

UNICEF UK BRIEFING - AMR is a crisis for children

Antimicrobial resistance (AMR) is a deeply complex cross-sector challenge. Resistant infections caused by AMR directly threaten the lives of people of all ages and in all regions of the world, putting our stretched health systems under additional pressure. As a result, AMR is estimated to cost the global economy billions of dollars yearly.¹ These impacts are only set to increase as resistant infections continue to grow and spread.

The global community is coming together to address this shared challenge, working collectively to tackle AMR and manage it into the future. Disproportionate impacts on low- and middle-income countries (LMICs), fragile and conflict-affected settings, and marginalised populations are increasingly understood, and global responses have begun to focus support on communities most affected.

However, the specific position of children remains underrepresented in the global AMR response. It is vital that AMR is recognised as a crisis for children, their needs and rights more strongly integrated into AMR forums and strategies.

As a leading voice on this issue, the UK has a major role to play in championing a child-sensitive AMR response, both through delivery of the UK National Action Plan, and contributions to the global response, including follow-up action from the 2024 High-Level Meeting on AMR.

What is Antimicrobial Resistance?

Antimicrobial drugs – including antibiotics, antivirals, antifungals, and antiparasitics – are critical tools for treating infectious diseases in humans, animals, and plants. These products have been transformative, saving millions of lives globally while also underpinning our food supply and safeguarding livelihoods.

Antimicrobial resistance (AMR) occurs when microbes – including bacteria, viruses, fungi, and parasites – adapt over time and are no longer killed by antimicrobial drugs. As a result, many medicines are becoming less effective, leading to drug-resistant infections that are much harder, and sometimes impossible, to treat. Without effective antimicrobials, common illness and injuries that were previously treatable can become life-threatening, and routine medical procedures like surgery, childbirth, and chemotherapy become more dangerous due to the risk of catching infections that are drug-resistant.

Microbes can become resistant to antimicrobials naturally when they multiply. This process is sped up when microbes are exposed to antimicrobial products, putting them under pressure to adapt. Use of medicines by people and animals increases this exposure, as well as contamination of the environment. Good stewardship of medicines is key to lowering the chances of resistance emerging, but we know that globally antimicrobials are often not used appropriately. This includes overuse of medicines, use of medicines when they are not needed, and use of poor-quality products. At the same time, too many people still lack access to antimicrobials when they need them, allowing diseases to spread unchecked.

Antibiotic-resistant infections have caused at least one million deaths each year since 1990 and are expected to cause 39 million more by 2050.² Urgent action is needed to reverse this trend. This must include development of new antimicrobials, as well as improving accessibility, quality, and stewardship of medicines to ensure they are available when needed and stay effective for longer.

Drug-resistant infections can spread globally, meaning emergence of AMR in one place can have repercussions around the world. Due to the risk posed to global health security, shared global governance structures have been established to collectively address AMR. These are led and coordinated by the Quadripartite Joint Secretariat, a partnership between the Food and Agriculture Organization of the UN (FAO), the UN Environment Programme (UNEP), the World Health Organization (WHO) and the World Organisation for Animal Health (WOAH). To contribute to this important work, every country is expected to have an AMR National Action Plan (NAP) that is regularly updated, setting out their own commitments to supporting global efforts on AMR.

Why is AMR a crisis for children?

- **Children face a heavy burden from AMR** – In 2019, 1.27 million deaths were directly attributable to bacterial resistant-infections, of which 23% occurred in children.³ Of these, 95% were children under 5, and 52% were babies under 28 days old.
- **The most vulnerable children are hit the hardest** – LMICs account for 99% of bacterial AMR deaths,⁴ the great majority in Sub-Saharan Africa and South Asia. As a result, children in Sub-Saharan Africa are 58 times more likely than those in high-income countries (HICs) to die of a drug-resistant infection.
- **Resistance compromises safe childbirth and treatment of common childhood diseases** – Despite a 51% drop in the global under-5 mortality rate since the year 2000,⁵ infections remain a leading cause of death among children under five⁶ and mothers following childbirth,⁷ particularly those with poor access to health services. Loss of efficacy of key antimicrobials due to resistance will compound with access issues, making infectious disease an even more acute threat for children and mothers around the world. This will put hard won health gains made over recent decades at risk.
- **AMR impedes critical child development** – AMR damages multiple aspects of child development beyond health, as well as progress towards 8 out of 17 Sustainable Development Goals (SDGs). For example, resistance compromises children’s education when protracted infections limit school attendance, threatens food security when livestock and crop diseases develop resistance to treatment, and puts children at risk of poverty where family income is jeopardised by poor health or loss of parents.
- **AMR undermines children’s right to the best health care possible** – Enshrined by the UN Convention on the Rights of the Child (UNCRC, article 24), a child’s right to good health is compromised by resistant infections weakening critical health tools and systems needed to keep children safe. In the short term this includes antimicrobial treatments for infectious childhood illnesses. In the long term it also includes loss of other critical medical procedures many children need, like surgery and chemotherapy.
- **AMR is an intergenerational issue children will inherit** – Resistance is a natural phenomenon linked to routine use of antimicrobials. It cannot be stopped, only mitigated. Children will inherit the AMR governance systems created today, as well as the challenges left unresolved. Children are intrinsically linked to the AMR crisis as the custodians of tomorrow.

A child-sensitive approach to AMR

To adequately address the crisis of AMR for children, a child-sensitive approach is needed. Activities targeted at children are already being implemented, but more can be done to ensure that global, national, and local AMR responses as a whole are child-sensitive. Not only will this improve outcomes for children, but also support a more comprehensive and effective AMR response that benefits everyone and supports global health security worldwide.

A child-sensitive approach to AMR should:

- **Recognise children as an important group in AMR dynamics** – Common childhood illnesses are caused by a variety of bacteria, viruses, and parasites, making children key carriers for infections and a major user group of antimicrobials.⁸ Children must therefore be seen as an important and distinct group to fully understand the dynamics of AMR, and to identify the most effective mitigation options.
- **Include tailored solutions for children** – Children face additional exposure to infections due to their anatomy, immature immune systems and behaviours like crawling and play.⁹ Children living in poverty face even greater risk,¹⁰ and too many children still suffer because they cannot access the medicines they need. In addition, childhood illnesses can be challenging to diagnose due to the range of diseases and symptoms seen, and antimicrobials must be prescribed differently for children of different ages. Therefore, to be effective and appropriately protect children, AMR responses must include solutions targeted to their specific needs and situations.
- **Prioritise specific child-focused interventions in areas of need**, including:
 - Strengthen surveillance mechanisms to better capture data on burden of resistant infections in children and pediatric use of antimicrobials.
 - Embed preventative measures more strongly into AMR responses, particularly those important for children such as immunisation, strengthening primary healthcare and improving sanitation.
 - Optimise antimicrobial access and stewardship for childhood infections, ensuring healthcare workers have the training and tools needed to diagnose infections, guidance on prescribing for children, and access to appropriate treatments for children, babies, and pregnant women.
 - Prioritise clinical trials for new antimicrobials that provide data on safety, efficacy and appropriate dosage for children, babies, and pregnant women.
 - Bolster child-focused AMR awareness and public health campaigns.

What is UNICEF doing to address AMR?

UNICEF works in over 190 countries and territories to save children's lives, to defend their rights, and to help them fulfil their potential, from early childhood through to adolescence. Addressing AMR is therefore part of UNICEF's mandate as drug-resistant infections put the health, survival, and livelihoods of children around the world at risk.

UNICEF's response to the growing threat of AMR is centered on both AMR-specific and AMR-sensitive actions in three priority areas:

1. **Reducing the incidence of infection** by improving access to health and infection prevention services, strengthening health, community, and supply systems, and generating new evidence to improve interventions.
2. **Ensuring access to and optimal use of antimicrobial agents** by promoting antimicrobial stewardship, engaging with industry to strengthen the global AMR response, and supporting advocacy initiatives around access to medicines and diagnostics.
3. **Improving awareness and understanding of AMR** by raising awareness of AMR's impact on children, deploying social and behavioral change interventions, promoting AMR education initiatives among children and young people, and empowering community organisations to educate communities and prevent the emergence and spread of AMR.

The UN General Assembly Political Declaration of the 2024 High level Meeting on AMR¹¹ invites the Quadripartite to cooperate and exchange with UNICEF as part of an effective, coordinated, and inclusive multisectoral approach to AMR.

What can the UK government do to support a child-sensitive AMR response?

1. **Commit to representing children as a distinct and important group in delivery of the refreshed UK AMR National Action Plan**, both through nationally focused and diplomatic activity, particularly:
 - Include tailored solutions for children that recognise their specific needs and situations.
 - Support AMR research focused on children, babies, and pregnant women, using evidence to develop interventions and products that better address their needs.
 - Prioritise health system strengthening and equitable access to existing and new antimicrobial medicines, vaccines and diagnostics for children, babies, and pregnant women, in the UK and globally. This should include funding existing major programmes that deliver on these priorities at scale, including Gavi, the Vaccine Alliance.

2. **Champion children in implementation of global commitments made at the 2024 High-Level Meeting on AMR**, including:
 - Call for the Quadripartite to ensure the commitment to facilitate greater cooperation and exchange with UNICEF in the global AMR response is rapidly operationalised, developing clear mechanisms that allow UNICEF to work alongside the Quadripartite and other organisations to enable a child-sensitive response to AMR.
 - Call for the Quadripartite to set out plans for establishing the independent panel for evidence for action against antimicrobial resistance by the end of 2025, ensuring scope of work prioritises children, babies, and pregnant women as distinct groups who would benefit from targeted research.
 - Call for inclusion of children as a distinct group in global frameworks and guidance for addressing AMR, particularly in the refresh of the Global Action Plan planned by 2026.

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