

Summary of The Antimicrobial Resistance Research Landscape and Emerging Solutions

While antimicrobial resistance (AMR) is often discussed as a future crisis the reality is that AMR is already a major global health challenge. We explore the AMR research landscape between 2000 and 2021 to assess the state of the research and development pipeline and identify avenues to improve the global response to AMR.

We find that:

- **The amount of AMR research, in terms of publications, is increasing**, and the proportion of AMR-specific research to overall research on microbes has increased as well.
- **The United States is a world leader in AMR research, with the most publications and cross-country collaborations**, and as a result the U.S. has the opportunity to shape the AMR research landscape going forward.
- **Research on novel solutions like phages and synthetic antimicrobial development is a small but growing percentage of AMR research**—presenting an opportunity for research funding.
- **Half of all AMR-related research focuses on WHO priority pathogens**, a sign that AMR-related research is taking the most dangerous pathogens seriously.

Recommendations:

The U.S. government can play a role in addressing the global AMR health problems by:

- **Passing legislation** to address the lack of market incentives for antimicrobial drug development, improving antimicrobial stewardship, and surveillance for new resistant pathogens.
- **Increasing funding** for AMR research, particularly focused on emerging technology.
- **Cooperating internationally** to improve AMR monitoring, as resistance developed anywhere could cross borders and become a global problem, threatening the United States.

For more information:

- Download the report:
<https://cset.georgetown.edu/publication/the-antimicrobial-resistance-research-landscape>
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