Keeping AMR top of the 2025 agenda

The AMR Global Health Academy Newsletter

January 2025

Happy New Year! Welcome back to the AMR Global Health Academy Newsletter, January edition. Due to popular demand, we have decided to shift this newsletter to a monthly cycle.

The AMR Global Health Academy serves the global health professional and antimicrobial steward in low- and middle-income countries with a free online educational curriculum designed to advance AMR knowledge and best practices. Every month we share important updates from the AMR field, especially as it relates to AMR testing, diagnostics, and surveillance.

News Story

The rise of antimicrobial resistance in Ukraine

As a follow-up from our quarter 3 (September/October) AMR newsletter (***Lessons from the field - The impact of war on antimicrobial resistance)***, the BBC recently published an **article** highlighting a sharp increase in drug-resistant infections in war clinics in Ukraine. A key challenge highlighted in the article is that injured soldiers evacuated for medical reasons often pass through multiple health care facilities. Unfortunately, each facility may be challenged by their own strains of antimicrobial resistance. Together, these increase the spread of AMR infections and potentially a wide variety of strains as well.

Multi-resistant bacteria must be treated with special antibiotics. BBC (2025 January 21). War clinics in Ukraine witness sharp rise in drug-resistant infections. https://www.bbc.com/news/articles/c20k5wrgz13o

Article Spotlight

Key improvements necessary to improve AMR detection across laboratory networks in sub-Saharan Africa

The *Lancet Microbe* recently published an **article** from colleagues that assessed the laboratory networks in 14 countries in sub-Saharan Africa as part of the Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP). Out of over 50,000 listed laboratories, only 1% could deliver bacterial testing. Of responding laboratories in seven countries, antimicrobial susceptibility testing (AST) could be provided to less than 50% of the general population. A lack of ISO accreditation (23%) and use of electronic laboratory information systems (13%) were

clear deficiencies.

A number of clear steps were suggested, including:

- Development of AMR action plans
- Increase access to diagnosis and care
- Promote quality AMR surveillance
- Decentralize antimicrobial susceptibility testing
- Designate AMR sentinel sites
- Implement whole-of-network laboratory information and quality management systems

The AMR Global Health Academy will soon be launching the most recent Global Health Continuing Professional Development (GHCPD) AMR course - *Building Capacity for Antimicrobial Resistance (AMR) in Low- and Middle-Income Countries*. The course discusses MAAP and shows the learner how to contribute to stronger surveillance systems. The course will be made available in English, French, Portuguese, and Spanish. Stay tuned!

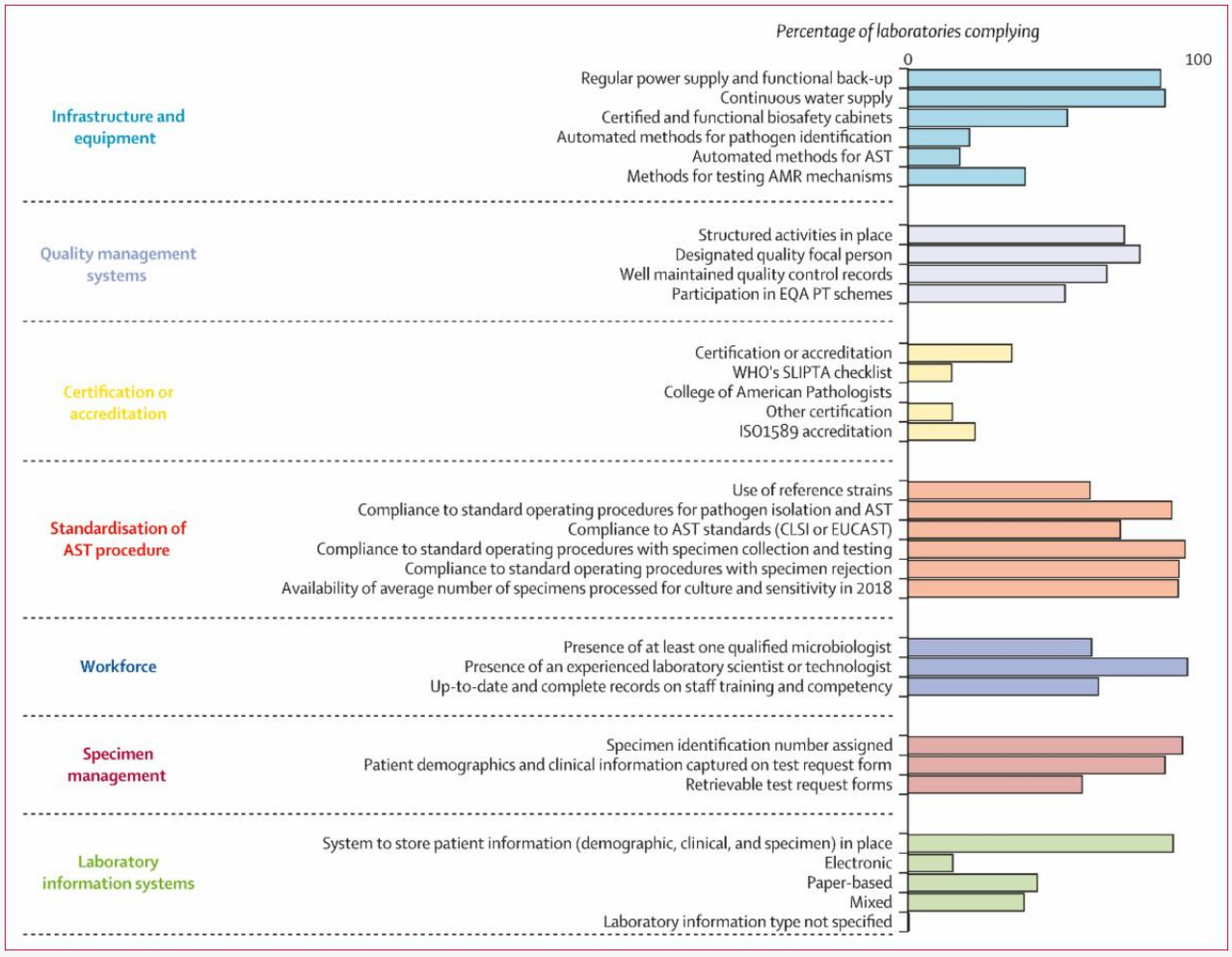

Figure 2 Participating laboratories complying with various basic system requirements for bacterial testing and AMR detection. Bacteriology testing and antimicrobial resistance detection capacity of national tiered laboratory networks in sub-Saharan Africa: an analysis from 14 countries. Ondoa, Pascale et al. The Lancet Microbe, Volume 6, Issue 1, 100976

Oyster proteins help fight AMR

A protein in the blood of the Sydney rock oyster could be effective at killing bacteria, Australian researchers discover. Photograph: Paris Spellson/Alamy. The Guardian (2025 January 20). Australian oysters' blood could hold key to fighting drug-resistant superbugs, researchers find. https://www.theguardian.com/science/2025/jan/21/australia-sydney-rock-oyster-blood-drug-resistant-superbug-bacteria-antibiotics

A recent PLoS One **article** suggests that a protein in the blood of Australian oysters can kill bacteria and boost the effectiveness of some antibiotics. Though further studies in animals and humans are required, this finding suggests that there could be a pathway to improving the potency of more accessible and affordable conventional medicines, particularly considering the global rise of AMR. An associated article in the Guardian can be found **here**.

In Case You Missed It

Last year we launched the AMR Global Health Academy Newsletter to share news stories and updates from the field. To kick off 2025, below, we have provided some highlights.

AMR Global Health Academy Highlights from 2024:

- AMR directly caused 300,000 deaths in 2019 alone, with a further one million deaths likely caused in part by AMR: Nature **spotlight**
- More than 39 million deaths expected by 2050 that are caused by AMR: **Nature News Article**
- There were a number of political actions last year to raise awareness of AMR and galvanize the global community to action.
    - WHO **resolution** at the World Health Assembly
    - **WHO strategic and operational priorities to address drug-resistant bacterial infections, 2025-2035**
    - 2nd UN General Assembly **High-Level Meeting** on AMR

- Five proposed blind spots within the AMR field that require focus and prioritization: Lancet Microbe **commentary**
- Three case studies were shared last year. Please see **here** in case you missed them.

In 2024, WHO **released** a policy brief entitled, *Antimicrobial resistance diagnostic initiative*. Four building blocks were identified in bringing diagnostics to the forefront of the global AMR response.

CARB-X has awarded a biotech company, **Melio**, with a $3.5 million grant to develop a rapid diagnostic tool to detect neonatal sepsis. See **here**.

Don't Miss

The journal *Antibiotics* is planning for a special issue entitled, "Antibiotics: Utilization, Resistance, and Infection Prevention". The editors are inviting submissions for this special issue that addresses various aspects of AMR, including its mechanisms, transmission dynamics, and global impact. Manuscript submissions are due 31 October 2025. Please see **here** for more information.

The US Presidential Advisory Council on Combatting Antimicrobial Resistance Bacteria will host an online and in-person meeting **28-29 January 2025** in Washington, DC. This meeting will seek input into the national action plan and how to sustain political momentum built during the UNGA High-Level Meeting on AMR. See **here** for details and to register.

The 9th AMR Conference 2025 is 25-26 February 2025 in Basel, Switzerland. Click **here** to register.

The annual meeting of the European Society for Clinical Microbiology and Infectious Diseases is 11-15 April 2025 in Vienna, Austria. See **here** for details.

To join the AMR Global Health Academy, enroll in the Global Health Continuing Professional Development (GHCPD) free online AMR courses **here**.

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