



Our position on Antimicrobial Resistance

What is the issue?

The World Health Organization recognises antimicrobial resistance (AMR) as one of the top ten threats to global public health.ⁱ Antimicrobials are a cornerstone of modern medicine. They prevent and treat common infections, and they can enable more complex medical procedures, like surgery, childbirth and cancer treatment, by reducing the risks associated with inadequately treated infections. Rising resistance to antimicrobials threatens to undermine modern medicine as we know it.

AMR already causes over 1 million deaths each year. Without urgent action, by 2050 almost 40 million lives will have been lost and life expectancy globally could be reduced by nearly 2 years.^{ii, iii} AMR places a particular burden on lower income countries, increasing health inequity. It also imposes a significant financial burden on health systems and governments. Direct health care costs associated with AMR are currently estimated to be \$66 billion per year, with potential to rise to \$159 billion per year by 2050.^{iv}

AMR is accelerated by factors such as overuse and misuse of antibiotics in humans and animals; poor infection control practices; and antibiotics in the environment (e.g. in wastewater).^v Climate change is also having an impact as warmer temperatures and climate shocks can change infectious disease patterns and contribute to resistant infections.^{vi}

Although the threat of AMR is serious and urgent, there are very few new antibiotics in development. This is due to three main factors:

1. The limited economic attractiveness of investing in antibiotic R&D, due to new antimicrobials often being held back as a last resort, delaying and limiting the return for the developer
2. The unique scientific challenges associated with discovering new antibiotics
3. The complexity of antibiotic development and running antibiotic clinical trials

What is GSK's view?

- **The global community is at a critical point in the fight against AMR.** Some national governments have taken steps to trial new economic incentives – e.g. a subscription model in the UK – and initiatives such as the AMR Industry Alliance have kept the issue high up the political agenda. Greater political will to address AMR is essential to translate attention into action. Governments should work together, alongside NGOs, industry and academia, to implement the political declaration on AMR, agreed on at the UN High-Level Meeting in 2024.
- **Getting ahead of AMR and infectious disease will strengthen both health and economic resilience.** Failing to tackle rising resistance will put lives at risk; place health systems under stress; and depress economies. Industry, governments and other stakeholders have an opportunity to stave off this threat by investing in measures to prevent and mitigate AMR and bolster health systems' resilience to infectious disease risks.
- **A suite of complementary tools is needed to counter AMR.** Effective antibiotics are crucial to tackling AMR. Innovative economic tools are needed to stimulate development of new antibiotics and ensure appropriate access to them. Preventive interventions also have an important role to play. This includes investing in improved sanitation and accessible rapid diagnostics, addressing the climate and nature crises that can contribute to resistance, and importantly, increasing the coverage

of current vaccines and introducing new vaccines to prevent infections that drive AMR. Coordinated, transparent surveillance data collection and sharing can also help by informing better interventions.

- **Vaccines are an important pathway towards preventing resistance** as vaccines can help prevent infections occurring in the first place, as well as transmission of bacteria that are already resistant (or becoming resistant) to current therapies. Existing vaccines have already been shown to help combat AMR and future innovation in vaccinology could enable us to protect against other priority AMR threats with vaccines.^{vii} Despite their potential, vaccines are still underused and undervalued as a tool against AMR.
- **In lower income countries, a lack of reliable access to appropriate, high-quality antibiotics can lead to the misuse of antibiotics** as patients and HCPs turn to the antibiotics they have available, which may not be the most appropriate antibiotic. Robust surveillance, including access to rapid diagnostics, can help by improving demand forecasting and driving better prescribing practices. Introducing pooled procurement mechanisms can also help by building resilience into supply chains, encouraging a diverse supplier base and guaranteeing responsible manufacturing practices. Stronger regulatory and stewardship frameworks help to ensure the antibiotics being distributed are high quality and appropriately used.

How can we get ahead of AMR together?

Industry, governments, and other stakeholders have a collective opportunity to get ahead of AMR together. Key areas where GSK is taking action to counter AMR include:

- **We're building on our 70-year legacy of innovating in infectious disease, turning science and technology into medicines and vaccines to get ahead of AMR.** Our pipeline is one of the largest and most diverse in the industry, with over 30 projects that could help address AMR, 12 of which target pathogens identified as 'critical' or 'urgent' by WHO and US CDC. With our portfolio of vaccines and medicines, we have the opportunity to make a significant and positive impact on patients' lives, preventing and treating resistant bugs or reducing the likelihood of recurring infection.
- **We're supporting sustainable, equitable access to antibiotics and vaccines around the world,** including in lower income countries through partnerships with GARDP and Gavi. We pledged €4.5 million to GARDP to support a policy ecosystem that delivers high-quality, affordable antibiotics that are suitable for diverse settings with high AMR burdens and limited resources. Of the more than 2.5 billion people GSK will reach this decade, a significant majority will be through our vaccines and medicines for infectious diseases.
- **We run surveillance and education initiatives to help ensure antibiotics are used appropriately.** Since 2002, our Survey of Antibiotic Resistance (SOAR) has shared data on the susceptibility of pathogens to antibiotics in countries where resistance data is scarce, supporting data-driven interventions.
- The release of antibiotics into the environment during manufacturing can drive resistance. **We're independently verifying that all our antibiotic manufacturing sites meet global standards for minimised risk of AMR by 2026.** Our Worthing site is the first in the UK to achieve the BSI Certification.

- **We're investing in science and policy partnerships** to accelerate progress against AMR. We pledged £45 million to the Fleming Initiative, becoming its first Centenary Partner. In early 2025, we kicked off our work, focussing on a number of Grand Challenges that cover science, policy and public engagement. We have partnered with organisations like US BARDA and CARB-X to accelerate our pipeline, and we are a founding investor in the AMR Action Fund to help progress innovation externally.
- **We're a founding member of the AMR Industry Alliance**, working across sectors to advocate for new economic models to stimulate investment in a pipeline capable of keeping up with the pace of resistance.
- **We've partnered with Amref Health Africa to support the implementation of AMR National Action Plans in Africa**, focussing on regional coordination, resourcing and technical strengthening.

Governments have an opportunity to put concrete commitments behind long-discussed reforms by developing, funding and implementing multi-sectoral National Action Plans for AMR that build political will and include clear timelines and accountabilities to:

- **Establish market-based solutions that appropriately incentivise a full spectrum of interventions to combat infectious disease, including vaccines.** This should include flexible economic incentives and reimbursement approaches, as well as tailored valuations for assessing the full value of antibiotics and vaccines.
- **Promote effective stewardship of existing and new antibiotics in humans, animals and agriculture, to protect the environment and public health, through responsible and appropriate manufacturing and use.** Strengthened global manufacturing standards for antimicrobials are key because high-quality antibiotics can reduce the likelihood of resistance^{viii} and responsible manufacturing can limit the emergence of resistance. Transparent and coherent methods for collecting and sharing data can strengthen global surveillance efforts.
- **Enable appropriate access to a suite of interventions to combat infectious disease.** Stronger infrastructures are needed to support routine immunisation programmes and appropriate access to antibiotics, along with reduced regulatory barriers for antibiotics and vaccines that address unmet needs.

ⁱ [Antimicrobial resistance \(who.int\)](https://www.who.int/antimicrobials)

ⁱⁱ Naghavi Mo et al. Global burden of bacterial antimicrobial resistance 1990–2021: a systematic analysis with forecasts to 2050, *The Lancet* 2024; 404: 1199 - 1226

ⁱⁱⁱ Global Leaders Group on Antimicrobial Resistance (2024), Report: Towards specific commitments and action in the response to antimicrobial resistance. Available at: <https://www.amrleaders.org/resources/m/item/qlg-report>

^{iv} McDonnell A, et al – Forecasting the Fallout from AMR: Economic Impacts of Antimicrobial Resistance in Humans – A report from the EcoAMR series: World Organisation for Animal Health and World Bank, 2024, <https://doi.org/10.20506/ecoAMR.3539>

^v WHO. Antimicrobial Resistance. Available at: [Antimicrobial resistance \(who.int\)](https://www.who.int/antimicrobials)

^{vi} https://wedocs.unep.org/bitstream/handle/20.500.11822/38373/antimicrobial_R.pdf

^{vii} [Fighting antimicrobial resistance with vaccines \(nature.com\)](https://www.nature.com/news/antimicrobial-resistance)

^{viii} [falsified-and-substandard-healthcare-products.pdf \(gsk.com\)](https://www.gsk.com/~/media/documents/default/source/2024/02/antimicrobial-resistance-falsified-and-substandard-healthcare-products.pdf)