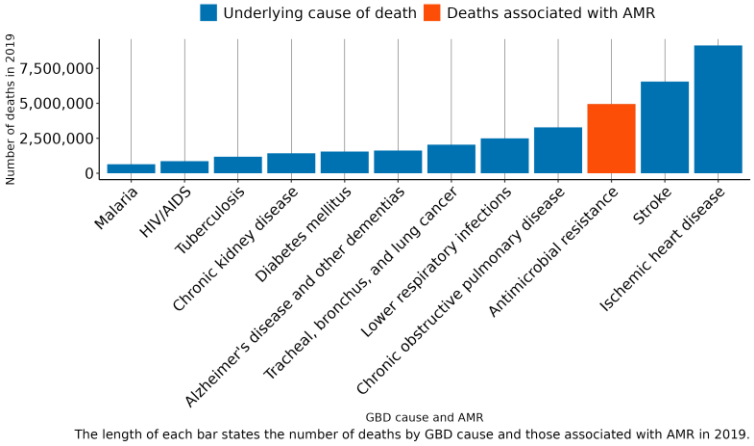
The burden of antimicrobial resistance (AMR) in Nauru

AMR represents a global challenge

- **4.95 million** people who died in 2019 suffered from drug-resistant infections.
- AMR directly caused **1.27 million** of those deaths.
- **1 in 5** of those deaths occurred among children under 5 years old.

Figure 1 Global number of deaths by GBD cause and those associated with AMR



The length of each bar states the number of deaths by GBD cause and those associated with AMR in 2019.

AMR burden in Nauru

- In **Nauru** in 2019, there were **1** deaths attributable to AMR and **5** deaths associated with AMR.
- **Nauru has the 54th highest** age-standardized mortality rate per 100,000 population associated with AMR across 204 countries.

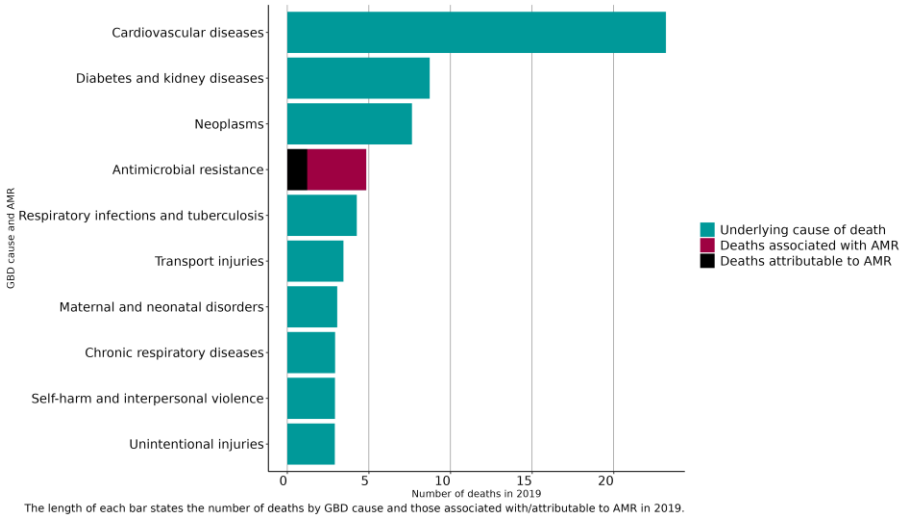
Figure 2. Age-standardized mortality rate associated with AMR in 2019 for 204 locations

The length of each bar states the age-standardized mortality rate per 100,000 population associated with AMR in 2019.

- In the GBD region of **Oceania**, **Nauru has the 6th highest** age-standardized mortality across **18** countries.

- The number of AMR deaths in **Nauru** is higher than deaths from **respiratory infections and tuberculosis, transport injuries, maternal and neonatal disorders, chronic respiratory diseases, and self-harm and interpersonal violence**.

Figure 3. Placing AMR in context with other causes of death in 2019, Nauru



- There are five pathogens to be aware of in **Nauru** (number of deaths associated with AMR in parentheses): ***Streptococcus pneumoniae (1), Acinetobacter baumannii (1), Staphylococcus aureus (1), Escherichia coli (1)*, and *Klebsiella pneumoniae (1)***.
- These commonly caused **lower respiratory infections and all related infections in the thorax, bloodstream infections, peritoneal and intra-abdominal infections, and bloodstream infections**.
- According to the Tracking AMR Country Self-Assessment Survey (TrACSS)1], **"there is no National AMR action plan"** in **Nauru**. The next step is that the plan should be **"developed"** in the short term, and this data should be used to ensure this progression.

1 World Health Organization (WHO). TrACSS 2021-2022 [Internet]. [cited 2023 Feb 16]. Available from: https://amrcountryprogress.org/download/AMR-self-assessment-survey-responses-2020-2021.xlsx

Addendum: A summary of data sources for Nauru

In total, 471 million individual records or isolates covering 7,585 study-location-years were used as input data to our estimation process to develop the most comprehensive set of AMR estimates to date. There was no input data accessible that could be used to inform these country estimates. Estimates were informed by results from the Global Burden of Disease study and data from the surrounding region. Any datasets that could be used to improve these estimates in the future are welcome. Going forward, new strategies for data preparation, implementation of more usable data, and inclusion of new systematic literature reviews will result in an enhanced overall analysis. Specific policies that will improve AMR surveillance and link outcomes with resistance data will help us improve this research endeavor. If we expand the quantity and quality of data in this country (but also worldwide), we are confident that future iterations of these estimates (but also those of other research groups) will be able to assess the effect of AMR even more precisely and help tailor optimal approaches to ever-increasing threat of antibiotic resistance.

More information

About GRAM:

The purpose of the Global Research on AntiMicrobial resistance (GRAM) project is to **generate accurate and timely estimates of the magnitude and trends in antimicrobial resistance (AMR) burden** across the world, which can be used to inform treatment guidelines and agendas for decision-making and research, detect emerging problems and monitor trends to inform global strategies, as well as facilitate the assessment of interventions over time.

GRAM is the flagship project of the University of Oxford–IHME Strategic Partnership. GRAM was launched with support from the United Kingdom Department of Health and Social Care's Fleming Fund, the Wellcome Trust, and the Bill & Melinda Gates Foundation.

All resources:

For all resources on AMR analysis at IHME, visit https://www.healthdata.org/antimicrobial-resistance.

Further details are available on our FAQ page

Data sources:

To download the list of data input sources by country, and AMR results by region, visit the Global Health Data Exchange (GHDx).

Contact us:

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- For media-related inquiries: media@healthdata.org
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