

上記の他、既存の管理メカニズムにおいて既に上位優先事項とされている取り組みが下記の通り。

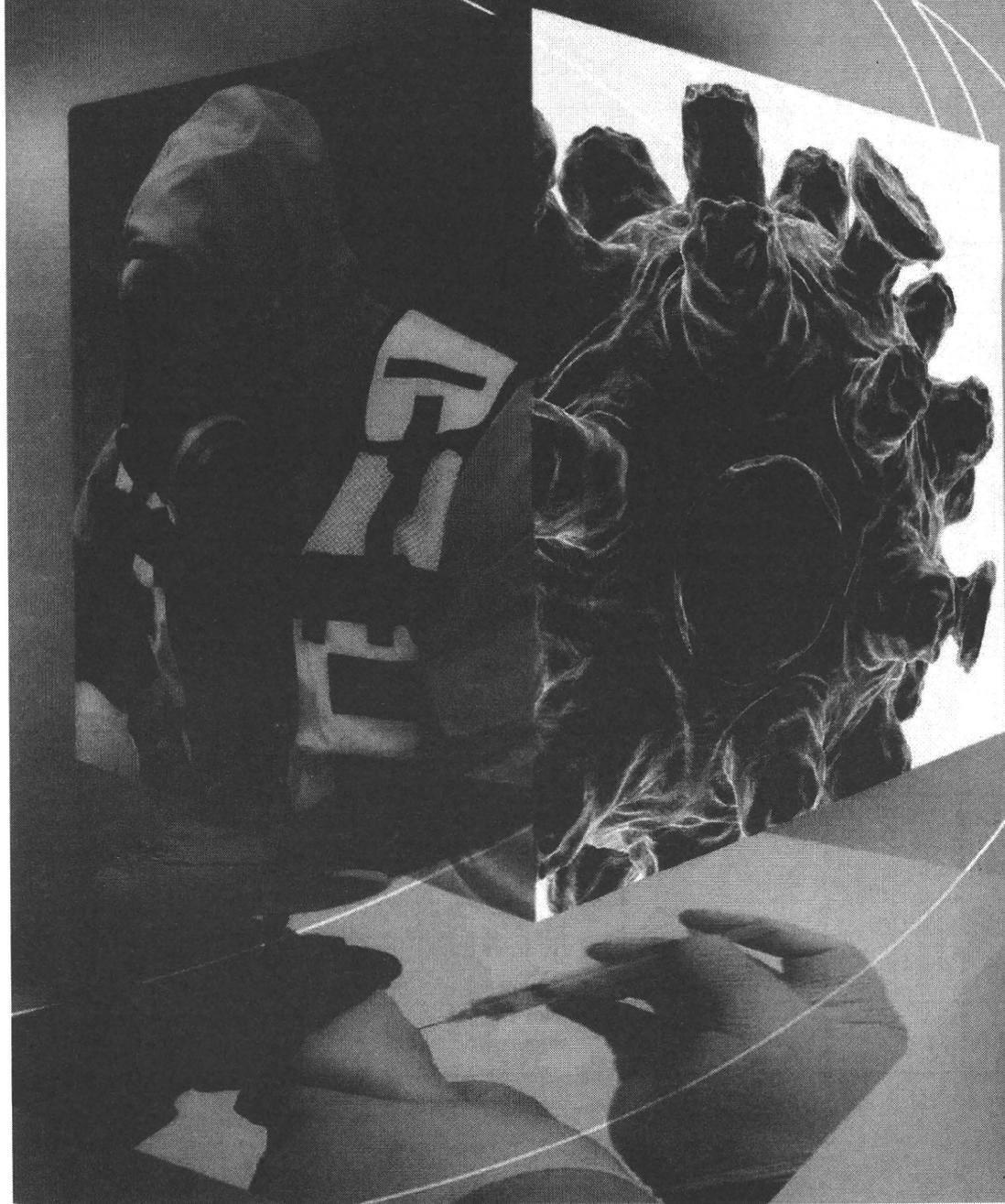
- 健康保護への理解と国民参加意識を高める
- 英国の国際保健目標とグローバルヘルスに寄与する
- 包括的な研究開発プログラムにより導き出された根拠に基づいた開発及び向上
- 新たな根拠に基づいた介入プログラムのために資産を活用する
- 病気の特定及び追跡、並びに感染症、化学物質、放射線障害への暴露に対応するための情報コミュニケーションシステムの強化
- コミュニティの現場での実践的サービスの強化
- 新たな公衆衛生上の脅威に関する研究及び水平走査

6. HPAの特徴

- 感染症、化学物質、放射線健康影響対応部門を一つの組織で担うことにより、協力しやすく、各部門の利点を対応に活かすことが可能
- 相談窓口を24時間オープンしており、また、NHSのホットラインを通じ国民へ情報を提供している。
- 保健医療及び物理の専門家を大学から派遣している(一定規模以上の病院では義務化)



Health Protection Agency 2010 ANNUAL REPORT AND ACCOUNTS



Health Protection Agency Annual Report and Accounts 2010

Presented to Parliament pursuant to
Schedule 1, paragraphs 22 and 24 of
the Health Protection Agency Act 2004

Ordered to be printed by the House of Commons 17 June 2010

© Health Protection Agency 2010

The text of this document (this excludes, where present, the Royal Arms and all departmental and agency logos) may be reproduced free of charge in any format or medium providing that it is reproduced accurately and not in a misleading context.

The material must be acknowledged as Health Protection Agency copyright and the document title specified. Where third party material has been identified, permission from the respective copyright holder must be sought.

ISBN: 9780102965780

Printed in the UK for The Stationery Office Limited on behalf of the Controller of Her Majesty's Stationery Office

ID 2365377 06/10

Printed on paper containing 75% recycled fibre content minimum.

Protecting health, preventing harm, preparing for threats

The Health Protection Agency is an independent UK organisation that was set up by 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.

The cost of health protection to the UK taxpayer has been reduced by the contribution from the £140.4m of sales of health products and services to third parties, by winning research grants and careful budget management.

The HPA is dedicated to working as efficiently as possible and increasing productivity to deliver the maximum possible health outcomes with the resources available.

WHAT DOES THE HPA DO?

The HPA identifies and responds to health hazards and emergencies caused by infectious disease, hazardous chemicals, poisons or radiation. It also ensures the safety and effectiveness of biological medicines such as vaccines and blood products.

It gives advice to the public on how to stay healthy and avoid health hazards, provides data and information to government, 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 HPA 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 HPA's advice, information and services are all 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 HPA is completely independent and has the freedom to provide whatever advice and information is necessary to protect people's health. The agency exists to help protect the health of everyone in the UK. Its ambition is to lead the way by identifying, preparing for and responding to health threats.

WHO DOES THE HPA WORK WITH?

The HPA works with a wide range of people and organisations, including:

- 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.

STAFF AND STRUCTURE

The HPA's expertise is provided by around 4,100 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 the National Institute for Biological Standards and Control. There is also a small central office in London.

The remainder are based locally, working with the NHS to provide health protection expertise for the community, and in a network of microbiological laboratories.

The HPA 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 an Executive Group.

Some significant events from 2009/10



APRIL

The National Institute of Biological Standards and Control (NIBSC) – a world-renowned institute and a world leader in the standardisation and control of biological medicines – merges with the HPA, creating a unique public health body and extending the agency's range of expert services.

The HPA launches a restructured network of food, water and environment laboratories at strategic locations across England, boosting the agency's ability to deal with emerging health threats.

The HPA reports there were 1,370 cases of malaria among UK travellers in 2008. The figures show that UK travellers visiting friends and family abroad, particularly in Nigeria and Ghana, continue to be the group most likely to acquire malaria.

The HPA takes a leading role in England's response to the 'swine flu' pandemic when it hits the UK. Testing of suspected cases is carried out and the agency provides regularly updated, expert advice and guidance to government, medical professionals and the public.



MAY

The HPA produces the first genetic fingerprint of the pandemic flu virus, paving the way for a greater understanding of how the virus affects humans. The HPA shares the first UK isolate of the virus, which is crucial to the development of an effective vaccine, with partner scientific institutes.

The HPA announces there were 813 reported cases of Lyme disease in 2008. The agency reminds people participating in outdoor activities in national parks and other wooded and heathland to be aware of the risk of tick bites.

Latest estimates of the number of people asymptomatic for variant Creutzfeldt-Jakob disease (vCJD) in the population remain very low, according to results from a large-scale study of tonsil tissue by the HPA, published in the *British Medical Journal*.



JUNE

The HPA produces a pandemic flu vaccine candidate. Meanwhile, the WHO raises its influenza alert level to Phase 6.

Following an in-depth review of the scientific evidence, an expert advisory group of the HPA recommends a tightening of safety levels for radon gas in homes and workplaces. Radon is responsible for an estimated 1,000 lung cancer deaths a year.

Poor egg-handling practices in restaurants and takeaways could be putting UK consumers at risk, according to a report from the HPA and the Local Authorities Coordinators of Regulatory Services (LACORS).

The HPA's quarterly figures show there is a 29% decrease in MRSA bloodstream infections and a 36% reduction in cases of *Clostridium difficile*, compared with the same quarter of the previous year.



JULY

The HPA repeats its advice that sunbeds should be off-limits to under-18s and never be used for cosmetic tanning, as the International Agency for Research on Cancer classifies sunbeds as carcinogens.

A study by the HPA and LACORS reveals the presence of salmonella and *Escherichia coli* bacteria in a small number of ready-to-eat shelled nuts. The study shows that 0.1% of samples are unsafe due to the presence of salmonella and 0.8% of samples contain *E. coli*.

The government announces moving to a treatment phase to manage the pandemic flu outbreak. The agency continues to provide scientific advice to government and to use established surveillance systems to monitor the spread of the virus.

The HPA reports an 11% decrease in the total number of new gonorrhoea infections diagnosed in the UK last year from 18,649 infections in 2007 to 16,629 in 2008 – the lowest number recorded since 1999.



AUGUST

The HPA reports a likely reduction in the number of pandemic flu cases, with a decrease in GP consultation rates coinciding with the first full week of operation of the National Pandemic Flu Service.



SEPTEMBER

Air pollution experts at the HPA state that well-run and regulated incinerators do not pose a significant threat to public health.

The HPA launches e-Bug – an education programme and interactive website for schools, developed with the assistance of 18 European countries.

The HPA-commissioned National Poisons Information Service reports an 11% rise in the number of telephone enquiries from health professionals relating to incidents involving children under 10 years.

HPA surveillance of MRSA bloodstream infections and *C. difficile* shows a continued decrease in cases of both, with MRSA cases dropping by 39.3% and *C. difficile* cases dropping by 37%, compared with the same quarter in 2008.

The HPA publishes a report of the investigation into illness affecting 529 diners at the Fat Duck restaurant in Bray, Berkshire in early 2009.

Mercury vapours from a broken energy-saving lightbulb do not pose a significant threat to public health, according to air pollution experts at the HPA.

The HPA investigates outbreaks of *E. coli* at a number of petting farms across the country.



OCTOBER

The HPA joins forces with the UN and World Health Organization to launch a strategy for safer hospitals, at an HPA-hosted event aimed at protecting hospitals from natural disasters.



NOVEMBER

The HPA reminds people to have their fossil fuel and wood-burning appliances checked by an engineer, to reduce the risk of carbon monoxide poisoning over winter.

A third of adults diagnosed with HIV in the UK in 2008 were diagnosed late, according to HPA figures. The HPA launches revised guidelines for assessing the microbiological safety of ready-to-eat foods placed on the market.

The HPA works with Spanish authorities to investigate a number of cases of *E. coli* O157 associated with travellers returning from Benidorm in Spain.



DECEMBER

The HPA publishes an epidemiological commentary on trends of MRSA bloodstream and *C. difficile* infections from July 2007 to September 2009.

The number of people developing tuberculosis continues to increase, according to a report published by the HPA.



JANUARY

The HPA welcomes the addition of a new pneumococcal vaccine to the childhood immunisation programme, which protects against further strains of the disease.

The HPA issues guidance to health professionals and drug users following confirmation of two cases of anthrax infection in injecting drug users in London and the North West.



FEBRUARY

Following the release of a report on the health effects of ultrasound by the Advisory Group on Non-Ionising Radiation (AGNIR), the HPA advises that parents-to-be should not hesitate to continue using ultrasound scans for diagnostic purposes, but to consider the uncertainties when deciding whether to have ultrasound scans that do not have a defined diagnostic benefit and provide only souvenir images or 'real time' scans.



MARCH

Provisional figures published by the HPA show a 5.5% increase in cases of tuberculosis in the UK – the biggest rise in the number of cases since 2005.

Contents

1 | OVERVIEW

- 08 Chairman's foreword
- 09 Chief executive's statement
- 10 Delivering the strategy

2 | OPERATING REVIEW

- 14 Key infections
- 22 Environmental hazards
- 24 Emergencies
- 26 Biological medicines
- 28 Frontline services
- 30 Value for money and productivity
- 31 Pandemic flu
- 32 International health
- 33 Providing microbiology services
- 34 Estates and facilities
- 35 Research and development
- 36 Workforce development
- 38 Financial review

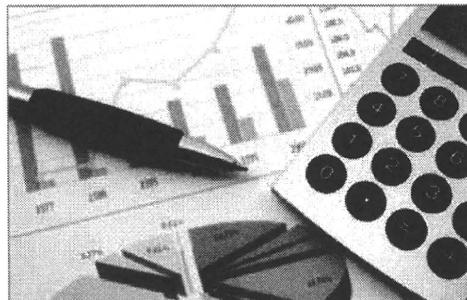
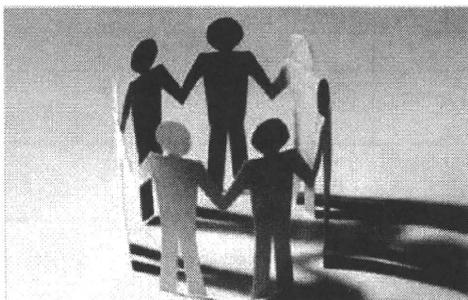


3 | GOVERNANCE

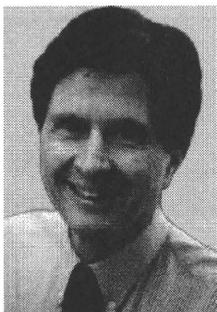
- 44 Governance report
- 52 Statement on internal control
- 56 Remuneration report

4 | ACCOUNTS

- 62 Statement of Accounting Officer's responsibilities
- 63 The Certificate and Report of the Comptroller and Auditor General to the Houses of Parliament
- 65 Operating cost statement
- 66 Statement of financial position
- 67 Statement of changes in taxpayers' equity
- 69 Cash flow statement
- 70 Notes to the financial statements
- 104 Five year financial summary



Picture sources: 123RF, Health Protection Agency, iStockphoto, Photos to GO, Science Photolibrary, Shutterstock
On the cover: Emergency response training exercise (HPA), influenza virus (Shutterstock) and childhood immunisation (iStockphoto)



DR DAVID L HEYMANN
CHAIRMAN

Chairman's foreword

It gives me great pleasure to introduce the Health Protection Agency's seventh annual report and accounts.

Our role is to improve public health protection of the people of the UK. This vital work is achieved by working with a wide range of stakeholders including the Department of Health, other government departments and agencies, the devolved administrations, organisations in the not-for-profit and private sector, and the general public to provide first-class expertise, skills, analysis, information and advice.

This report sets out the highlights from another eventful year for the HPA. Since its creation the agency has repeatedly demonstrated its importance and value to UK and international public health, and 2009 provided more proof, if it were needed, of this.

“ Our integrated structure allowed us to maximise our collective strengths and act in a coordinated manner ”

Swine flu was the most significant test this organisation has faced, but it was passed with flying colours for a number of important reasons, including the commitment and expertise of our staff and our integrated structure, encompassing staff on the frontline and in centres of excellence, which allowed us to maximise our collective strengths and act in a coordinated and rapid manner. I believe our nation's response would have been far less effective if the health protection effort necessary had been delivered by separate organisations.

Also, as a non-departmental public body, our

independence allowed us to deliver advice and information predicated entirely on science.

I would like to express my heartfelt pride and gratitude to all the staff of the agency, at all levels, for their colossal efforts throughout the flu pandemic – and across all the other important work carried out as part of our remit. It has been an honour to be part of such a skilled, effective and dynamic organisation and I feel sure the HPA has the potential for even greater successes in the future.

STRATEGIC IMPROVEMENTS

This is a time of significant strategic and organisational activity for the HPA, as it moves and develops from its formative years to a mature agency that leads the way in health protection.

Last year saw the development and implementation of a five-year vision and corporate values, and the successful integration of the National Institute for Biological Standards and Control.

This year will see the launch and delivery of our new strategic plan, a far-reaching and detailed document that sets out our priorities and programmes for the next five years to turn our vision into a reality.

MEETING FUTURE CHALLENGES

As well as today's infections, environmental hazards and emergencies, the coming years will inevitably bring new threats to the UK that test our health protection ability. Issues such as global warming may have profound and unpredictable consequences and present additional threats to health.

Whatever the future has in store, the HPA has the diverse skills, commitment and enthusiasm necessary to ensure we are prepared and the public has the best possible protection against harm. We stand ready to meet the threats presented by the next decade.



JUSTIN McCracken
CHIEF EXECUTIVE

Chief executive's statement

The HPA has faced many high-profile challenges in its short history, but none have set us centre stage in the public consciousness nor tested us quite as much as the 2009 swine flu pandemic.

Facing a global threat on a scale not seen in over 40 years was a profound examination of our capability and value, made more challenging by the intense media interest and scrutiny at every stage.

“The response of our staff was magnificent”

But unique threats like pandemic flu are the very reason we exist.

The response of our expert staff was nothing short of magnificent. The benefits of years of planning were realised, as the agency led the way in tackling the pandemic – from rapid intervention at a local level by our health protection units to testing, research, surveillance, epidemiology and vaccine development in our centres and laboratory network.

We delivered a constant stream of essential advice and information where and when it was needed, to the public, health professionals, government and colleagues across the globe. We informed decision-making, guided public health actions and influenced behaviour.

We also worked effectively in partnership with NHS organisations and other stakeholders. Our actions were thorough, evidence-based and decisive. This proved invaluable in the efforts to show the spread of the disease and in mitigating its effects.

Pandemic flu was compelling evidence of what the agency does and can achieve – and further

enhanced our UK and global reputation as a leading force in health protection.

Yet, while the flu pandemic dominated the headlines, as you will see from the pages of this report, 2009 was also a year of substantial activity and progress right across the agency's core activities of minimising the health impact from key infections, environmental hazards and emergencies, and ensuring the safety and effectiveness of biological medicines. There are many other stories worth telling.

FINANCIAL SITUATION

The HPA is not immune to the ongoing economic difficulties caused by the global financial crisis that began in 2007.

However, strong financial stewardship over recent years, combined with a healthy operating income to augment our grants from government, means the organisation is comparatively well placed to weather the financial storm.

It is inescapable that the organisation needs to deliver services with maximum efficiency, so that it continues to be more than the sum of its parts and meets the increasing service demands and expectations placed upon it. This is a challenge for all parts of the HPA in 2010 and the years ahead.

LOOKING AHEAD

I would like to take this opportunity to thank all members of staff throughout the agency for their efforts and achievements, and I look forward to working with them in the coming year.

I am confident that with its integrated structure, expertise and experience, the agency will meet any challenges that the next year may bring – and we will continue to excel in our important work of protecting health, preventing harm and preparing for threats.

Delivering the strategy

STAFF AND 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, to 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.

“We work at international, national, regional and local levels to identify threats to health – and to prepare, prevent and respond to them”

The HPA's 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 2009/10, the HPA's services were provided by an average of 4,108 full-time

equivalent staff. They were based in a number of centres (the Centre for Infections in north London, the Centre for Radiation, Chemical and Environmental Hazards in Oxfordshire, the Centre for Emergency Preparedness and Response in Wiltshire and the National Institute for Biological Standards and Control (NIBSC) in Hertfordshire) and throughout the country working at local and regional levels and in a network of microbiology laboratories. There is also a small headquarters in London. A location map of HPA sites is shown on p51.

For more information on the roles and functions of HPA centres and divisions please visit www.hpa.org.uk/annualreport

www.hpa.org.uk



STRATEGIC FOCUS

The HPA makes long-term strategic plans to direct its extensive skills and resources in the most effective way to protect public health against a wide range of threats.

These strategic plans are the basis for individual programmes of work and for the annual business plans that the agency agrees with its sponsor, the Department of Health.

The agency prepares quarterly reports on its achievements against these plans for its internal management, Board, and the Department of Health. Highlights from these achievements are the basis for the operating review pages of this annual report that follow on pages 14-42.

The strategic plan, on which the work of 2009/10 was based, was formulated for the five-year period 2008-2013 and revised to include the work of NIBSC, which joined the agency on 1 April 2009.

The plan emphasised the early recognition and response to all health protection emergencies. It identified priorities for supporting the NHS in reducing the incidence and consequences of

THE HPA'S STRATEGIC PATHWAY

VISION

The Health Protection Agency exists to help protect the health of everyone in the United Kingdom. Our ambition is to lead the way by identifying, preparing for and responding to health threats and setting standards for health protection

HEALTH OUTCOMES

- Reduction of key infections
- Minimise health impact from environmental hazards including radiation, chemicals and poisons
- Reduction in harm arising from incidents and emergencies
- Safe and effective development of biological medicines

KEY HEALTH PROTECTION PROGRAMMES

- | | |
|---|---|
| • Radiation | • Tuberculosis |
| • Chemicals, poisons, and other environmental hazards | • HIV and sexually transmitted diseases |
| • Healthcare-associated infections | • Gastrointestinal diseases |
| • Vaccine preventable diseases | • Health threats and emergencies |
| • Hepatitis B and C | • Pandemic influenza |
| | • Biological standards and controls |

STRATEGIC AIMS

- | | |
|--|--|
| • The primary expert force in delivering health protection | • Forward-looking, managing risks and anticipating future challengers |
| • Recognised internationally as a world-class health protection body | • An employer of choice, with a committed, skilled and motivated staff |
| • Trusted by all in providing public health protection services | • Excellent for advice, advocacy, information management and communication |
| • Leading effective collaborative working with the NHS and others | • One cohesive organisation |
| • Use state-of-the-art facilities to deliver consistent, cutting-edge services | • Respected for excellence in translating results into health improvements |

VALUES

- | | |
|-------------------------------|----------------------|
| • Innovation | • Respect for others |
| • Striving for excellence | • Integrity |
| • Focus on quality of service | |

key infections, and in protecting the population against exposure to radiation and chemical hazards in the environment.

The strategy also covered the agency's contribution to global health protection through agencies such as the World Health Organization and the obligations of the International Health Regulations, as many threats to UK public health have an international dimension.

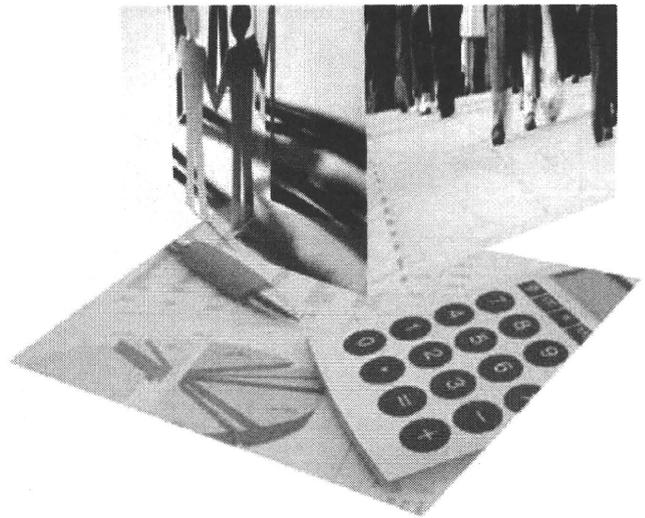
Finally, the 2008-13 plan set out the agency's intentions to enhance its workforce, governance and infrastructure so that it could best deliver its health protection plans.

The business plan for 2009/10 that underlies this annual report formed the second year of delivering the five-year strategic plan 2008-13.

Many key concerns in the 2008-2013 strategy, for health protection against infections and environmental hazards, were overseen by programme boards. There were 11 of these 'key health protection priority' programmes in place during 2009/10 plus 10 'other high-level priority' programmes focused on strengthening the organisation to deliver them.

“We combine public health, scientific and health protection expertise, research and emergency planning within one organisation”

During 2008 and 2009 HPA staff and stakeholders developed the agency's agreed vision and purpose, set out in *Leading the Way in Health Protection* – the next five years. This identified four health outcomes covering the HPA's purpose, and 10 strategic aims for the organisation, matching the programmes covering other high-level priorities.



During 2009/10 the HPA built on the vision document and the work of the programme boards to develop its next strategic plan. The four health outcomes were analysed into more detailed health topics and goals across the wide spectrum of health protection objectives.

In parallel, a zero-based budgeting exercise ensured that all staff and resources were closely associated with achieving the stated aims of the agency.

A further pilot project related the cost of health protection to quantified economic benefits, improving the prioritisation of increasingly scarce public sector resources.

The result has been the development of a strategic overview 2010-2015 and related business plans to cover the year ahead. The overview strengthens the agency's ability to manage future reductions in government funding available for health protection, as already announced by the end of the reporting year 2009/10.

The strategic overview document is available at www.hpa.org.uk/publications

www.hpa.org.uk



The management structure of the agency has been steadily adapted to deliver the agency's strategic plans to meet the needs of the public, our customers and partners.

The relationship of the vision, health outcomes, key health protection programmes, strategic aims and values is shown schematically on p11.

2 Operating review

Reducing key infections

BACKGROUND

Reducing key infections is one of the HPA's key strategic aims. The agency provides specialist and reference microbiological testing and associated technical and medical advice for the NHS, coordinates the provision of national clinical and epidemiological surveillance data, provides infection control advice to many different organisations, undertakes epidemiological analyses following outbreak investigations and disseminates risk assessment information to the public and healthcare professionals. HPA scientists undertake translational research and modelling studies to inform government policy on interventions and provide specific advice to the Department of Health on strategy and policy for the use of antivirals and vaccines.

These activities are underpinned by an expert workforce, specialist laboratories and unique facilities for handling dangerous pathogens, available at HPA centres at Colindale and Porton Down.

Work on specific infections throughout the HPA is coordinated into programmes of activity, as a means of ensuring that objectives at local, regional and national level can be met. Examples of infection programmes dealing with endemic infections include HIV and sexually transmitted infections (STIs), tuberculosis, gastrointestinal infections, healthcare-associated infections (HCAs), vaccine-preventable diseases and hepatitis B and C. These have all been established with the main aim of reducing the incidence and consequences of these diseases and developing the scientific evidence needed to inform and determine priorities for prevention and research. Pandemic influenza is an example of a programme dealing with a newly emerging infection.

HIV AND SEXUALLY TRANSMITTED INFECTIONS

Aims and objectives

To support the government's national strategy for sexual health and HIV, and to reduce the spread of STIs.

Achievements

The HPA:

- Tested 50% of new HIV diagnoses for recent infection using the recent infection testing algorithm (RITA) test.
- Ensured 85% of health protection units followed agreed standards for improving local sexual health commissioning.
- Reported comprehensive chlamydia testing data for the National Chlamydia Screening Programme (NCSP) from multiple sources.
- Improved the quality and coverage of STI surveillance data by transforming data collection from sexual health clinics, to enable analysis by local primary care trust.
- Created an indicator tool on the website for preparing locally relevant sexual health profiles, to strengthen service commissioning.
- Recruited laboratories to enable 5,000 samples a year to be tested to monitor the human papillomavirus (HPV) immunisation programme.
- Improved the diagnosis and treatment of

“ Our activities are underpinned by an expert workforce, specialist laboratories and unique facilities ”



“ We aim to reduce the incidence and consequences of infectious diseases and develop the evidence for action ”

STIs through publication of gonorrhoea laboratory testing guidance and companion standard operating procedures.

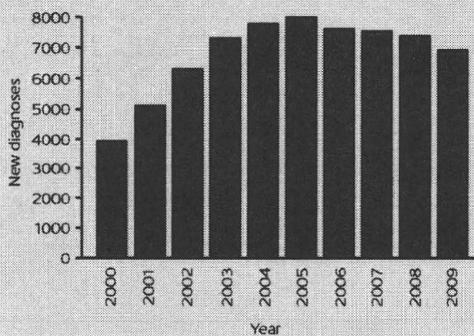
Future plans

The HPA will:

- Work with partners to implement the recommendations of the National Audit Office review of the NCSP.
- Obtain better risk factor information on recent HIV infections by prompt follow-up of those ascertained through RITA testing.
- Complete the formal process to mandate reporting of chlamydia and gonorrhoea test data from all NHS laboratories.
- Report for the HPA efficiency programme on the quality of serological testing for syphilis.
- Establish GUMnet, a network of 29 genitourinary medicine clinics and laboratories, to provide sample-based surveillance of HIV/STIs, as well as sexual behaviour information.
- Produce high-quality and timely outputs on HIV/STI information (quarterly), better tailored to the needs of sexual health commissioners.
- Complete studies on genital warts to inform the choice between bivalent and quadrivalent HPV vaccine.

HIV IN THE UK

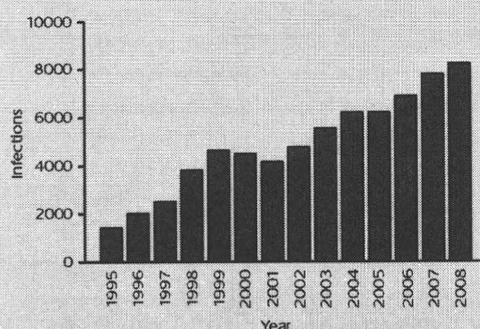
HPA figures show that an estimated total of 6,900 individuals were newly diagnosed with HIV in the UK in 2009, which is a fall of 6.5% on the 2008 figure of 7,382. Of the people newly diagnosed in 2009, an estimated 3,780 (55%) acquired their infection through heterosexual contact and 2,800 (41%) through sex between men.



TRACKING HEPATITIS

Hepatitis B and C are significant causes of long-term ill health. The number of laboratory confirmed cases of hepatitis C infection in England reported to the HPA in 2008 (the most recent year for which figures are available) was 8,196, continuing the steady rise witnessed over recent years.

HEPATITIS C INFECTIONS IN ENGLAND



HEPATITIS B AND C

Aims and objectives

To reduce the incidence and prevalence of hepatitis B and C, increase the proportion of people chronically infected with HCV and HBV whose infections are diagnosed, and improve the management (assessment, referral and treatment) of those with long-term hepatitis infection.

Achievements

The HPA:

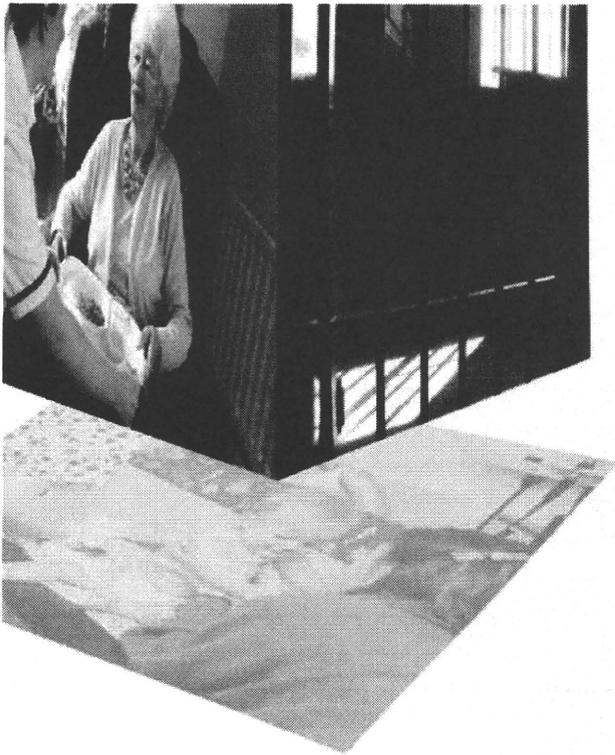
- Produced an annual report for England on hepatitis C virus prevalence and needle sharing in injectors, which laid out several public health recommendations aimed at reducing incidence and prevalence, while improving diagnosis and treatment.
- Obtained data from at least 75% of PCTs on acute hepatitis B incidence, including annual coverage data on hepatitis B in babies.
- Obtained data from prisons, to monitor the uptake of hepatitis B vaccine in prisoners.
- Piloted a method for collecting data on the number of individuals receiving National Institute for Clinical Excellence recommended treatment for hepatitis C in England.

- Published quarterly data on trends in hepatitis C tests in high- and low-risk settings.

Future plans

The HPA will:

- Publish annual data on acute hepatitis B, including risk factors and the most likely route of transmission, to ensure good quality surveillance.
- Provide data on the vaccine coverage of babies born to hepatitis B-positive women and support the development of systems in maternity units and PCTs for following up on babies born to hepatitis B carrier mothers.
- Undertake an anonymous survey using dried blood spot testing, to support the measurement of incidence, prevalence and genotype of hepatitis C virus in intravenous drug users.
- Audit use of new guidelines for the control of hepatitis A to improve implementation.
- Undertake regional audits of diagnostic hepatitis testing and referral of specimens by laboratories in all regions, to ensure that high-quality diagnostic services for hepatitis B and C are universally available.
- Roll out dried blood spot testing, to increase the number of laboratories offering the service.
- Monitor the impact of awareness campaigns, through HPA surveillance data, to increase hepatitis C testing at national, regional and local levels.
- Produce updated overall national prevalence and burden estimates for hepatitis C, and explore the use of serial prevalence data to estimate overall incidence in the general population.
- Provide regular reports to NHS Blood and Transplant and other stakeholders on the infection in blood donors and recipients, to inform blood donor selection and screening policy.



HEALTHCARE-ASSOCIATED INFECTIONS

Aims and objectives

To support the NHS and other key stakeholders in the prevention and control of healthcare-associated infections (HCAIs).

Achievements

The HPA:

- Distributed an HPA DVD, *An introduction to infection control in care homes*, to 30,000 care homes in England.
- Strengthened capacity in epidemiology, to support the NHS in reducing the incidence of HCAIs and antimicrobial resistance by delivering the European Centre for Disease Prevention and Control's prevalence surveillance training programme in healthcare epidemiology.
- Improved antimicrobial resistance surveillance across the agency, to reduce inappropriate use of antimicrobials and reduce the impact of emerging resistance.
- Developed and launched an e-Bug website for schools in collaborating countries, to improve children's knowledge of when to use antibiotics appropriately.

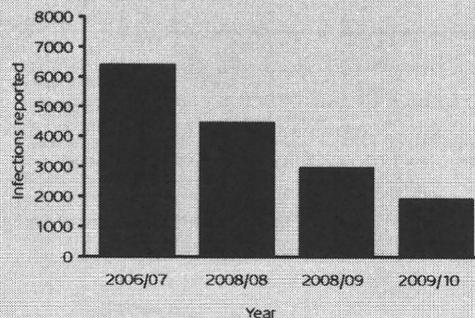
TACKLING MRSA AND CLOSTRIDIUM DIFFICILE

The HPA works to reduce episodes of healthcare-associated infections, such as methicillin-resistant *Staphylococcus aureus* (MRSA) and *Clostridium difficile* by giving proactive advice and support to the NHS in prevention, control and management.

HPA figures on MRSA bloodstream infections show there were 1,898 cases reported in England in 2009/10 (provisional data). This represents a 35% fall on the 2,935 total for 2008/09.

There were 25,604 *C. difficile* infections in patients aged two years and over reported in England in 2009/10 (provisional data), which represents a 29% fall from the 36,095 total for 2008/09

MRSA BLOODSTREAM INFECTIONS IN ENGLAND



Future plans

The HPA will:

- Develop core competencies in healthcare epidemiology and a career path for healthcare epidemiologists.
- Redevelop the data capture system for mandatory surveillance of HCAIs, in response to stakeholder needs.
- Develop standard operating procedures, guidance and supporting documents on the incident management tool HPZone for HCAI-related incidents and outbreaks.

TUBERCULOSIS

Aims and objectives

To support the NHS and the Department of Health in the treatment, prevention and control of tuberculosis, through rapid diagnostic services and strong local surveillance.

Achievements

The HPA:

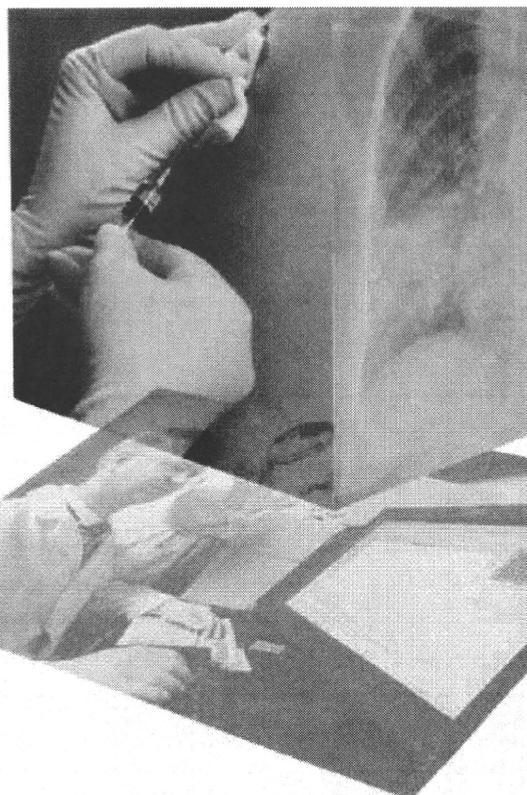
- Carried out audit of tuberculosis reporting in March 2009.
- Made available susceptibility test results (for at least isoniazid and rifampicin) for 4,808 (98.7%) of the culture-confirmed cases in 2008.
- Confirmed 66% of pulmonary tuberculosis cases in 2008.
- Received information on the outcome of treatment at 12 months for 8,080 (96%) of the 8,411 tuberculosis cases reported in 2007.

Future plans

The HPA will:

- Improve response to tuberculosis transmission through the implementation of a strain typing service.
- Improve local response through targeted control, including analysis of previously unrecognised clusters. Targeted surveillance data are to be provided to areas of high incidence for local performance monitoring.
- Improve analysis of drug resistance in England. Implement rapid culture-based second-line/reserve drug analysis and roll out integrated web-based surveillance system for information delivery to HPUs.
- Identify new vaccine candidates for clinical trials.
- Improve methods for detection of mycobacterial infections, with 70% of respiratory infections due to *M. tuberculosis* confirmed by laboratory culture.

“Tuberculosis is a growing and serious problem in the UK”



TUBERCULOSIS: A GROWING THREAT

Tuberculosis is one of the leading causes of death worldwide, and is a growing and serious problem in the UK. The number of new cases has risen steadily over the past two decades and in some areas, such as London, rates of infection are particularly high.

HPA figures show there were 9,153 cases of tuberculosis in the UK in 2009, a rise of 5.5% on the 2008 figure of 8,679. The main burden of this infection is in London with 3,476 cases reported in 2009, accounting for 38% of the UK total.

TUBERCULOSIS IN THE UK

