

WOAH Reference Laboratory Reports Activities 2023

Activities in 2023

This report has been submitted : 30 juin 2024 03:06

Laboratory Information

Name of disease (or topic) for which you are a designated WOAHO Reference Laboratory:	Antimicrobial Resistance
Address of laboratory:	Animal and Plant Health Agency, New Haw, Addlestone Surrey KT15 3NB Weybridge UNITED KINGDOM
Tel.:	+44-20 8026 2578
E-mail address:	Christopher.Teale@apha.gov.uk
Website:	http://apha.defra.gov.uk/apha-scientific/index.htm
Name (including Title) of Head of Laboratory (Responsible Official):	Mr D. Holdsworth, Chief Executive, Animal and Plant Health Agency
Name (including Title and Position) of WOAHO Reference Expert:	Dr Christopher Teale MRCVS, Head of Antimicrobial Resistance
Which of the following defines your laboratory? Check all that apply:	Veterinary Surveillance Governmental Research agency

TOR1: DIAGNOSTIC METHODS

1. Did your laboratory perform diagnostic tests for the specified disease/topic for purposes such as disease diagnosis, screening of animals for export, surveillance, etc.?
(Not for quality control, proficiency testing or staff training)

Yes

Diagnostic Test	Indicated in WOAHO Manual (Yes/No)	Total number of test performed last year	
		Nationally	Internationally
Indirect diagnostic tests			
No indirect tests routinely performed.		0	0
Direct diagnostic tests			
Disc diffusion susceptibility test		10158	0
Determination of minimum inhibitory concentration (MIC)		19289	0
Whole genome sequencing		110	0

TOR2: REFERENCE MATERIAL

2. Did your laboratory produce or supply imported standard reference reagents officially recognised by WOAHO?

No

3. Did your laboratory supply standard reference reagents (nonWOAHO-approved) and/or other diagnostic reagents to WOAHO Members?

No

4. Did your laboratory produce vaccines?

Not applicable

5. Did your laboratory supply vaccines to WOAHO Members?

Not applicable

TOR3: NEW PROCEDURES

6. Did your laboratory develop new diagnostic methods for the designated pathogen or disease?

No

7. Did your laboratory validate diagnostic methods according to WOAHS Standards for the designated pathogen or disease?

No

8. Did your laboratory develop new vaccines for the designated pathogen or disease?

No

9. Did your laboratory validate vaccines according to WOAHS Standards for the designated pathogen or disease?

No

TOR4: DIAGNOSTIC TESTING FACILITIES

10. Did your laboratory carry out diagnostic testing for other WOAHS Members?

No

11. Did your laboratory provide expert advice in technical consultancies on the request of an WOAHS Member?

No

TOR5: COLLABORATIVE SCIENTIFIC AND TECHNICAL STUDIES

12. Did your laboratory participate in international scientific studies in collaboration with WOAHS Members other than the own?

Yes

Title of the study	Duration	PURPOSE OF THE STUDY	PARTNERS (INSTITUTIONS)	WOAH MEMBER COUNTRIES INVOLVED OTHER THAN YOUR COUNTRY
AMR surveillance at live bird markets in Bangladesh	2 years	Determine prevalence of AMR	Central Disease Investigation Laboratory, Dhaka., Bangladesh	BANGLADESH
MDR non-typhoidal Salmonella in migratory birds	4 years	Determine prevalence and AMR of non-typhoidal Salmonella in wild birds	Bangladesh Livestock Research Institute	BANGLADESH
Prevalence and AMR of Salmonella in eggs	1 year	AMR in Salmonella	University of Ghana	GHANA

13. In exercising your activities, have you identified any regulatory research needs* relevant for WOAHS?

Yes

Research need : 1

Please type the Research need: BioRisk of AMR/ bacterial pathogen combinations.

Relevance for WOAHS Disease Control, Other, Facilitation of international collaboration,

Relevance for the Codes or Manual Code,

Field Epidemiology and Surveillance, Diagnostics,

Animal Category Terrestrial,

Disease:

Antimicrobial resistance

Kind of disease (Zoonosis, Transboundary diseases) Zoonosis,

If any, please specify relevance for Codes or Manual, chapter and title

(e.g. Terrestrial Manual Chapter 2.3.5 - Minimum requirements for aseptic production in vaccine manufacture)

Answer:

Notes:

Answer:

TOR6: EPIZOOLOGICAL DATA

14. Did your Laboratory collect epidemiological data relevant to international disease control?

Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

AMR surveillance data

15. Did your laboratory disseminate epidemiological data that had been processed and analysed?

Yes

IF THE ANSWER IS YES, PLEASE PROVIDE DETAILS OF THE DATA COLLECTED:

Collated AMR data was published.

16. What method of dissemination of information is most often used by your laboratory? (Indicate in the appropriate box the number by category and list the details in the box)

a) Articles published in peer-reviewed journals:

4

Ndahi M, Fagbamila IO, Adebisi I, Ekeng E, Adeleke S, Adetunji V, Hendriksen R, Ryan C, Patel H, Verner-Jeffreys D, Chisnall T, Card RM. 2023. Establishing a One Health AMR Community of Practice in Nigeria. *One Health Cases*.

<https://doi.org/10.1079/onehealthcases.2023.0030>

Archer EW, Chisnall T, Tano-Debrah K, Card RM, Duodu S, Kunadu AP. 2023.

Prevalence and genomic characterization of *Salmonella* isolates from commercial chicken eggs retailed in traditional markets in Ghana. *Front Microbiol.* 1;14:1283835. doi: 10.3389/fmicb.2023.1283835. PMID: 38029182; PMCID: PMC10646427.

Card RM, Chisnall T, Begum R, Sarker MS, Hossain MS, Sagor MS, Mahmud MA, Uddin ASMA, Karim MR, Lindahl JF, Samad MA. 2023. Multidrug-resistant non-typhoidal *Salmonella* of public health significance recovered from migratory birds in Bangladesh. *Front Microbiol.* May 15;14:1162657. doi: 10.3389/fmicb.1162657. PMID: 37256054; PMCID: PMC10226424.

Ndahi MD, Hendriksen R, Helwigh B, Card RM, Fagbamila IO, Abiodun-Adewusi OO, Ekeng E, Adetunji V, Adebisi I, Andersen JK. 2023. Determination of antimicrobial use in commercial poultry farms in Plateau and Oyo States, Nigeria. *Antimicrob Resist Infect Control.* 10;12(1):30. doi: 10.1186/s13756-023-01235-x. PMID: 37038206; PMCID: PMC10084607

4

b) International conferences:

2

Ramon P. Maluping*, Remedios F. Micu, Thomas Chisnall, Alistair Davies, Evelyn E. Embestro, Mary Ann Escoto, Mildred A. Padilla and Roderick Card. Prevalence of Extended-Spectrum Beta-Lactam (ESBL) and Colistin Resistance in *Escherichia coli* Isolated from Broiler Chickens in Dressing Plants in the Philippines. 9th Symposium on Antimicrobial Resistance in Animals and the Environment (ARAE), Tours, France. 3-5 July, 2023

Roderick Card* One Health AMR including the Environment. Fleming Fund Delivery Partners Event. Accra, Ghana, 25-27 September 2023.

c) National conferences:

1

Thomas Chisnall* Multidrug resistant *E. coli* in poultry from live bird markets in Bangladesh. *Applied Bioinformatics and Public Health Microbiology*, Cambridge, UK. 3-5 May 2023.

d) Other (Provide website address or link to appropriate information):

1

<https://www.gov.uk/collections/veterinary-antimicrobial-resistance-and-sales-surveillance>

TOR7: SCIENTIFIC AND TECHNICAL TRAINING

17. Did your laboratory provide scientific and technical training to laboratory personnel from other WOAHA Members?

Yes

a) Technical visit : 0

b) Seminars : 4

c) Hands-on training courses: 0

d) Internships (>1 month) 1

Type of technical training provided (a, b, c or d)	Country of origin of the expert(s) provided with training	No. participants from the corresponding country
B	MALAWI	36
D	NIGERIA	1

TOR8: QUALITY ASSURANCE

18. Does your laboratory have a Quality Management System?

Yes

Quality management system adopted	Certificate scan (PDF, JPG, PNG format)	
ISO17025	pdf	17025 certificate.pdf

19. Is your quality management system accredited?

Yes

Test for which your laboratory is accredited	Accreditation body
Disc diffusion test	UK Accreditation Service (UKAS)

20. Does your laboratory maintain a "biorisk management system" for the pathogen and the disease concerned?

Yes

The risk of the combination of AMR and the pathogen / host bacterium are evaluated.

TOR9: SCIENTIFIC MEETINGS

21. Did your laboratory organise scientific meetings related to the pathogen in question on behalf of WOAHA?

No

22. Did your laboratory participate in scientific meetings related to the pathogen in question on behalf of WOAHA?

No

TOR10: NETWORK WITH WOAHA REFERENCE LABORATORIES

23. Did your laboratory exchange information with other WOAHA Reference Laboratories designated for the same pathogen or disease?

Not applicable (only WOAHA Reference Laboratory designated for the disease)

24. Do you network (collaborate or share information) with other WOAHA Reference Laboratories designated for the same pathogen?

Not applicable (Only WOAHA Reference Laboratory designated for the disease)

25. Did you organise or participate in inter-laboratory proficiency tests with WOAHA Reference Laboratories designated for the same pathogen?

Not applicable (Only WOAHA Reference Laboratory designated for the disease)

26. Did your laboratory collaborate with other WOAHA Reference Laboratories for the same disease on scientific research projects for the diagnosis or control of the pathogen of interest?

Not applicable (Only WOAHA Reference Laboratory designated for the disease)

TOR11: OTHER INTERLABORATORY PROFICIENCY TESTING

27. Did your laboratory organise or participate in inter-laboratory proficiency tests with laboratories other than WOAHA Reference Laboratories for the same pathogen?

No

TOR12: EXPERT CONSULTANTS

28. Did your laboratory place expert consultants at the disposal of WOH?

Yes

KIND OF CONSULTANCY	Location	SUBJECT (FACULTATIVE)
Responding to specific technical queries from WOH	UK	Review of WOH courses and guidance.

29. Additional comments regarding your report:

Yes

An AMR proficiency testing scheme was paused in 2023 while countries from sub-saharan Africa were recruited.