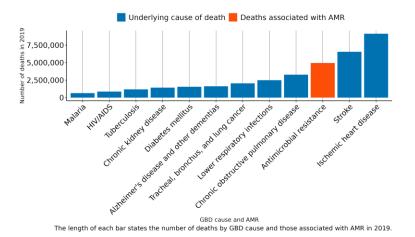


The burden of antimicrobial resistance (AMR) in American Samoa

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.

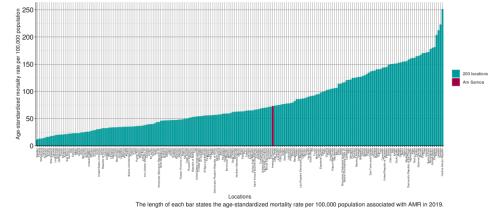
Figure 1 Global number of deaths by GBD cause and those associated with AMR



AMR burden in American Samoa

- In American Samoa in 2019, there were 8 deaths attributable to AMR and 31 deaths associated with AMR.
- American Samoa has the 86th 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

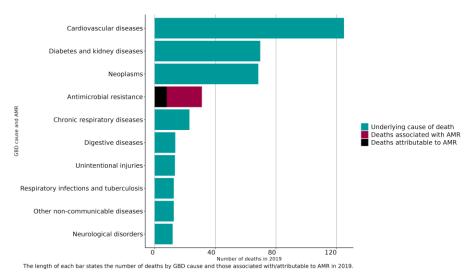


In the GBD region of **Oceania**, **American Samoa has the 5th lowest** agestandardized mortality across **18** countries. •



The number of AMR deaths in American Samoa is higher than deaths from chronic respiratory diseases, digestive diseases, unintentional injuries, respiratory infections and tuberculosis, and other non-communicable diseases.

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



- There are five pathogens to be aware of in American Samoa (number of deaths associated with AMR in parentheses): *Escherichia coli (5), Staphylococcus aureus (4), Streptococcus pneumoniae (4), Klebsiella pneumoniae (4), and Acinetobacter baumannii (4).*
- These commonly caused **peritoneal and intra-abdominal infections, urinary** tract infections and pyelonephritis, lower respiratory infections and all related infections in the thorax, bloodstream infections, and lower respiratory infections and all related infections in the thorax.
- According to the Tracking AMR Country Self-Assessment Survey (TrACSS)1, "there is no information on a National AMR action plan" in American Samoa. The next step is that the plan should be "developed" in the short term, and this data should be used to ensure this progression.



Addendum: A summary of data sources for American Samoa

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 <u>https://www.healthdata.org/antimicrobial-resistance</u>.

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 <u>Global Health Data Exchange (GHDx)</u>.

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