

TACKLING ANTIBIOTIC RESISTANCE

In today's world, drug resistant infections travel and spread as quickly as planes do. Therefore it is in the UK's interest to tackle AMR and to help other countries to do the same. Priority actions including investing in Universal Health Coverage and resilient health systems in developing countries, tackling counterfeit drugs and also antibiotic use within animal health and agricultural. This is an issue the UK has an opportunity to be a global leader on, to foster the critical international partnerships between governments, the private sector and civil society that will be necessary to solve the AMR crisis long-term.

480,000

Globally, 480,000 people develop multi-drug resistant TB each year, and drug resistance is starting to complicate the fight against HIV and malaria, as well.
(WHO)



25,000

It is estimated that more than 25,000 patients die annually in the EU due to multidrug-resistance (MDR in bacterial infections, ECDC/EMEA Joint Working Group, 2009. *The bacterial challenge: time to react*)

In 2015 the WHO Director General characterised the global challenge of antimicrobial resistance (AMR), which includes antibiotic resistance, as: 'threatening the very core of medicine and the sustainability of an effective global public health response to the enduring threat of infectious diseases'. The World Bank estimates that if AMR remains unchecked, global domestic product per annum will be decreased by up to 3.8 per cent by 2050.

A global approach to a global problem - with the UK taking a leading role

- Addressing the urgent problem of AMR requires an integrated, global approach that recognises the different priorities of developing and developed countries.
- Developing new drugs, diagnostics or monitoring and restricting drug use alone will not be enough to tackle the problem. Investing in Universal Health Coverage and resilient health systems around the world is also essential to ensure that people have access to effective treatment of common infectious diseases, as is the need to simultaneously address counterfeit drugs and antibiotic use within animal health and the agricultural industry.
- The UK has an opportunity to be a global leader on this issue and build on the work being led by Professor Dame Sally Davies and the Department of Health, to foster the critical international partnerships between governments, the private sector and civil society that will be necessary to solve the crisis long-term.
- Countries with larger national incomes and higher levels of economic and social organisation have a stake in the success of measures by relatively low-income countries to reduce the risk infectious diseases and increase access to effective treatment.

What is Antimicrobial Resistance (AMR)?

Antimicrobial resistance occurs when microorganisms that cause illness such as viruses, bacteria or parasites mutate after contact with antimicrobial drugs, which include antibiotics, antifungals and antimalarials in to so-called 'super bugs'. It leads to drugs we have relied on for decades being rendered ineffective and risks infections spreading within the body and infectious diseases spreading to other people.

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Universal Health Coverage

- More focus is needed on solving basic health problems through investment in universal health coverage. The overuse of antibiotics may not be a priority for developing countries where their populations are still dying from diseases that are easily treatable.
- The risk of emergence and subsequent transmission of AMR genes can be reduced by immunising the population against common infectious diseases; reducing exposure to infections through contaminated water and food and reducing susceptibility to infections by improving nutrition.

“Invest UKaid in building resilient health systems in developing countries in order to make progress towards both Universal Health Coverage and addressing AMR.”

Recommendations for UK policy makers

- Invest UKaid in building resilient health systems in developing countries in order to make progress towards both Universal Health Coverage and addressing AMR.
- To protect UK citizens, the UK government should take the lead in forging international partnerships between government, scientists and pharmaceutical companies, which will be needed in the future to agree the controlled and appropriate use of antibiotics.
- Take a coherent, cross-government approach that includes Department of Health, Department for International Development and the Foreign and Commonwealth Office to tackle AMR.
- Take a One Health approach to AMR. This means recognising that human, animal and environmental health are inter-related and so a multi-sectoral, interdisciplinary approach to prevention and mitigation of health crises is required. Monitoring and restricting antibiotic use in animals in agriculture, as well as in the treatment of people, is essential.
- There are no blueprints for implementing the significant and complex changes at the scale that is required to tackle AMR globally. It is therefore important to take an approach of continual feedback and learning along the way to establish best practice.
- Measures to address AMR will need to be built on the foundation of strong regional and global agreements on actions that address the concerns of all countries and all social groups.
- National action plans need to take into account regional and global interdependencies. Dense transportation links, the movement of large quantities of goods and people, the behaviour of international pharmaceutical companies and international media influence national systems.

Further reading

Bloom G, Buckland Merrett G, Wilkinson A, Lin V, Paulin S (2017) *Antimicrobial Resistance and Universal Health Coverage*, BMJ Global Health

Davies S, (2013), *The Drugs Don't Work: A Global Threat*, London, Penguin

Antimicrobial Resistance in the Asia Pacific Region : A Development Agenda, Manila, Philippines. World Health Organisation Regional Office for the Western Pacific; 2017.

Buckland Merrett, G., Bloom G., Wilkinson A. and MacGregor H. (2016) 'Towards the Just and Sustainable Use of Antibiotics', *Journal of Pharmaceutical Policy and Practice*

Credits

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