

## G20 CALL TO ACTION ON ANTIMICROBIAL RESISTANCE

1. **Antimicrobial resistance (AMR), in particular antibiotic resistance, is among the top ten global public health threats<sup>14</sup> and an urgent health challenge for the next decade<sup>15</sup>.** Emerging AMR potentially risks eroding many of the health and development advances of modern medicine and achievement of the Sustainable Development Goals (SDGs). AMR does not recognize borders and affects humans, animals, plants, food, environment, trade and the world economy. Low-and-Middle Income Countries (LMICs) are disproportionately impacted by AMR as they often lack sufficient access to human and animal healthcare services and to quality and safe medicines, AMR and antimicrobial use (AMU) and antimicrobial consumption (AMC) functional and representative surveillance programs, waste management systems, wastewater treatment, sufficient laboratory and diagnostic capacity, appropriate governance and the regulatory frameworks needed to respond adequately to AMR. The COVID-19 pandemic has significantly disrupted AMR governance and implementation of interventions such as stewardship, surveillance, routine vaccination programs<sup>16,17</sup>, and has increased inequality of access to healthcare and essential medicines in LMICs. It has also highlighted the urgent need for sustainable, equitable and cost-effective global and national joint responses. We will work to ensure that our collective COVID-19 response investments enhance improvements in national capacity to prevent, detect and respond effectively to AMR and explore the appropriateness of the inclusion of AMR in international instruments on pandemic prevention, preparedness and response currently under negotiation at WHO.
  
2. **To better address the AMR threat, robust surveillance and monitoring are required globally:** Accurate and reliable data on AMR, AMU and AMC is needed across humans, animals, plants, food and the environment. A recent study<sup>18</sup> estimated that at least 1.27 million deaths per year are directly attributable to bacterial AMR (i.e. antibiotic resistance) and pointed to the limited existing high-quality data to inform policy decisions and science-based interventions at local, subnational, national, regional and global levels. We urge countries to join the WHO Global Antimicrobial Resistance and Use Surveillance System (GLASS) and participate in regional AMR and AMU surveillance networks. We encourage countries to also join the monitoring program on AMU in animals, through the WOAHA ANimal AntiMicrobial USE (ANIMUSE)<sup>19</sup> Global Database. We acknowledge the development of the International FAO Antimicrobial Resistance Monitoring (InFARM)<sup>20</sup> data platform and system by the FAO for AMR in the food and agriculture sectors and AMU in crops. Furthermore, we also request the Quadripartite to update member states on TISSA<sup>21</sup>, the upcoming Quadripartite platform for linking and referring current initiatives for AMR and AMU surveillance data across sectors (human, animal, plant, food, and environment) at the national, regional and global levels. We continue to be guided by the Codex Alimentarius on integrated monitoring and surveillance of foodborne antimicrobial resistance, and correspondingly, WOAHA's chapters around monitoring of the quantities and usage patterns of antimicrobial agents used in animals from the terrestrial and aquatic animal health codes.
  
3. **Scaling up collaborative, coordinated, One Health AMR surveillance, risk assessment and interventions is required** to contain and minimize health impact and health expenditure – in the

<sup>14</sup> AMR has been declared as one of the top ten global public health threats facing humanity by WHO in 2019.

<sup>15</sup> <https://www.who.int/news-room/photo-story/photo-story-detail/urgent-health-challenges-for-the-next-decade>.

<sup>16</sup> 2021 TrACCS report.

<sup>17</sup> <https://www.oecd.org/health/Antimicrobial-Resistance-in-the-EU-EEA-A-One-Health-Response-March-2022.pdf>

<sup>18</sup> Global burden of bacterial antimicrobial resistance in 204 countries and territories in 2019: an analysis for the Global Burden of Disease Study', The Lancet, 2022.

<sup>19</sup> <https://amu.woah.org/amu-system-portal/home>.

<sup>20</sup> <https://www.fao.org/antimicrobial-resistance/resources/database/the-international-fao-antimicrobial-resistance-monitoring-infarm-system/fr/>

<sup>21</sup> <https://web.oie.int/download/WG/AMR/AMR-Tripartite-Workplan-updated-08-April-2019.pdf>

human, plant and animal sectors - as well as socioeconomic and environmental consequences. Surveillance is critical for understanding and assessing the emergence and spread of AMR and effective pandemic preparedness, prevention and response efforts. Therefore, we encourage countries to empower on-the-ground, integrated One Health AMR surveillance efforts to improve the use of local data and strengthen national-level capacity. Scalable, proven One Health interventions exist, including implementation of biosecurity and Infection Prevention and Control (IPC) activities in human and animal health; pollution control and minimization - through clean water, sanitation and hygiene; vaccines where available and appropriate; antimicrobial stewardship capacity and programs to ensure responsible and prudent use of antimicrobials to preserve antimicrobial efficacy in healthcare, community and animal health; accurate laboratory detection, improved digital reporting and appropriate evidence and risk-based interventions to target priority microbes and infectious diseases and anticipate future risks; and strong governance at all levels. Prevention-focused actions and a specific focus on providing LMICs with support should be prioritized to mitigate the risks posed by AMR, as investments into tackling AMR will pay for themselves<sup>22</sup>.

4. **Start somewhere, start small, now, and sustain efforts:** It is time to establish the steps needed for all countries to start somewhere, start small, and sustain actions based on One Health approaches whenever relevant. We recall the fictional One Health exercise at the 2018 G20 Argentina Presidency on the spread of antibiotic resistant *Escherichia coli* through multiple transmission routes, between sectors and across borders and the WHO Tricycle Protocol in piloted countries. We encourage countries to monitor the WHO priority microbes, the bacteria identified in the monitoring framework of SDG 3 - including but not limited to *Escherichia coli*, notably strains resistant to third generation cephalosporins and carbapenems, and methicillin-resistant *Staphylococcus aureus* (MRSA) - as well as other nationally determined priority pathogens and commensal bacteria.
5. **We aim to increase equitable access to vaccines, therapeutics and diagnostic tools (VTDs) and innovative preventive tools, to prevent and control infections in human, plant and animal health:** We will prioritize provision and equitable access to affordable, safe, timely and quality assured antimicrobials, diagnostic tools and services and prevention measures using integrated science and risk assessments, including alternatives to antimicrobials when relevant, across sectors (humans, animals and plants), particularly for populations in vulnerable situations and ensuring responsible and prudent use of antimicrobials in all settings. We appreciate the new antimicrobials and affordable diagnostics being developed through global initiatives and the need to enhance global efforts to increase availability of new and existing VTDs for human and animal health. Extending the production of VTDs within LMICs, while ensuring antimicrobial stewardship and minimizing environmental pollution, can help diversify and strengthen their innovation and production capabilities.
6. **Progress has been made:** We welcome the new Quadripartite (FAO, UNEP, WHO, WOA) Collaboration for One Health, supported by the One Health High-Level Expert Panel, and its efforts to coordinate joint One Health work through global activities addressing health risks at human-animal- food-plant-environment interfaces. We encourage the Quadripartite Joint Secretariat on AMR to emphasize that all actions on AMR should be grounded in strong science and sector-specific strategies and programs, while also advancing the One Health approach when relevant and the Global Action Plan on AMR. We welcome the integration of AMR as an action track of the One Health Joint Plan of Action (OH JPA). The G20 also welcomes the establishment of the Multi-Stakeholder Partnership Platform on AMR by the Quadripartite and building on the 2021 G20 Health Ministers' Declaration, we also urge the swift establishment of the Independent Panel on Evidence

<sup>22</sup> The 2018 OECD report "Stemming the Superbug Tide. Just A Few Dollars More" (<https://www.oecd.org/health/stemming-the-superbug-tide-9789264307599-en.htm>) showed that, in OECD countries, investments in a package of policies addressing AMR "would pay for itself within a year, and end up by saving 4.8 billion of dollars per year" and would "produce savings of about USD 1.5 for every dollar invested."

for Action Against Antimicrobial Resistance following the recommendations of the UN Interagency Coordination Group (IACG) report. We note with appreciation the SECURE<sup>23</sup> initiative by WHO and Global Antibiotic Research & Development Partnership (GARDP) to establish a relevant product portfolio of antibiotics driven by public health needs.

## CALL TO ACTION

- a. **We call for reaffirmed commitment from G20 Member States to lead by example and implement our own AMR National Action Plans (NAPs)** across all sectors, in line with the Global Action Plan on AMR and to consider the integration of AMR action track of the OH JPA when updating NAPs. Where necessary and appropriate, we reaffirm our commitment to support each other and share knowledge and assistance with other G20 countries through existing bilateral and multilateral mechanisms. We encourage G20 countries to monitor progress on NAP implementation through the annual Tracking AMR Country Self-Assessment Survey (TrACSS)<sup>24</sup>. The G20 encourages increased implementation of NAPs on AMR in LMICs, through new and existing national, bilateral and multilateral mechanisms, including the AMR Multi-Partner Trust Fund, relevant UN and multilateral organizations or other financial instruments. The G20 welcomes the Quadripartite' s ongoing initiative of developing global and national AMR investment cases in collaboration with other stakeholders to enhance domestic and external funding for implementing high-impact AMR multisectoral interventions.
  
- b. **We call for Member States to address AMR with One Health AMR surveillance implementation and contribute to achieving the SDGs.** We look forward to the creation of the Quadripartite Technical Group on Antimicrobial Resistance and Use Integrated Surveillance (QTG-AIS) to provide advice and guidance on the development of global and context-appropriate regional and country-level systems for integrated surveillance and the establishment of effective capacity across all sectors.  
**We call for collaboration on strengthening surveillance systems among G20 countries,** including capacity building to strengthen the quality, frequency and representativeness of the clinical, epidemiological, and microbiological data collection and data analysis so that those sharing data equally benefit from the information. The G20 welcomes the WHO project on AMR periodic nationally representative prevalence surveys in select countries, including Indonesia, to improve surveillance. The G20 strongly encourages contributing to regional and global surveillance architecture including GLASS and ANIMUSE, and to consider participation in global AMR and AMU monitoring initiatives in development, including the InFARM data platform and the TISSA integrated data platform. We encourage WHO to develop regional AMR surveillance networks in Eastern-Mediterranean and African Regions and collaboration with Asian networks. The G20 also supports FAO ATLASS in assessing and defining areas to improve laboratory capacity and the sharing of emerging AMR organisms in the food and agriculture sectors.
  
- c. **We call for commitment to enhance the coverage and quality of diagnosis of infections and resistant infections** at all levels of the health system among the G20 countries. Stronger laboratory systems and reliable diagnostics are the basis for reliable surveillance data, and appropriate outbreak investigation, infection prevention and control and patient management. The G20 strongly encourages strengthening the capacity of microbiology laboratories at national and sub-national levels to diagnose disease and detect AMR, thereby facilitating timelier and more appropriate treatment, as well as the training of health professionals regarding the diagnostic process (including clinical examination). The G20 acknowledges the need for increased investments in diagnostic facilities and capacity development, including laboratory facilities, appropriate equipment, dedicated and trained staff, laboratory methods, internal and external laboratory quality assurance

<sup>23</sup> <https://www.who.int/groups/secure-expanding-sustainable-access-to-antibiotics>

<sup>24</sup> TrACSS – Has been renamed from “Tripartite” to “Tracking AMR Country Self-Assessment Survey” after the official inclusion of UNEP within the Quadripartite.  
[www.amrcountryprogress.org](http://www.amrcountryprogress.org).

and quality control, laboratory networking and diagnostic stewardship<sup>25</sup>, including engagements with relevant international organizations.

- d. **We call upon the United Nations Secretary General and the Quadripartite to establish the Independent Panel on Evidence for Action against AMR**, as recommended by the IACG, with a scope agreed by UN Member States. In response to the clear need for interventions to be guided by evidence, a focused, streamlined and sustainable panel is needed to generate, monitor and synthesize evidence on the drivers, risks and options for mitigation of AMR including its broader economic and social impacts. We recognize that the panel should align with existing and emerging global structures related to One Health and health security and iterate the importance of establishing the Panel prior to the 2024 High-Level Meeting on AMR.
- e. **We call for strengthened engagement with the Global AMR R&D Hub, OECD, the Quadripartite and other international antimicrobial research and development organizations** whenever possible and relevant, including: Combating Antibiotic-Resistant Bacteria Biopharmaceutical Accelerator (CARB-X), GARDP, including its SECURE initiative and the Global Health Security Agenda - Antimicrobial Resistance Action Package (GHS-A-AMR). The G20 encourages efforts to close GARDP's funding gap to facilitate the "5 by 25" Initiative to deliver five new treatments by 2025. We encourage the convening of a discussion between Health and other relevant ministries and international organizations to promote collaboration and facilitation on research and development of new antimicrobials, while taking measures to preserve their efficacy, as well as effective and affordable diagnostic tools and vaccines, addressing unmet public health needs, across the One Health spectrum and other alternatives to antimicrobials and disease prevention and control measures.
- f. **We call for improved infectious disease prevention and control.** The G20 will work to improve infectious disease prevention and biosecurity. Reducing the incidence of infections decreases the use of antimicrobials and the potential for antimicrobial resistant pathogens to spread. The G20 will work to ensure COVID-19 response investments in healthcare IPC results in sustainable improvements in national IPC capacity. Effective IPC programs are crucial to ending avoidable health-care-associated infections and the spread of AMR, and are the foundation of safe, effective, high quality health service delivery. The G20 recognizes the WHO IPC assessment framework (IPCAF)<sup>26</sup> as a critical tool to support the implementation of the WHO Guidelines on core components of IPC programs.
- g. **We call for the advancement of antimicrobial stewardship** as a priority area across the One Health spectrum. The G20 asks the Quadripartite support to increase advocacy across political, multilateral, and technical fora on the critical importance of preserving the effectiveness of existing antimicrobials. By focusing on the development of diagnostic tools that support appropriate use decisions when clinically relevant, the G20 will complement the G7's research and innovation agenda. We also encourage the strengthening of the evidence base for the behavioral and social aspects of inappropriate use, to inform more effective and targeted stewardship-focused innovations.

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<sup>25</sup> <https://apps.who.int/iris/bitstream/handle/10665/251553/WHO-DGO-AMR-2016.3-eng.pdf>

<sup>26</sup> <https://www.who.int/publications/i/item/WHO-HIS-SDS-2018.9>