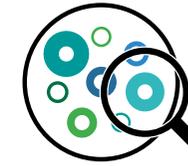


AMR

WHAT YOU NEED TO KNOW ABOUT ANTIMICROBIAL RESISTANCE (AMR)



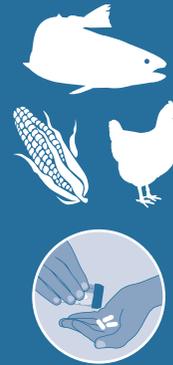
The
**Fleming
Fund**



➤ The facts about AMR

Antimicrobial resistance (AMR) occurs when microorganisms such as bacteria, viruses, fungi and parasites change in ways that make treatments ineffective. AMR is a major concern because drug-resistant infections can kill, spread to others, and impose huge costs on individuals and society.

[MORE INFORMATION PAGE 2](#)



➤ How AMR spreads

Antimicrobial drugs are often used unnecessarily, which increases the risk that microorganisms can become resistant, survive and multiply. A number of factors can increase the spread of these resistant microorganisms. These factors often work together to become 'drivers of AMR'.

[MORE INFORMATION PAGE 3](#)



➤ Responding to AMR

Tackling AMR requires a One Health approach – that is, the collaboration of multiple disciplines working locally, nationally and globally to achieve the optimal health of people, animals and the environment. This vision is being articulated in a series of action plans.

[MORE INFORMATION PAGE 4](#)



➤ Fleming Fund response

In 2015, the UK Department of Health launched the Fleming Fund – a One Health initiative to support the AMR response in low and middle-income countries (LMICs). The Fund is working collaboratively with relevant United Nations agencies and other development partners.

[MORE INFORMATION PAGE 5](#)

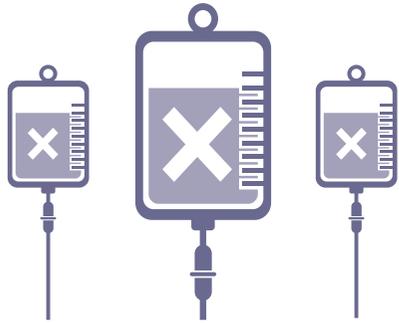
For more information about Antimicrobial Resistance (AMR) visit www.flemingfund.org

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700 THOUSAND PEOPLE



➤ Why AMR is a threat

Almost 700,000 people worldwide die annually from drug-resistant infections. Without effective antimicrobial treatments, infections that have been treatable for decades could, once again, cause widespread death and suffering.

100 TRILLION US DOLLARS



➤ The economic costs

It is estimated that the economic cost of AMR through lost global production will be US\$100 trillion between now and 2050. Direct and indirect impacts will disproportionately affect low and middle-income countries.

10 MILLION PEOPLE



➤ The global impact

The global impact of AMR could be 10 million deaths annually by 2050. The World Health Organization warns that AMR is happening now and 'has the potential to affect anyone, of any age, in any country'.

10 POINT PLAN



➤ The O'Neill report

The 2016 O'Neill report described a definitive 10-point plan for tackling the global challenge of AMR. This evidence-based plan outlined the action needed on surveillance, rapid diagnostics, drugs and vaccines, and a Global Innovation Fund.

CLICK RESOURCES

- [O'Neill report: Final report and recommendations](#)
- [WHO: Factsheet on antimicrobial resistance](#)

CLICK RESOURCES

- [World Bank discussion paper on drug-resistant infections](#)
- [O'Neill report: Final report and recommendations](#)

CLICK RESOURCES

- [WHO global report on AMR surveillance](#)

CLICK RESOURCES

- [O'Neill report: Final report and recommendations](#)

➤ How AMR spreads

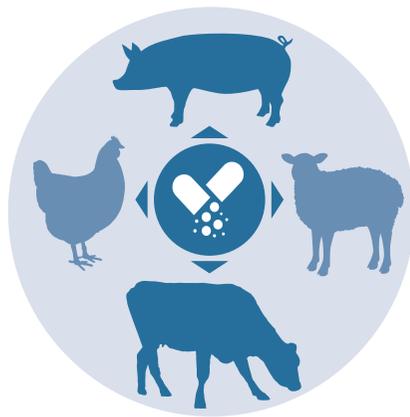
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➤ Human drivers

Humans contribute to the spread of AMR through inappropriate and unregulated use of antimicrobial drugs, along with poor infection prevention and control. Increased global travel and trade also contributes to the spread of AMR.



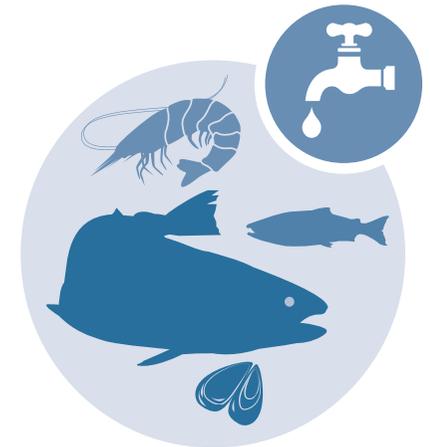
➤ Animal drivers

Antimicrobial drugs are used in animal husbandry and veterinary medicine for disease prevention and treatment, and growth promotion. Resistant microorganisms spread through the food chain, direct contact, poor hygiene measures and unregulated slaughter practices.



➤ Crop production

Antimicrobials, such as antifungals, are used to increase the productivity of crops, including vegetables, fruit and cut-flowers. Drug-resistant microorganisms can spread through the food chain and through poorly controlled farming, processing and distribution practices.



➤ Environmental drivers

Water systems can spread resistant microorganisms and their genes. Poorly controlled farming and aquaculture activities, as well as poor sewage and waste management practices, can lead to the spread of AMR.

CLICK RESOURCES

- [WHO: Factsheet on antimicrobial resistance](#)

CLICK RESOURCES

- [OIE Strategy on Antimicrobial Resistance](#)

CLICK RESOURCES

- [FAO: AMR in food and agriculture](#)
- [FAO: Action Plan on AMR 2016-2020](#)

CLICK RESOURCES

- [FAO: Drivers, dynamics and epidemiology of AMR](#)

➤ Responding to AMR



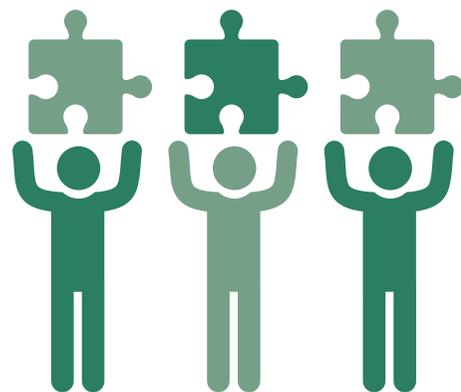
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➤ For more information about AMR visit www.flemingfund.org



➤ Global Response

In 2015, the World Health Assembly endorsed The Global Action Plan on antimicrobial resistance. AMR surveillance is a cornerstone of the plan and is supported by the Global Antimicrobial Resistance Surveillance System (GLASS).



➤ Tripartite Collaboration

The Food and Agriculture Organization, the World Organisation for Animal Health and the World Health Organization have formed a Tripartite Collaboration on AMR. This collaboration is providing leadership for global action on AMR within a One Health framework.



➤ National Action Plans

Countries are urged to develop national AMR action plans linked to the five strategic objectives in the Global Action Plan. These cover: improved awareness; surveillance; infection prevention; optimal use of antimicrobials; and sustainable investments in the AMR response.



➤ One Health Action

Implementation of Global and National Action Plans requires a One Health approach, working across human, animal and environmental health for evidence-based responses.

CLICK RESOURCES

- [WHO: Global Action Plan](#)
- [WHO: GLASS](#)

CLICK RESOURCES

- [Joint WHO/FAO/OIE Flyer on AMR](#)

CLICK RESOURCES

- [FAO/OIE/WHO manual on developing AMR national action plans](#)

CLICK RESOURCES

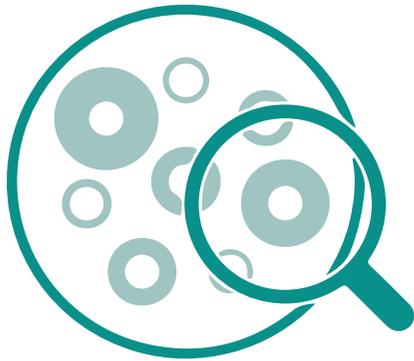
- [OIE infographic – role of awareness raising, capacity building, good governance, standards](#)

➤ The Fleming Fund response



In 2015, the UK Department of Health launched the Fleming Fund – a One Health initiative to support low and middle-income countries (LMICs) in addressing AMR. The Fund is working collaboratively with relevant United Nations agencies and other development partners.

➤ For more information about AMR visit www.flemingfund.org



➤ The Fleming Fund

Using a One Health approach, the Fleming Fund aims to improve laboratory capacity and strengthen AMR surveillance and data use in LMICs. Expected outcomes include: improved AMR knowledge; early detection of threats; and optimised use of antimicrobial drugs.



➤ Fleming Fund Grants

The Fleming Fund Grants Programme is a central pillar of the Fleming Fund. It provides Country Grants, Regional Grants and Fellowship awards to advance Fleming Fund objectives. Mott MacDonald is the Management Agent for the Grants Programme.



➤ Investment Areas

The five investment areas for Fleming Fund grants and awards are: strengthening laboratory infrastructure; capacity building; strengthening surveillance systems; improving AMR data use; and promoting rational use of antimicrobial medicines.



➤ Scope and Principles

Fleming Fund support covers 24 eligible UK Official Development Assistance (ODA) countries in Sub-Saharan Africa, and South and South East Asia through Country and Regional Grants. Grants will follow the Fleming Fund principles of One Health, country ownership, alignment and sustainability.

CLICK RESOURCES

➤ For more information go to: www.flemingfund.org/grantsprogramme

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➤ The facts about AMR

HELPFUL RESOURCES

- Statistics sourced from the O'Neill report: O'Neill, J. (2016). Tackling Drug-Resistant Infections Globally: Final Report and Recommendations. The review on antimicrobial resistance. London: HM Government and the Wellcome Trust. Available at: https://amr-review.org/sites/default/files/160525_Final%20paper_with%20cover.pdf
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➤ How AMR spreads

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➤ Responding to AMR

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➤ The Fleming Fund

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