

Infectious diseases and the future: policies for Europe

A short summary of the EASAC report, *European Public Health and Innovation Policy for Infectious Disease: The View from EASAC*

The 20th century saw many social, scientific and medical developments that greatly reduced the impact of infectious disease. It began to seem that public health measures, vaccination and antibiotics would soon render most infections a distant memory. But despite many successes, communicable illness still accounts for some 10% of Europe's burden of disease. The advent of new infectious micro-organisms, the resurgence of old infections, increased migration and travel, and the emergence of antibiotic resistance have frustrated further improvement.

The economic impact of infection is considerable. The price of treating infectious disease is much greater than that of preventing it.

Why EASAC got involved

Infectious disease cannot be tackled solely at a local or national level. So when EASAC was founded to provide science advice to European Union (EU) policy makers, infectious disease was on the agenda. Drawing on evidence from a range of scientific disciplines, and from previous studies, the latest EASAC report on infectious diseases identifies several key priorities for the EU.

Knowing the facts

The collection of data about infectious disease remains the bedrock on which health services and policy are founded. EASAC has previously stressed the need to improve disease surveillance systems,

and make them sufficiently flexible to detect novel threats.

Working productively on a European scale requires the standardisation of methods and effective networking among a chain of reference laboratories across the EU and beyond. Reliable and comprehensive databases play a role in the care of patients, in research, in predicting the likely scale of future resistance to drugs, and in much else.

When people move, their diseases move with them. The EU generates more than 19% of the world's international traffic. And just as microbes do not recognise frontiers, neither do they always distinguish between humans and animals. Zoonoses are infections that can pass between the two; when they do so, their antibiotic resistance goes with them. Success in dealing with such problems will be boosted if the public and veterinary health communities work more closely together.

Strengthening science

EASAC sees one of its roles as identifying areas of research where there are opportunities to generate new knowledge. Relevant policies include the following:

- the support of basic research into new molecular targets for attacking microbes and developing vaccines;
- the integration of human and veterinary research;

- research into human behaviour on topics such as the rationality of antibiotic prescribing;
- a greater emphasis on clinical and translational research to bring new findings from the laboratory to the bedside;
- the training of more researchers in basic and clinical microbiology;
- the development of new forms of research infrastructure, and of stronger links between universities and hospital microbiology services.

Creating health and wealth

To survive growing international competition, the European pharmaceutical industry needs more support in the form of policies to encourage innovation. EASAC also has a 'shopping list' of goals it would like industry to pursue. These include

the development of new, cheap, rapid and reliable methods to diagnose common infections. EASAC believes that small and medium-sized enterprises have much to offer in these endeavours.

The EU's role

Public health is a relatively recent policy area for the EU. As part of its effort to bring greater coherence to health policy across Europe, the European Commission's strategy for 2008–2013 identifies communicable disease as a priority. EASAC supports this focus. It believes that the EU should always take account of health impacts when developing policies on other issues.

Health is a vital interest of the peoples of Europe. The tasks are urgent.

The full report is available from the EASAC website: www.easac.eu.

About EASAC

EASAC – the European Academies Science Advisory Council – is formed by the national science academies of the EU Member States to enable them to collaborate with each other in providing advice to European policy-makers. It thus provides a means for the collective voice of European science to be heard.

Through EASAC, the academies work together to provide independent, expert, evidence-based advice about the scientific aspects of public policy to those who make or influence policy within the European institutions. Drawing on the memberships and networks of the academies, EASAC accesses the best of European science in carrying out its work. Its views are vigorously independent of commercial or political bias, and it is open and transparent in its processes. EASAC aims to deliver advice that is comprehensible, relevant and timely.

For more information about EASAC and for copies of all our previous publications, please visit our website www.easac.eu.

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