are tabulated below.

	Pensionable Pay	2008/09 Employee Contribution	2008/09 Employer Contribution
Tier 1	Up to £19,682	5.0%	14.0%
Tier 2	£19,683 - £65,002	6.5%	14.0%
Tier 3	£65,003 - £102,499	7.5%	14.0%
Tier 4	More than £102,499	8.5%	14.0%

Contributions for new members of the NHS Pension Scheme in 2008/09 were based on their pensionable pay at the time of joining the Scheme

The Government Financial Reporting Manual 2008-09 requires the scheme to be accounted for as defined contribution in nature.

c) The UKAEA Combined Pension Scheme

The UKAEA CPS was set up as a statutory body with effect from 1 July 1997 as a result of merging the previous UKAEA Principal Non-Industrial Superannuation Scheme (PNISS) and the UKAEA Industrial Superannuation Scheme (ISS). The scheme is managed by the UKAEA. It is a multi-employer scheme which provides defined benefits to its members. The agency is unable to identify its share of the underlying assets and liabilities.

For the year ended 31 March 2009, employees were required to pay contribution of 5% (2008: 5%) of pensionable pay. The employer's contribution amounted to 17.3% (2008: 17.3%) of pensionable pay in all cases. Employer contributions are charged to operating costs as they become due.

In common with other public sector schemes the UKAEA CPS does not have many of the attributes of normal pension schemes. All contributions are paid to and benefits paid by HM Government via the Consolidated Fund. Any surplus of contributions made in excess of benefits paid out in any year is surrendered to the Consolidated Fund and any liabilities are met from the Consolidated Fund via the annual Parliamentary vote. Government does not maintain a separate fund and the scheme valuations are based on a theoretical calculation as to how a typical UK pension scheme would have invested the historical surplus of contributions over payments. There is no actual fund.

The Government Financial Reporting Manual 2008-09 requires the scheme to be accounted for as defined contribution in nature.

d) Employer contributions

The agency has accounted for its employer contributions to these schemes as if they were defined contribution schemes. The agency's employer contributions were as follows:

	2009 £'000	2008 £'000
The National Health Service Pension Scheme (NHSPS)	15,133	13,852
The UKAEA Combined Pension Scheme (CPS)	1,755	1,466
Other pension schemes	127	184
Total contributions by the Health Protection Agency	17,015	15,502

The contributions in respect of the March 2009 contribution for the Combined Pension Scheme and other pension schemes were outstanding as at the balance sheet date: there were no prepaid contributions as at the balance sheet date.

e) Retirements due to ill-health

During 2008/09 there were three (2007/08: one) early retirements from the agency on the grounds of ill-health. The NHS Pension Agency estimated the additional pension liabilities of these ill-health retirements to be £281,453 (2007/08: £13,912). These retirements represented 0.91 per 1,000 active scheme members (2007/08: 0.31).

6. OTHER OPERATING CHARGES

	2009 £'000	2008 £'000
Laboratory consumables and services	35,823	30,092
Supplies and services	41,317	41,825
Accommodation	24,769	23,609
Travel and subsistence	5,979	5,357
Foreign exchange (gains)/losses	(937)	121
Auditor's remuneration	148	130
Release of bad and doubtful debt provision	(209)	(352)
Losses on disposal of tangible and intangible fixed assets	134	63
Total other operating charges	107,024	100,845

7. AMORTISATION AND DEPRECIATION

The charge to operating costs for amortisation and depreciation for the year is as follows:

	2009 £'000	2008 £'000
Charge in respect of assets funded by capital grant in aid from the Department of Health:		
Intangible fixed assets (note 8)	1,073	257
Tangible fixed assets (note 9)	15,538	14,396
	16,611	14,653
Charge in respect of other tangible fixed assets (note 9)	324	124
Total charge to operating costs	16,935	14,777

8. INTANGIBLE FIXED ASSETS

	Software £'000
Cost or valuation	
At 1 April 2008	1,521
Reclassification from tangible fixed assets	1,921
Additions	875
Disposals	(59)
At 31 March 2009	4,258
Amortisation	
At 1 April 2008	927
Reclassification from tangible fixed assets	231
Charge for Year	1,073
Disposals	(31)
At 31 March 2009	2,200
Net book value	
At 31 March 2009	2,058
At 31 March 2008	594

Reclassification from tangible fixed assets

Laboratory and finance software and systems previously classified as tangible fixed assets were reclassified to intangible fixed assets during the year.

9. TANGIBLE FIXED ASSETS

	Land and buildings £'000	Fixtures and fittings £'000	Plant, equipment and vehicles £'000	Information technology equipment £'000	Assets under construction £'000	Total £'000
Cost						
At 1 April 2008	142,724	8,963	30,780	13,139	17,777	213,383
Reclassification to intangible fixed assets	-	-	(6)	(1,915)	-	(1,921)
Reclassification of assets	(3,361)	3,333	487	(459)	-	-
Additions	-	-	-	-	30,117	30,117
Transfer of assets under construction	2,435	7,183	7,120	1,777	(18,515)	-
Revaluations	(12,176)	346	1,018	-	-	(10,812)
Disposals	-	-	(630)	(222)	-	(852)
At 31 March 2009	**129,622**	**19,825**	**38,769**	**12,320**	**29,379**	**229,915**
Depreciation						
At 1 April 2008	24,878	1,404	14,015	5,909	-	46,206
Reclassification to intangible fixed assets	-	-	(3)	(228)	-	(231)
Reclassification of assets	(38)	38	5	(5)	-	-
Charge for year	7,060	2,171	4,112	2,519	-	15,862
Revaluations	(764)	46	528	-	-	(190)
Disposals	-	-	(550)	(196)	-	(746)
At 31 March 2009	**31,136**	**3,659**	**18,107**	**7,999**	**-**	**60,901**
Net Book Value						
At 31 March 2009	**98,486**	**16,166**	**20,662**	**4,321**	**29,379**	**169,014**
At 31 March 2008	117,846	7,559	16,765	7,230	17,777	167,177

Reclassification to intangible fixed assets

Laboratory and finance software and systems previously classified as tangible fixed assets were reclassified to intangible fixed assets during the year.

Reclassification of assets

Tangible fixed assets previously incorrectly classified as land and buildings and information technology

tangible fixed assets were reclassified to fixtures and fittings and plant and equipment tangible fixed assets during the year.

Additions

All additions to tangible fixed assets are processed through assets under construction in the first instance and transferred into the appropriate asset category when the item is brought into service.

Land and buildings

Freehold land and buildings have a net book value of £98,006,000 (2008: £115,206,000). Long leasehold land and buildings have a net book value of £481,000 (2008: £918,000). Short leasehold land and buildings have a net book value of £0 (2008: £1,722,000); this was due to the reclassification of assets previously classified as leasehold land and buildings.

Third party owned assets

In addition to the above assets, the agency held tangible fixed assets, at no cost to the agency, with a total cost of £4,074,000 (2008: £3,968,000) which were funded by and remain in the ownership of third parties. These assets, required to meet customer contracts, consisted of modular buildings £2,242,000 (2008: £2,393,000) and plant and equipment £1,832,000 (2008: £1,575,000).

10. INVESTMENTS

Investments comprise of the unlisted securities of Syntaxin Limited (Syntaxin) and Proacta Incorporated (Proacta).

The agency holds a 9.3% interest in Syntaxin (2008: 9.3%). The holding was aquired for a cash consideration of £2,565.00 (2008: £2,565.00) and is made up of 100 preference shares of £1 each (2008: 100 preference shares of £1 each) and 2,465,000 ordinary shares of 0.1p each (2008: 2,465,500). The agency also holds 25,052 shares (2008: 25,052) of the US$ 0.001 common stock of Proacta (2008: 25,052 shares), for which there was no cash consideration (2008: £Nil).

The agency has no significant influence over the operating and financial policies of Syntaxin or Proacta, as defined by Financial Reporting Standard 9, so is required to treat the holdings as a simple investment. There is no easily ascertainable market value for either investment, so the Board continues to disclose both on a historic cost basis.

11. STOCK

	2009 £'000	2008 £'000
Raw materials	316	290
Finished goods	1,705	2,071
Laboratory consumables and other stores	1,341	1,058
Total stock	3,362	3,419

The replacement cost of raw materials, laboratory consumables and other stores is not materially different from the balance sheet value.

12. DEBTORS

	2009 £'000	2008 £'000
Amounts falling due within one year		
Trade debtors	8,489	11,621
Accrued income	11,252	11,158
Prepayments	2,733	2,116
Other debtors	8,704	5,163
Total	31,178	30,058
Amounts falling due after more than one year		
Other debtors	261	493
Total	261	493

The debtor amounts falling due after more than one year relate to lump sums paid to premature retirees from the UKAEA Combined Pension Scheme. These amounts will be repaid by the Scheme administrators to the agency on the retirees' normal retirement age, or death, whichever is the earliest.

Intra-Government balances

Intra-Government balances within the totals for debtors are as follows:

	2009 £'000	2008 £'000
Balances with the Department of Health	454	857
Balances with NHS Trusts	9,706	7,312
Balances with other Central Government bodies	1,502	1,828
Balances with Local Authorities	2,027	586
Total intra-Government balances	13,689	10,583

13. ANALYSIS OF CHANGES IN NET FUNDS

	31 March 2009 £'000	31 March 2008 £'000	Change in year £'000
Cash at bank and in hand	22,405	30,415	(8,010)
Overdraft (note 14)	(598)	(2,121)	1,523
Net funds	21,807	28,294	(6,487)

Net funds can be analysed as follows:

	2009 £'000	2008 £'000
Paymaster General Account	19,926	28,833
Commercial bank accounts	1,881	(539)
Net funds	21,807	28,294

The overdraft is a technical book overdraft relating to the value of unpresented payments as at the balance sheet date. No actual bank overdraft existed at any time during the year.

14. CREDITORS: AMOUNTS FALLING DUE WITHIN ONE YEAR

	2009 £'000	2008 £'000
Trade creditors	14,310	12,011
Overdraft	598	2,121
Deferred income	12,597	12,641
PAYE and social security	-	3,583
Accruals	19,594	20,025
Other creditors	3,918	5,978
Total creditors: amounts falling due within one year	51,017	56,359

There were no creditor amounts falling due after more than one year at 31 March 2009.

The overdraft is a technical book overdraft relating to the value of unpresented payments as at the balance sheet date. The cash to meet these payments was held in the agency's account with the Office of the Paymaster General. No actual bank overdraft existed at any time during the year.

Intra-Government balances

Intra-Government balances within the totals for creditors are as follows:

	2009 £'000	2008 £'000
Balances with the Department of Health	4,866	6,110
Balances with NHS Trusts	5,002	5,835
Balances with other central Government bodies	1,149	7,811
Balances with local authorities	504	219
Total intra-Government balances	11,521	19,975

15. PROVISION FOR LIABILITIES AND CHARGES

	Legal claims £'000	Future costs of early retirement £'000	Agenda for change £'000	Other provisions £'000	Total provision £'000
Provision at 1 April 2008	2,642	2,134	2,926	857	8,559
Expenditure during the year	(128)	(233)	(1,687)	(161)	(2,209)
Reversal of unused provisions	(499)	-	(895)	-	(1,394)
Additional provisions	67	5	-	1,021	1,093
Provision at 31 March 2009	2,082	1,906	344	1,717	6,049

The provision for legal claims comprises several items, the most significant of which relates to a clinical negligence claim the agency inherited from the Public Health Laboratory Service. The claim has now been re-assessed with the agency being liable for 50% of the settlement. The provision has been revised accordingly. It is anticipated that stage payments will be made over a period of time.

The provision for the future costs of early retirement consists of the element of the cost in respect of employees who took early retirement before 31 March 2009 which, in accordance with the terms of the agency's pension schemes (note 5) fall to the agency. The balance of £1,906,000 (2008: £2,134,000) relates entirely to members of the UKAEA CPS.

The Agenda for Change provision relates to the estimated increase in the non-medical staff costs from 1 October 2004 (1 April 2005 for former staff of the National Radiological Protection Board), the implementation date for the new pay structure for the NHS and related bodies. Actual increases in pay will be based on formal job evaluations which are expected to be completed during the financial year ending 31 March 2010.

Other provisions comprise:

A provision of £1,235,000 (2008: £594,000) for the estimated costs of making good dilapidations on various properties leased by the agency, when these properties are returned to the lessors on the termination of the leases. The sum represents the expected costs of making good on dilapidations.

A provision of £482,000 (2008: £263,000) for the estimated costs of the agency's liabilities for the disposal of radioactive sources falling within the scope of the High Activity Sealed Radioactive Sources and Orphan Sources Regulations 2005. The sum represents the expected costs of disposal.

16. CAPITAL AND RESERVES

	General reserve £'000	Revaluation reserve £'000	Capital grant reserve £'000	Total £'000
Balance at 1 April 2008	146,049	18,179	3,013	167,241
Net operating cost for the year	(172,147)	-	-	(172,147)
Revenue grant in aid credited for year (note 17)	155,911	-	-	155,911
Capital grant in aid credited for year (note 17)	30,800	-	-	30,800
Capital grants received for specific projects	-	-	356	356
Release of capital grant to offset depreciation	-	-	(324)	(324)
Realisation of revaluation reserve (difference between historic cost depreciation and current cost depreciation)	1,264	(1,264)	-	-
Revaluation of tangible fixed assets (note 9)	-	(10,622)	-	(10,622)
Balance at 31 March 2009	161,877	6,293	3,045	171,215

Included within the general reserve are negative balances of £7,013,000 inherited from the agency's predecessor bodies, the National Radiological Protection Board and the Public Health Laboratory Service.

17. GOVERNMENT FINANCING

The following grant in aid has been received during the year:

	2009 £'000	2008 £'000
Department of Health	183,829	163,787
Scottish Government	763	722
National Assembly for Wales	488	420
Consultants' Clinical Excellence Award	1,631	1,492
Total Government grant in aid received	186,711	166,421
Less Government grant in aid in respect of general capital expenditure	(30,800)	(21,038)
Total revenue Government grant in aid received	155,911	145,383

The Health Protection Agency has UK-wide responsibilities. In addition to the formal grant in aid reported above, the agency received income from the Northern Ireland Executive of £783,000 (2008: £714,800) to fund specific work which is included within operating income (note 2). The agency also received other income from UK Government departments for contract and grant work which is also included within note 2.

Result for the year

The net operating cost for the financial year shown in the Operating Cost Statement and the related total revenue Government grant in aid for the financial year may be compared as follows:

	2009 £'000	2008 £'000
Total revenue Government grant in aid received	155,911	145,383
Revenue Government grant in aid received in past years	-	3,868
Revenue Government grant in aid received in past years relating to future years commitments	-	(3,668)
Depreciation on assets funded by capital grant in aid from the Department of Health (note 7)	16,611	14,653
Loss on disposal of assets funded by capital grant in aid from the Department of Health (note 6)	134	63
Total revenue Government grant in aid relating to net operating cost for the financial year	172,656	160,299
Less net operating cost for the financial year	(172,147)	(160,017)
Government grant in aid less net operating cost for the year	509	282

Capital for the year

The capital expenditure for the financial year may be compared with the capital financing for the financial year as follows:

	2009 £'000	2008 £'000
Total capital Government grant in aid relating to the capital expenditure for the financial year	30,800	21,038
Capital grants received for specific projects	356	1,983
Total capital financing for the financial year	31,156	23,021
Less capital expenditure for the financial year	(30,992)	(20,101)
Capital financing less capital expenditure for the year	164	2,920

18. RECONCILIATION OF NET OPERATING COST TO NET CASH OUTFLOW FROM OPERATING ACTIVITIES

	2009 £'000	2008 £'000
Net operating cost for the financial year	(172,147)	(160,017)
Interest received	(285)	(400)
Net operating cost before interest	(172,432)	(160,417)
Adjustments		
Amortisation of intangible fixed assets (note 8)	1,073	257
Depreciation of tangible fixed assets (note 9)	15,862	14,520
Loss on disposal of fixed assets	134	63
Release of capital grant from capital grant reserve (note 16)	(324)	(124)
Net transfer (from)/to provisions (note 15)	(2,510)	1,146
Decrease in stock	57	842
(Increase)/Decrease in debtors and accrued income	(888)	4,583
(Decrease) in creditors*	(2,954)	(3,001)
Net cash (outflow) from operating activities	(161,982)	(142,131)

* The decrease in creditors of £2,954,000 (2008: decrease of £3,001,000) excludes the decrease in capital creditors of £2,388,000 (2008: increase of £822,000). This movement in capital creditors is included in the payments to acquire tangible fixed assets shown in the cashflow statement.

19. RELATED PARTY DISCLOSURES

The agency is sponsored by the Department of Health, which is regarded as a related party. During the year the agency has had various material transactions with the Department of Health itself and with other entities for which the Department of Health is regarded as the parent entity. These include many NHS Primary Care Trusts, Foundation Trusts, the NHS Litigation Authority and many others.

In addition, the Health Protection Agency had transactions with other Government departments and Central Government Bodies. These included the Home Office, the Ministry of Defence, the Food Standards Agency, the Department for Environment, Food and Rural Affairs, the Department for International Development, the Department of Health, Social Services and Public Safety (NI), the National Blood Service, and the Medical Research Council.

During the year no Board members, members of the senior management or other related parties have undertaken any material transactions with the Health Protection Agency except for:

- Professor Pat Troop, who retired from the post of Chief Executive and executive Board member on 6 April 2008, was also a Board member of the London School of Hygiene and Tropical Medicine from which the agency purchased £569,000 (2008: £468,000) and provided £56,000 (2008: £47,000) of goods and services during the year to 31 March 2009.

- Professor Troop is also an Honorary Professor of City University, London. During the year to 31 March 2009, the agency made no payments to the University for the supply of goods and services (2008: £171,000) and the agency provided £4,000 for goods and services (2008: none) from City University, London.

- Dr John Stephenson is a member of the agency's Executive Group, and holds an honorary academic position at the London School of Hygiene and Tropical Medicine, from which the agency purchased £569,000 (2008: £468,000) and provided £56,000 (2008: £47,000) of goods and services during the year to 31 March 2009.

- Professor Stephen Palmer is an employee of the University of Cardiff and acted as a member of the Executive Group for the whole of the year ended 31 March 2009. During 2008/09 the amount due to the Cardiff University for the supply of goods and services totalled £486,000 (2008: £325,000). The amount paid in respect of Professor Palmer's salary and employer on-costs for the year totalled £190,904 (2007/08: £188,000). This total included a clinical excellence award which is funded by the Department of Health

- Dr Barbara Bannister is an employee of the Royal Free Hospital, and a non-executive member of the HPA board. During the year to 31 March 2009, the agency paid a total of £77,000 (2008: £81,000) to the Royal Free Hospital, of which £10,000 (2008: £10,000) related to services provided by Dr Bannister to the agency.

- Dr Vanessa Mayatt is a director of Mayatt Risk Consulting Limited, as well as non-executive member of the HPA Board. During the year to 31 March 2009, the agency paid £28,000 (2008: £5,000) to the Mayatt Risk Consulting Limited for additional services provided by Dr Mayatt to the agency.

- The HPA has a minor shareholding in Syntaxin Limited (see note 10). During the year ended 31 March 2009, Syntaxin Limited was charged £174,000 (2008: £1,075,000) for goods and services received from the agency.

- Professor Andrew Hall holds research grants from The Wellcome Trust, and is a non-executive member of the HPA Board. During the year to 31 March 2009, the agency provided £453,000 (2008: £348,000) of goods and services to The Wellcome Trust.

20. CAPITAL COMMITMENTS

The contracted capital commitments at 31 March 2009 not provided for in the accounts amounted to £14,536,000 (2008: £11,810,000). There were no other financial commitments at 31 March 2009 (2008: None) that require disclosure.

21. COMMITMENTS UNDER OPERATING LEASES

The agency's commitments as at 31 March 2009 to future operating lease payments are given in the table below, analysed according to the period in which the lease expires.

Obligations under operating leases comprise:	2009 £'000	2008 £'000
Land and buildings:		
- Expiring within one year	3,857	3,591
- Expiring between two and five years	719	604
- Expiring after five years	35	121
Other leases:		
- Expiring within one year	1,302	1,480
- Expiring between two and five years	344	409
- Expiring after five years	-	-
Total obligations under operating leases at 31 March	6,257	6,205

22. FINANCIAL INSTRUMENTS

Financial Reporting Standard 26 (Financial Instruments: Recognition and Measurement) and Financial Reporting Standard 29 (Financial Instruments: Disclosures), requires disclosure of the role which financial instruments have had during the year in creating or changing the risks an entity faces in undertaking its activities.

Due to the largely non-trading nature of its activities, and the way in which it is financed, the Health Protection Agency is not exposed to the degree of financial risk faced by other business entities. Moreover, financial instruments play a much more limited role in creating or changing risk than would be typical of UK listed companies. The Health Protection Agency has no authority to borrow or to invest without the prior approval of the Department of Health and the Treasury. Generally, financial assets and liabilities are generated by day-to-day operational activities and are not held to change the agency's risk profile.

a) Liquidity risk

The agency has no borrowings and relies primarily on grant in aid funding from the Department of Health for its own cash requirements. It is therefore not exposed to significant liquidity risks. It also has no material deposits, and all material assets and liabilities are denominated in sterling.

The Office of HM Paymaster General (OPG) is responsible for holding the working balances of Government Departments and other public bodies in high level accounts at the Bank of England. By transacting principally through such accounts, the Health Protection Agency is able to minimise its exposure to the liquidity risk associated with bank failure.

b) Interest rate risk

Interest rate risk arises from the agency's use of interest bearing bank accounts. The agency applies strict banking procedures and cash management procedures to ensure that minimal balances are held. Therefore the agency is not exposed to significant interest rate risk.

c) Foreign currency risk

The Health Protection Agency operates foreign currency bank accounts to handle transactions denominated in Euro (€) and US Dollars ($). This helps to manage potential exposure to exchange rate fluctuations. The fair value of cash is the same as the book value as at the balance sheet date.

During the year to 31 March 2009, the agency received Euro income equivalent to £7,701,000 (2008: £3,103,000) and US Dollar income equivalent to £7,652,000 (2008: £9,926,000), upon which there was some currency risk.

The only other currency risk is that of a Euro currency bank balance, valued at £223,000 on 31 March 2009 (2008: £144,000), and a US Dollar bank balance valued at £250,000 (2008: £81,000). The agency operates Euro and US Dollar bank accounts to handle transactions denominated in those currencies. This helps to manage potential exposure to exchange rate fluctuations.

d) Credit risk

Credit risk refers to the risk that a counterparty will default on its contractual obligations resulting in financial loss to the agency. The agency only deals with credit worthy customers. It also mitigates against financial loss from defaults by obtaining sufficient assurances, by applying robust credit management techniques as part of its routine business, and by concentrating credit risk within UK public sector entities.

The debtor amounts within note 12 represent the agency's maximum exposure to credit risk at the balance sheet date. The Board believes that no further credit provision is required in excess of the allowance for doubtful debts.

e) Summary of financial instruments

A financial instrument is defined as any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity. The financial instruments held by the agency at the balance sheet date were as follows:

Categories of financial instruments	Balance at 31 March 2009	Charged for the year 2009	Balance at 31 March 2008
	£'000	£'000	£'000
Investments	3	-	3
Sub-total: financial assets available for resale	3	-	3
Other debtors, due after 1 year	261	(232)	493
Trade debtors	8,489	(3,132)	11,621
Accrued income	11,252	94	11,158
Other debtors, due within 1 year	8,313	3,187	5,126
Cash and cash equivalents	22,405	(8,010)	30,415
Sub-total: loans and receivables	50,720	(8,093)	58,813
Trade creditors	(14,310)	(2,299)	(12,011)
Overdraft facility	(598)	1,523	(2,121)
Accruals	(19,594)	431	(20,025)
Other creditors, due within 1 year	(3,918)	2,060	(5,978)
Provision: early retirements	(1,906)	228	(2,134)
Provision: agenda for change	(344)	2,582	(2,926)
Provision: dilapidations	(1,235)	(641)	(594)
Sub-total: financial liabilities	(41,905)	3,884	(45,789)
Total financial instruments	8,818	(4,209)	13,027

Amounts due from tax authorities are not treated as financial instruments for the purpose of Financial Reporting Standards 25, 26 and 29 and are, therefore, excluded from this table.

23. CONTINGENT LIABILITIES

As at 31 March 2009, there were a small number of outstanding legal claims made against the Health Protection Agency by patients and others. Standard accounting practice requires that provision only be made in the accounts if it is probable that a claim will be successful, and that a reliable estimate of the claim can be made. The Health Protection Agency's provision for legal claims is disclosed at Note 15.

There were no other contingent liabilities as at 31 March 2009.

24. LOSSES AND SPECIAL PAYMENTS

Losses and special payments requiring disclosure during the year ended 31 March 2009 totalled £290,900 (2008: £336,295).

25. EXCEPTIONAL ITEMS

There are no exceptional items for the year ending 31 March 2009 (2008: None).

26. EVENTS AFTER THE BALANCE SHEET DATE

Following the Department of Health's review of its Arms Length Bodies in 2004, the Secretary of State for Health announced that the HPA should merge with the National Institute of Biological Standards and Controls (NIBSC), subject to consultation and legislation. The Health and Social Care Act 2008 authorised the merger, which took place on 1 April 2009. Total 2009/10 financing for NIBSC is planned to be £34.6m. A detailed breakdown is included in the Financial Review on page 62.

In accordance with the requirements of Financial Reporting Standard 21, Events After The Balance Sheet Date, post balance sheet events are considered up to the date on which the accounts are authorised for issue. This is interpreted as the date of the Certificate and Report of the Comptroller and Auditor General.

There are no other post balance sheet events that would require reporting under Financial Reporting Standard 21.

Five Year Financial Summary

OPERATING COST STATEMENT

	2004/05[1] £'000	2005/06[2] £'000	2006/07 £'000	2007/08 £'000	2008/09 £'000
Staff costs	127,683	136,930	145,672	153,983	166,221
Other operating costs	83,291	90,366	91,543	100,845	107,024
Amortisation and depreciation	9,604	9,780	10,747	14,777	16,935
Gross operating costs	**220,578**	**237,076**	**247,962**	**269,605**	**290,180**
Operating income	(84,475)	(87,483)	(93,887)	(109,188)	(117,748)
Interest receivable	(118)	(241)	(228)	(400)	(285)
Net operating costs	**135,985**	**149,352**	**153,847**	**160,017**	**172,147**

GOVERNMENT FUNDING

	2004/05[1] £'000	2005/06[2] £'000	2006/07 £'000	2007/08 £'000	2008/09 £'000
Total revenue Government grant in aid relating to net operating cost for the financial year	135,092	146,893	156,135	160,299	172,656
Net operating costs	(135,985)	(149,352)	(153,847)	(160,017)	(172,147)
Gross (deficit) or surplus	**(893)**	**(2,459)**	**2,288**	**282**	**509**

BALANCE SHEET

	2004/05[1] £'000	2005/06[2] £'000	2006/07 £'000	2007/08 £'000	2008/09 £'000
Fixed assets					
Intangible fixed assets	1,184	931	700	594	2,058
Tangible fixed assets	130,359	139,305	153,958	167,177	169,014
Investments	-	1	1	3	3
Total fixed assets	**131,543**	**140,237**	**154,659**	**167,774**	**171,075**
Current assets					
Stocks	6,548	4,322	4,261	3,419	3,362
Debtors	34,811	35,514	34,979	30,058	31,178
Cash at bank and in hand	14,219	8,840	22,914	30,415	22,405
Total current assets	**55,578**	**48,676**	**62,154**	**63,892**	**56,945**
Creditors due within one year	(52,897)	(44,642)	(58,538)	(56,359)	(51,017)
Long term debtor	183	229	264	493	261
Provisions	(10,707)	(15,380)	(7,413)	(8,559)	(6,049)
Net assets	**123,700**	**129,120**	**151,126**	**167,241**	**171,215**
Capital and reserves					
Capital grant reserve	-	-	1,154	3,013	3,045
Revaluation reserve	-	3,060	11,614	18,179	6,293
General reserve	123,700	126,060	138,358	146,049	161,877
Total capital and reserves	**123,700**	**129,120**	**151,126**	**167,241**	**171,215**

[1] The Agency merged with the National Radiological Protection Board (NRPB) on 1 April 2005. In accordance with Financial Reporting Standard number 6, the financial information presented for 2004/05 has been restated, as if the NRPB had been part of the Agency throughout that accounting period.

[2] Under the Government Financial Reporting Manual (FReM) for the 2006/07 financial year, non-departmental public bodies should regard Government grants and grant in aid received for revenue purposes as a financing flow and no longer as income. Therefore our accounts include an Operating Cost Statement in place of the Income and Expenditure Account. The prior year comparisons have been restated to reflect the change in accounting and presentation.

Health Protection Agency sites

Region	Sites
South West	14
East of England	10
North West	8
West Midlands	8
London	7
East Midlands	5
Yorkshire & the Humber	5
North East	3
Wales	2
South East	11
Scotland	1
Northern Ireland	1
Total HPA sites	**75**

1 Health Protection Agency central office

2 Centre for Infections

3 Centre for Radiation, Chemical and Environmental Hazards

4 Centre for Emergency Preparedness and Response

5 National Institute for Biological Standards and Control

From 1 April 2009

- Laboratories
- Offices
- Centres

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