The role of pest management in protecting public health

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Foreword

Everybody should be entitled to enjoy a healthy and satisfying life in a pleasant, peaceful and pest-free environment. Unfortunately this is not always the case. Indeed for some people, life could not be more different.

It is clear that many of today’s environmental health problems are ones that we have created ourselves and if present and future generations are to enjoy a healthy and satisfying life, we need to identify the broad range of problems which face us and address them before they become unmanageable.

One of these problems is the health impact of urban pests. This is a worldwide problem which can be overcome with effective pest control management techniques and the application of good practice.

The Chartered Institute of Environmental Health (CIEH), a registered charity, is the professional and educational body dedicated to promoting environmental health in England, Wales and Northern Ireland. Its mission is to promote public health policies and interventions to ensure the highest possible standards in the work and training of environmental health practitioners.

As an integral part of its mission, CIEH is an active and prominent campaigner on environmental and public health issues, both in the UK and increasingly in the world at large. Its influence is now being felt in Europe, North America and Asia.

This international outlook is timely because the way the world thinks about health and wellbeing is changing. Governments now recognise that reducing health inequalities needs more prevention than cure. The work of the CIEH in the area of pest management is dedicated to achieve this aim.

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What is environmental health?

The World Health Organization defines health as: “… a state of complete physical, mental and social wellbeing, not merely the absence of disease or infirmity.”

Environmental health is concerned with all aspects of the improvement and safety of our living environment. It involves assessing, correcting and preventing any environmental problems which impact on human health and wellbeing. These problems might be biological, chemical, physical or social.

To resolve these problems, environmental health practitioners work alongside other public health professionals, such as doctors and community nurses. They are key partners in local and national efforts to protect and improve health and the quality of life, reducing health inequalities of individuals and the communities they serve - very much a preventative approach to the causes of disease and ill health.

The environmental health contribution to public health includes:

• Improvement of housing conditions and urban regeneration
• Quality and availability of safe and nutritious food supplies and support for local food production
• Prevention of accidents and injuries in the home and at work
• Occupational health and safety
• Health protection and communicable disease control
• Control of public health vectors and nuisance pest infestations
• Noise Control
• Control of pollution, including nuisances
• Remediation of contaminated land
• Improvement of air quality

While this list of activities and functions is diverse and varied, the common factor is the identification of interventions which will improve human health.
What are the key issues?

We cannot hide from the fact that poor health often results from poor environments and by improving the conditions in which we live and work, we can move forward with our aim of "creating empty hospital beds by better environmental health".

Environmental health practitioners today tackle an increasingly wide range of issues in promoting public health. While many of the issues associated with 19th century environmental health, such as a basic lack of sanitation, unsafe drinking water and heavily polluted atmosphere, have been overcome new challenges lie ahead.

The problem and consequences associated with poor housing and pest control still persist in the 21st century. Poorly constructed and maintained properties can often be infested with rats, mice, flies, fleas, bedbugs and cockroaches, all of which deprive us of the complete physical, mental and social wellbeing for which we strive.

This threat from pest infestations is only likely to accelerate unless we manage the pests which are threatening our public health and recognise the need for better monitoring, in particular at airports and ports to prevent the spread of pest-borne diseases.

Looking at the global picture, we continue to be concerned about the effects of climate change; the movement of goods, animals and people leading to the spread of emerging diseases and increased carbon emissions; and the possibility of a global illness, such as an influenza pandemic.

Climate change will also bring about a change in the pattern and ecology of pests. Most emerging diseases are zoonotic which will increase the need for proper and competent monitoring and management of appropriate programmes.

Environmental health is a subject which knows no social or geographical divides; some of the problems affect both rich and poor in all areas of the country. However, some of the problems are faced only by the most disadvantaged in society living in urban areas or those living in disease endemic countries.
The CIEH is a professional and educational environmental health organisation. It is a registered charity operating under a Royal Charter for the protection of the public. It has over 10,500 members who work not only in the UK but also in other parts of the world.

Its members perform a variety of roles in local authorities, government departments and agencies, the health service, the armed services, academia, not-for-profit organisations, commercial companies and as private consultants.

They work in large, medium and small businesses and are involved in a wide range of jobs such as those that involve regulation in food safety, housing, health and safety, and environmental protection, including pest and vector control.

The CIEH works to promote improvements in environmental and public health policy by campaigning on key issues of concern, raising the status and understanding of environmental health – with national, regional and local government, employers, the media, the public and other stakeholders to ensure that the high professional standards, knowledge and competencies of environmental health practitioners are achieved and maintained.

In England, Wales and Northern Ireland, the CIEH sets standards and accredits courses and qualifications for the education of practitioners. As a regulated awarding body, it is a major provider of accredited vocational qualifications. CIEH also produces leading sector publications and runs a comprehensive programme of educational events.

An important part of its role is to provide information, evidence and policy advice to international, national and regional governments, local authorities, industry and other stakeholders. It has a close working relationship with the World Health Organization.

In this regard in 2008 an Associate Parliamentary Group for Environmental Health, which consists of UK Members of Parliament, was established and met for the first time. The event saw the launch of the WHO publication on the health significance of urban pests.

The CIEH is based in the UK but as one of the founding bodies of environmental health, it is keen to see standards rolled out internationally and to work to help support the environmental health movement in a number of developing countries.
Public health significance of urban pests

Working with the WHO European Centre for Environment and Health, the CIEH suggested and co-funded the development of the World Health Organization’s book Public health significance of urban pests by Xavier Bonnefoy, Helge Kampen and Kevin Sweeney, which was published by the WHO Regional Office for Europe in 2008.

This book, which was the WHO’s book of the month in July 2008, was launched at the inaugural meeting of the Associate Parliamentary Group for Environmental Health in June 2008. It outlines the problems caused by urban pests and draws a number of important conclusions.

The book provides sound evidence that urban areas are being exposed increasingly to pests and through them to pest-related diseases.

The evidence highlights that:

- Public health authorities would benefit from improving their capacity to identify pest-related risks
- A well-trained public health force is needed to protect the public from the threats associated with urban pests
- There is a need for planners to take into account the risks of pest infestation and disease transmission to new developments and that buildings are pest-proofed so that they do not create conditions conducive to pest infestations
- Information should be developed for the public to raise awareness of how to protect themselves through simple sanitary and behavioral measures

Hard copies of the book can be obtained via the WHO website. Alternatively, electronic copies can be downloaded free of charge.

The CIEH has produced a summary of the main points in the WHO book in English, German, French and Russian, as well as Dutch, Spanish, Hungarian, Polish and Italian. These can be downloaded free of charge from www.urbanpestsbook.com.
The National Pest Advisory Panel

In 2001 the CIEH set up its National Pest Advisory Panel (NPAP) to provide specialist advice and solutions on the problems caused by pests. Its members are pest management experts from within the environmental health profession, industry and academia who have been selected for their individual expertise. Its meetings are attended by representatives from government departments and agencies.

The NPAP is one of the CIEH’s most active panels and, to date, has undertaken a number of projects which have been designed not only to raise awareness among environmental health practitioners of the importance of good pest management but also to provide them with the information they need to translate this awareness into successful and effective best practice.

Projects include:

- A survey of how local authorities in England, Wales and Northern Ireland provide pest management services as part of their public health role. This survey, originally carried out in 2003, is currently being updated
- A comprehensive guidance document on best practice in pest management for local authorities.
- The production of the training DVD Pests on the Menu, which is available in 17 languages and is widely used on food hygiene training courses.
- Producing a series of publications to assist pest controllers and buyers of pest control services (see next section)
- A series of annual seminars on mosquito control, health problems caused by rodents, problems caused by ticks and how to carry out environmental assessments with particular reference to rodenticides and secondary poisoning
- Providing speakers on the role of pest management in protecting public health at conferences in the UK, Belgium, France, Germany, Poland, Spain, Italy, Hungary, Sweden, China, Japan, Australia and the USA
NPAP publications

Guidance notes on the management of UK mosquito vectors of disease
A procedures manual for the control of mosquitoes in the event that mosquito borne disease becomes endemic once again in the UK.

Pest control procedures in the food industry
A comprehensive set of procedures for pest management in the food industry.

Pest minimisation – Best practice in the construction industry
Guidance notes for those involved in the construction industry, with particular reference to the holding of the 2012 Olympic Games in London.

Pest control procedures manual – Rodents
A set of procedures for those involved in the public service control of rodents.

Pest minimisation – Best practice in the hospitality industry
Guidance notes for those involved in the hospitality industry, with particular reference to the holding of the 2012 Olympic Games in London.

All of the above can be downloaded free of charge from: www.cieh.org/policy/npap_publications.html