

## The world together solving the antibiotic emergency

### Comment from Sir Mark Walport, Foreign Secretary and Vice-President of the Royal Society

On 16 May 2024, the Royal Society was pleased to partner with His Majesty's Government, at the request of Dame Sally Davies FRS, UK Special Envoy on Antimicrobial Resistance (AMR), to host the event 'The world together solving the antibiotic emergency.' This was an opportunity to convene key stakeholders involved in the fight against AMR ahead of the 2024 UN General Assembly High-level Meeting on AMR taking place in September 2024. The event served to foster important discussions and establish a unified approach among participants to address this critical One Health<sup>1</sup> challenge.

AMR is a significant and escalating threat to global health and economic stability. Resistance undermines the effectiveness of treatments, leading to prolonged illnesses, higher mortality rates and increased healthcare costs. This crisis is exacerbated by the misuse of antibiotics and a challenging pipeline for new drug development. In 2019, AMR was linked to nearly 5 million deaths, making it one of the world's biggest killers<sup>2</sup>. The World Bank estimates that by 2050, AMR could reduce global GDP by 3.8% annually and push 28 million people into poverty<sup>3</sup>. While low- and middle-income countries (LMICs) are particularly vulnerable, the impact is worldwide, necessitating coordinated international efforts to enhance surveillance, promote responsible antibiotic use and invest in new treatments.

The event featured an internationally diverse range of speakers and attendees from over 30 countries, including many from the global south. Amongst the participants were the Prince of Wales and the UK Chancellor of the Exchequer, as well as health ministers from around the globe. International organisations including the World Health Organization, the World Organisation for Animal Health and the World Bank were also in attendance. Speakers emphasised the importance of adopting a One Health approach and implementing comprehensive, long-term strategies at local, regional and global levels, highlighting the necessity for investment to effectively implement these measures. Success stories, such as the UK's reduction in antibiotics usage in the livestock industry and Bangladesh's regulatory efforts requiring antibiotic prescriptions, demonstrated tangible progress. The event also featured impactful moments, including insights from the WHO's Task Force of AMR survivors – firsthand accounts shedding light on the challenges of drug-resistant infections. Charities like Stop TB and WaterAid highlighted the collective strength of civil society in driving action and a panel discussion with young AMR advocates illustrated the need for engaging future generations in decision-making processes.

The event was marked by some major commitments. The UK Government pledged up to £85 million to combat AMR, including £50 million to partner with countries in Africa on improving access to essential antimicrobial drugs. This package also includes up to £10 million to help establish a global independent scientific panel for AMR, with Saudi Arabia offering to match this pledge. The pharmaceutical company GSK also announced £45 million in support of the Fleming Initiative, which aims to create a comprehensive and interdisciplinary global network to advance new interventions against AMR.

The Royal Society views these commitments as positive and believes they should continue and accelerate. We recognise some of the key science issues still to be tackled include:

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<sup>1</sup> One Health can be defined as "an integrated, unifying approach that aims to sustainably balance and optimise the health of people, animals and ecosystems". World Health Organization. One Health. [https://www.who.int/health-topics/one-health#tab=tab\\_1](https://www.who.int/health-topics/one-health#tab=tab_1). (accessed 22 May 2024).

<sup>2</sup> World Health Organization. Antimicrobial Resistance. <https://www.who.int/news-room/fact-sheets/detail/antimicrobial-resistance#:~:text=It%20is%20estimated%20that%20bacterial,development%20of%20drug%20resistant%20pathogens>. (accessed 20 May 2024).

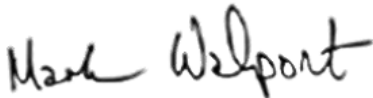
<sup>3</sup> Rupasinghe, N., C. Machalaba, T. Muthee, and A. Mazimba. Stopping the Grand Pandemic: A Framework for Action. Addressing Antimicrobial Resistance through World Bank Operations. Washington, DC: World Bank; 2024. License: CC BY 3.0 IGO.

- The pipeline of novel antibiotics. The lack of new antibiotics poses a severe threat, particularly to LMICs with high AMR burdens and limited access to effective treatments. This could be addressed through consideration of renewed and sustained efforts to coordinate global action to create innovative incentives to promote the development of antibiotic and other antimicrobial approaches.
- A robust international science advice mechanism. The creation – first proposed during the 2016 High-Level Meeting on AMR – of an international body tasked with defining targets and driving collective action on AMR may be beneficial. Such an international and independent scientific panel should reflect the unique attributes of AMR and needs to mesh with national and international policy mechanisms to drive impacts.

As the Second High-Level Meeting on AMR approaches, the discussions and commitments made during this event provide a valuable foundation for even more ambitious action. The UN meeting presents a crucial opportunity to foster dialogue between scientists and policymakers and establish more effective governance structures within a unified One Health approach.

The Royal Society wishes to thank everyone who attended this event and whose presence and contributions made it an outstanding success.

Yours sincerely,



Sir Mark Walport  
Foreign Secretary and Vice-President, Royal Society