



ANTIMICROBIAL RESISTANCE NEWSLETTER

A bi-weekly update by the National Antimicrobial Resistance Secretariat

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FEATURED EVENTS

Human and Animal Health Sectors' Technical Working Group Meetings: October 2020



The Animal Health sector held its 3rd Animal Health Sector Technical Working Group (AHs-TWG) Meeting on the 21st and 22nd October 2020. The meeting was organized by the Federal Ministry of Agriculture and Rural Development (FMARD) in collaboration with the Fleming Fund Country Grant. The AHs-TWG members were drawn from FMARD, the Academia, Research Institute, Veterinary Council of Nigeria (VCN), Nigeria Agricultural Quarantine Services (NAQS) and Private veterinarians. The meeting deliverables included finalising Memorandum of Understanding (MoUs) and Terms of Reference (ToRs) between Federal Ministry of Agriculture and Rural Development (FMARD) and National Reference Laboratory (NRL) and Sentinel Laboratories (SLs) with regards to the National Antimicrobial Resistance (AMR) surveillance, finalising the guidelines for antimicrobial resistance and antimicrobial use surveillance and monitoring in the animal health sector in Nigeria, adopted a template for collation of AMR research in Veterinary Faculties and reviewed proposed activities for national antibiotics awareness week (NAAW) for 2020

In accordance with the One Health approach to antimicrobial resistance, the Human Health sector also held a national HH AMRTWG meeting to review the planned activities (across AMR surveillance, antibiotic stewardship and AMR governance) for the 4th quarter in 2020, on the 28th October 2020. The meeting was coordinated by Nigeria Centre for Disease Control with attendees from the AMR surveillance sites, National Agency for Food and Drug Administration and Control (NAFDAC), National Institute for Medical Research (NIMR) and, the World Health Organisation and the Fleming Fund Country grant consortium partners. Discussions centered on defining implementation strategies and the expected outcome for these activities.

EVENTS

2020 World Antibiotics Awareness Week

Theme: Antimicrobials: handle with care

Date: 18-24 November 2020

Link to submit report of activities: <https://docs.google.com/forms/>

Following a stakeholder's consultation meeting in May 2020 organized by the Tripartite Organizations (the Food and Agriculture Organization of the United Nations (FAO), the World Organisation for Animal Health (OIE) and WHO) the scope of WAAW was expanded, changing its focus from "antibiotics" to the more encompassing and inclusive term "antimicrobials". Expanding the scope of the campaign to all antimicrobials will facilitate a more inclusive global response to antimicrobial resistance and support a multisectoral One Health Approach with increased stakeholder engagement.

Institutions, private organizations, civil societies, and individuals are encouraged to raise awareness using the one health approach within their communities in commemoration of the week. Recommended activities include but not limited to media engagement (talk shows on TV, radio), stakeholders' engagement, symposium, conferences, seminars, dissemination of IEC materials, market/school/hospital/veterinary clinic sensitization.

Report of activities conducted by individuals and organizations should be submitted to the AMR secretariat at NCDC through this [link](#) for collation and appropriate recognition.

CONFERENCES

Title: **World One Health Congress**

Link: <https://worldonehealthcongress.org>

Date: 30 **October 2020**

The 6th World One Health Congress will hold virtually. COVID-19 has shown why One Health is key to ensuring the healthy and sustainable future of the planet. Click [here](#) to register for the event.

Title: **Antimicrobial Resistance - Genomes, Big Data and Emerging Technologies 2020**

Link: <https://coursesandconferences.wellcomegenomecampus.org/our-events/ntimicrobial-resistance-2020/>

Date: 4 **November 2020**

Virtual registration deadline is 28 Oct 2020

Title: **ASTMH Annual Meeting**

Link: <https://www.astmh.org/annual-meeting>

Date: 15 **November 2020**

The annual meeting will be presented through combination of livestream and pre-recorded sessions. Click [here](#) to register for the event.

Title: **1st International Conference on Public Health in Africa**

Link: <https://africacdc.org/event/1st-international-conference-on-public-health-in-africa/>

Date: 12 **May 2021**

TWITTER CHAT

Title: **How Can We Improve Awareness for Antimicrobial Resistance In Africa?**

Link: https://zoom.us/webinar/register/WN_dTykKfKlR9-IKBoZtiFMw

Date: 21 November 2020

Join Africa CDC for a 60-minute Twitter chat to share your views on how we can increase awareness for antimicrobial resistance in Africa. All stakeholders including healthcare professionals, civil society, policymakers, journalists, nurses, medical researchers, IT experts, veterinarians, pharma, students etc. locally and globally are welcome.

PUBLICATIONS

NIGERIA

Antimicrobial resistant and enteropathogenic bacteria in ‘filth flies’: a cross-sectional study from Nigeria.

Francis Chinedu Onwugamba, Alexander Mellmann, Frieder Schaumburg, Alexander Mellmann, Victor Oluoha Nwaugo, Benno Süsselbeck

Filth flies facilitate the dispersal of pathogens between animals and humans. This study aims to examine the intestinal colonization with antimicrobial resistant and enteropathogenic bacteria in ‘filth flies’ from Nigeria. Click [here](#) to read more.

To understand why bacteria behaves in a particular way, you need genomics. Fleming Fund

Since 2019, the Fleming Fund has been investing in building sequencing capacity across Africa through a consortium of grantees including several African laboratories and academics at the Danish Technical University. [Read more](#) on the capacity building process at the GHRU laboratory in Nigeria.

GLOBAL

The critical need for alternative approaches to address antibiotic treatment failure. Bob Hancock

The fundamental issue lies in how we define resistance and whether this should encompass treatment failure, since the net effect is similar. Click [here](#) to read more

COVID-19 and antimicrobial resistance: Are there any unknowns that will become known? Stephan Harbarth

This paper brings to limelight the impact of COVID-19 on antimicrobial resistance. Click [here](#) to read more

Antimicrobial Resistance (AMR) in relation to pesticide use in plant production. Food and Agriculture Organization

The International Plant Protection Convention Contracting Parties initiated the discussion on the effects of antimicrobial use on plants. Click [here](#) to read more

Re-Establishing the Utility of Tetracyclines for Current Challenges with Antimicrobial Resistance. Kerry Laplante, Abhay Dhand

This publication aims to review the historical background on tetracycline discovery, emerging resistance, mechanism of action, and their spectrum of activity. The clinical data supporting tetracycline use for common bacterial infections is also discussed. Click [here](#) to read more.

Running a phase 3 trial for a new drug for gonorrhoea during the coronavirus pandemic. Markus Heep, Esther Bettiol, Tanyaporn Wansom and Hilary Johnstone

Zoliflodacin is an oral antibiotic with a novel mode of action distinct from quinolones. To further the development of zoliflodacin, the Global Antibiotic Research and Development Partnership (GARDP), a Swiss-based non-profit foundation, has partnered with Entasis Therapeutics, Inc., the World Health Organization, and the U.S. National

Institute of Allergy and Infectious Diseases (NIAID) to manage a multinational phase 3 randomized clinical trial of zoliflodacin for gonorrhoea therapy (NCT03959527). Click [here](#) to read more

A lesson learned from COVID-19: The importance of non-inferiority (NI) trials for developing new antimicrobial agents before widespread need. John Rex

In this article, the Global Antibiotic Research and Development Partnership explores the two types of clinical trials: Superiority and non-inferiority (NI) as well as the lethal danger of Infections and how antibiotics are best developed before we need them. Click [here](#) to read more.

Efficacy and safety of cefiderocol or best available therapy for the treatment of serious infections caused by carbapenem-resistant Gram-negative bacteria (CREDIBLE-CR): a randomised, open-label, multicentre, pathogen-focused, descriptive, phase 3 trial. Prof Matteo Bassetti, MD, Roger Echols, MD, Yuko Matsunaga, MD, Mari Ariyasu, BPharm, Yohei Doi, MD, Ricard Ferrer, MD, et al

This publication assessed the efficacy and safety of cefiderocol as the best available therapy in adults with serious carbapenem-resistant Gram-negative infections. Click [here](#) to read more

Exploring the pathophysiology of post-sepsis syndrome to identify therapeutic opportunities. Elisabeth C. van der Slikke, Andy Y. An, Robert E.W. Hancock, Hjalmar R. Bouma

Understanding the pathophysiology of post-sepsis syndrome is crucial to developing new therapeutic opportunities, as this improves the survival rate and quality of life of sepsis survivors. Click [here](#) to read more

Confronting antimicrobial resistance beyond the COVID-19 pandemic and the 2020 US election. Steffanie A Strathdee, Sally C Davies. Jasmine R Marcelin

This article highlights the rise in multidrug-resistant bacterial infections; these are undetected, undiagnosed, and are increasingly becoming untreatable, threatening the health of people in the USA and globally. Click [here](#) to read more

Strengthening antimicrobial defenses with novel diagnostic stewardship approaches. Jennifer Ross

The symbiotic relationship between antimicrobial stewardship and diagnostic technology was highlighted in this article. Click [here](#) to read more

WHO Global tuberculosis report 2020. World Health Organization

The report reveals that about half a million people developed rifampicin-resistant TB (RR-TB) in 2019, with 78% of the cases consisting of multidrug-resistant TB (MDR-TB). Click [here](#) to read more

Availability of over-the-counter antibiotics in Guatemalan corner stores. Purificación Moreno, Alejandro Cerón, Karen Sosa, Marinees Morales, Laura M. Grajeda, Maria Renee Lopez, John P. McCracken, Celia Cordón-Rosales, Guy H. Palmer, Douglas R. Call, Brooke M. Ramay

A [cross sectional study](#) to document the number and types of antibiotics available in corner stores, in four study areas in Guatemala.

Antimicrobial stewardship: a COVID casualty? C. Lynch, N. Mahida, J. Gray

In this [editorial letter](#) to the Journal of Hospital Infection, researchers discuss the profound effect that the COVID-19 pandemic has had on antimicrobial stewardship (AMS) programs.

Global Forum on Food Security and Nutrition Food Systems Dashboard

Healthy diets are essential for nutrition and health. Poor diets are one of the main risk factors for deaths globally. Food safety, antimicrobial resistance, and pesticide usage also affect the health of consumers and people who work within the food system. Read more [here](#)

Antibiotic use spikes at VA facilities during pandemic, rising to 2016 levels Caithlyn Stulpin

Data from more than 80 Veterans Affairs facilities showed a substantial increase in antibiotic use during the early months of the COVID-19 pandemic, rising to levels not seen since 2016. Read more [here](#).

There is more to IPC and AMS than COVID-19 Jon Otter

This [opinion piece](#) discusses the impact of COVID-19 on our usual HCAI & AMR practice.

Implementation research for the prevention of antimicrobial resistance and healthcare-associated infections; 2017 Geneva infection prevention and control (IPC)-think tank (part 1). Walter Zingg, Julie Storr, Benjamin J. Park, Raheelah Ahmad, Carolyn Tarrant, Enrique Castro-Sanchez, Sara Tomczyk, Claire Kilpatrick, Benedetta Allegranzi, Denise Cardo, Didier Pittet & the 2017 Geneva IPC-Think Tank

In June 2017, a total of 42 experts convened at the Geneva IPC-Think Tank to discuss four domains in implementation science. The [findings are here](#)

Urgent care stewardship program improves antibiotic prescribing Caithlyn Stulpin

[Antibiotic prescribing](#) in dozens of urgent care sites decreased after the introduction of a stewardship program, according to data presented at IDWeek.

A current perspective on antimicrobial resistance in Southeast Asia. Raphaël M. Zellweger, Juan Carrique-Mas, Direk Limmathurotsakul et al

This [paper](#) describes the current AMR situation in Southeast Asia and propose ways in which Southeast Asia could contribute to a global solution.

Antimicrobial susceptibility testing. F. C. Tenover

[Antimicrobial susceptibility test](#) are performed in clinical microbiology laboratories to guide physicians in their choice of antimicrobial therapy for a patient with an infection.

Antimicrobial resistance in the WHO African region: Current status and roadmap for action. S. Y. Essack, A. T. Desta, R. E. Abotsi et al

A [desktop analysis](#) to ascertain whether countries in the WHO African region have implemented the WHO Policy Package to combat antimicrobial resistance

WEBINARS

CURRENT

Title: **AMR in the Light of COVID-19 Webinar Series Webinar 3: Aiming in the dark: what happens when disease spreads without diagnosis**

Link: https://event.webcasts.com/viewer/event.jsp?ei=1365095&tp_key=5e97bb81b8

Date: 5 November 2020

Through the webinar series, global experts discuss how the COVID-19 pandemic could reshape strategies for combating AMR around the world.

Title: **Infection Prevention and Control in Home Healthcare - Findings from two large multi-method studies**

Link: <https://webbertraining.com/schedulep1.php>

Date: 5 November 2020

The webinar will describe infrastructure, staffing, and policies for infection prevention and control (IPC) at home healthcare (HHC) agencies from a national survey

Title: **Emerging Fungal Infections and Infection Prevention and Control**

Link: <https://webbertraining.com/schedulep1.php>

Date: 5 November 2020

The webinar will describe infrastructure, staffing, and policies for infection prevention and control (IPC) at home healthcare (HHC) agencies from a national survey

Title: **Environmental Stress and Food Crisis**

Link: https://us02web.zoom.us/webinar/register/WN_UUXjTtDyTlegW-wca_Tdg

Date: 12 November 2020, 8:00PM GMT

The aim of the Nature Café on Environmental Stress and Food Crisis is to address the simple question of how to grow enough food to meet global population demands, with a focus on agricultural production and farming practices.

Title: **Discovery of New Antibacterials using Artificial Intelligence (computational chemoinformatics)**

Link: <https://attendee.gotowebinar.com/register/1949187135756460557?source=direct>

Date: 17 November 2020

The initiative led by the Africa CDC Institute for Pathogen Genomics (IPG) aims to build robust pan-African pathogen genomics laboratory network to promote genomics-based surveillance for preparedness and timely outbreak management of disease threats as well as to support the control and elimination of endemic diseases

Title: **AMR in the Light of COVID-19 Webinar Series Webinar 4: Responding to difficult-to-treat infections: role and responsibilities of governments, researchers, clinicians, industry and patients**

Link: https://event.webcasts.com/starthere.jsp?ei=1365096&tp_key=834716974d

Date: 19 November 2020

Through the webinar series, global experts will discuss how the COVID-19 pandemic could reshape strategies for combating AMR around the world.

Title: **Saving childrens' lives – treating neonatal sepsis**

Link: <https://attendee.gotowebinar.com/register/6583374659993595663?source=direct>

Date: 20 November 2020, 10:30AM WAT

The webinar, organized in collaboration with WHO, is being held on the occasion of Universal Children's Day and during World Antimicrobial Awareness Week. It will focus on the challenges in treating newborns suffering from drug-resistant sepsis and finding new treatment options

PAST (RECORDINGS)

2-day virtual Presidential Advisory Council on Combating Antibiotic-Resistant Bacteria (PACCARB) meeting on "AMR and COVID-19". U.S. Department of Health & Human Services

The meeting organizers have published the archived webcast and PDF presentations from the meeting. Click [here](#) to read more

Early Identification and Appropriate Clinical Management of Sepsis Saves Lives and Prevents AMR

The meeting organizers have published the Session 6 of the 2020 WSC Spotlight on [Youtube](#) and [Apple Podcast](#)

MENTORSHIP AND OTHER OPPORTUNITIES

Virtual Global Health Electives for Final Year Health Professions Students (received via HIFA)

The Child Family Health International (CFHI) Virtual Global Health Elective is designed for interprofessional final year health professions trainees (resident physicians, 4th year medical students, NP, PA, pharmacy, allied health senior students). These electives take place January thru April 2021 for 3 or 4-week durations. The elective includes synchronous (live) and asynchronous (self-paced) components. Learn more [here](#).

International Student One Health Alliance Mentorship Program

This program is aimed at connecting students interested in One Health with established One Health professionals who have similar interests. Applications are due October 31st 2020. Contact isohamentorship@gmail.com with any questions or concerns

Mentor Requirements: Completion of Masters, DVM, PhD, MD or other post-graduate degree(s) OR completion of undergraduate degree with two years' work experience, with past or present experience working in a One Health-related field, Mentor Application: bit.ly/isohamentors2020

Mentee Requirements: Students aged 18 years and above in any undergraduate, graduate, or doctoral degree program, with interest in One Health, Mentee Application: bit.ly/isohamentees2020

Susan Hershey Memorial Scholarship for Virtual Learning

Child Family Health International is excited to present the CFHI Susan Hershey Memorial Scholarship for Virtual Learning. We will be giving out four \$600 awards between May 2020 - May 2021

Eligibility: Any current student enrolled in an undergraduate, post-baccalaureate, graduate or post-graduate program. Applicant must be participating in a [virtual](#) CFHI program. Application deadline: December 1, 2020. Click [here](#) to learn more or email <mailto:jeverter@cfhi.org>.

Launch of public review - Methodology to analyse AMR-Relevant Legislation in the Food and Agriculture Sector; a Guidance Document for Regulators

The public review, starting on 7 October and ending on 15 December 2020, aims to strengthen the consensus built so far and ensure the Methodology meets the needs of those seeking to improve the legislative frameworks for AMR. Click [here](#) for the public review.

For feedbacks and other suggestions, please send a mail to amr_surv@ncdc.gov.ng.

LEARN MORE ABOUT AMR RESPONSE IN NIGERIA

National AMR situation:

- Antimicrobial use and resistance in Nigeria: situation analysis and recommendations, 2017
https://ncdc.gov.ng/themes/common/docs/protocols/56_1510840387.pdf
- Joint External Evaluation 2017
https://ncdc.gov.ng/themes/common/docs/protocols/70_1511012198.pdf

Response plans:

- National Action Plan for Antimicrobial Resistance
https://ncdc.gov.ng/themes/common/docs/protocols/77_1511368219.pdf
- National Action Plan for Health Security
<https://ncdc.gov.ng/themes/common/files/establishment/5e88f9e22d2b4e4563b527005c8a0c43.pdf>
- Laboratory guidelines for AMR surveillance
- One Health Strategic Plan
https://ncdc.gov.ng/themes/common/docs/protocols/93_1566785462.pdf

To join the National AMR surveillance system (call to action):

- Assess the laboratory assessment checklist by clicking on the URL: <https://ncdc.gov.ng/diseases/guidelines>
- Click on the NCDC AMR surveillance self-assessment checklist and complete the self-assessment form
- Send the form to amr_surv@ncdc.gov.ng

For other disease conditions

- Read the Weekly Epidemiology Report [here](#)