



SENEGAL



The Department of Health and Social Care (DHSC)'s Fleming Fund is a UK aid programme that supports up to 25 countries across Africa and Asia to tackle antimicrobial resistance (AMR), a leading public health threat, globally. The Fleming Fund invests in strengthening surveillance systems through a portfolio of Country Grants, Regional Grants, and Fellowships managed by Mott MacDonald and Global Projects managed by DHSC partners.

Country Context


The multisectoral National Action Plan for Surveillance and the Fight against AMR Senegal (2017-2022) was developed under the leadership of the Ministry of Health and Social Action through the Directorate of Laboratories and with support from multisectoral stakeholders, including the Ministries of Agriculture and Farming, Fisheries, Environment, and Commerce.

The overall goal of the National Action Plan (NAP) was to provide an effective response to the growing threat of AMR, through an integrated One Health approach and aligned with the Global AMR Action Plan. The AMR NAP was supported by a costed implementation plan.


The development of a second multisectoral NAP for AMR in Senegal (2023-2027) progressed significantly under the leadership of the High Council for Global Health Security-One Health Platform.

The Senegal Country Grant in phase 2 aims to build on and maximise the impact of investments made to date. This involves consolidating surveillance toward an integrated One Health system to produce data-driven decisions and policymaking.


Phase 2 Country Grant – Expected Results




Ensure data reporting on DHIS2, including from private sector hospitals and laboratories, in line with approved strategies.




Develop, validate and implement Human health (HH) surveillance strategies and protocols for AMR, antimicrobial use (AMU) and antimicrobial stewardship (AMS).



Develop and implement animal health (AH) and aquaculture AMR and AMU surveillance strategies.




Conduct active surveillance in poultry, beef cattle, environment and aquaculture sectors.




Produce national HH antibiograms annually in line with surveillance strategies.



Conduct integrated surveillance activities in line with the Tricycle protocol.



Develop a procurement strategy for reagents and consumables required for bacteriology testing in selected laboratories.



Share AMR/AMU data with international platforms, Global Antimicrobial Resistance Data and Use System (GLASS) and World Organisation for Animal Health (WOAH).

Phase 2



Country Grants

Grantee: Fondation Mérieux
Value: £1,599,739
Duration: Jul 2024 - Dec 2025

Grantee: Food and Agriculture Organisation
Value: £900,000
Duration: Oct 2024 - Dec 2025

Fellowships

No. of Fellows: 10
Host Institute: Fondation Mérieux
Total value: £1,309,011 (Across multiple countries, including Senegal)
Total duration: Nov 2023 - Dec 2025

Regional Grants

(Across multiple countries, including Senegal)

African Society for Laboratory Medicine
Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP)
Value: £2,997,523
Duration: Dec 2023 - Dec 2025

External Quality Assessment of Laboratory Data Africa (EQuAfrica)
Value: £2,458,558
Duration: Oct 2023 - Dec 2025

Qualifying the Workforce for AMR Surveillance in Africa and Asia (QWARs)
Value: £2,200,050
Duration: May 2023 - Dec 2025

Technical University of Denmark
Whole Genome Sequencing and Bioinformatics Capacity Building in Africa (SeqAfrica)
Value: £3,595,802
Duration: Oct 2023 - Dec 2025

Liverpool School of Tropical Medicine

Gender, Equity and Antimicrobial Resistance Mainstreaming (GEAR up)
Value: £2,199,925
Duration: Feb 2024 - Dec 2025

Fondation Merieux

Technical Assistance for Clinical Engagement Africa (TACE Africa)
Value: £1,822,408
Duration: Feb 2024 - Dec 2025

African Society for Laboratory Medicine

Technical Assistance for Data and Evidence Use Africa (TADEU Africa)
Value: £1,800,005
Duration: Feb 2024 - Dec 2025

International Livestock Research Institute

AMR and One Health West Africa (AMROH WA)
Value: £1,500,000
Duration: Feb 2024 - Dec 2025

Strategic Alignment Grants

(Across multiple countries, including Senegal)

Brigham and Women's Hospital
WHONET: Management and Analysis of Microbiology Laboratory Data
Value: £453,328
Duration: Mar 2024 - Dec 2025

Commonwealth Pharmacists Association
Surveillance and Prescribing Support for Antimicrobial Stewardship Resource Capacity Building (SPARC)
Value: £806,742
Duration: Mar 2024 - Dec 2025

Phase 1



Country Grants

Country Grant 1

Grantee: PATH

Sub-grantees: Institut Pasteur de Dakar, IUCN, Fondation Mérieux

Value: £3,000,000

Duration: Nov 2020 - Oct 2023

Country Grant 2

Grantee: Food and Agriculture Organisation

Value: £1,253,767

Duration: Nov 2020 - Mar 2024

Fellowships

Number of Fellows: 6

Host Institution: Fondation Mérieux

Value: £560,000

Duration: Dec 2019 - July 2022



Regional Grants

(Across multiple countries, including Senegal)

African Society for Laboratory Medicine

Qualifying the Workforce for AMR Surveillance in Africa and Asia (QWARS)

Value: £3,924,546

Duration: Oct 2019 - Apr 2023

African Society for Laboratory Medicine

Mapping Antimicrobial Resistance and Antimicrobial Use Partnership (MAAP)

Value: £7,054,881

Duration: Nov 2018 - Nov 2023

African Society for Laboratory Medicine

External Quality Assessment of Laboratory Data Africa (EQuAfrica)

Value: £4,364,227

Duration: Oct 2019 - Sep 2023

Strategic Alignment Grants

(Across multiple countries, including Senegal)

Brigham and Women's Hospital

WHONET: Management and Analysis of Microbiology Laboratory Data

Value: £889,044

Duration: Apr 2022 - Feb 2024

Commonwealth Pharmacists Association

Surveillance and Prescribing Support for Antimicrobial Stewardship Resource Capacity Building (SPARC)

Value: £1,152,946

Duration: Dec 2021 - Feb 2024

Foundation for Innovative New Diagnostics

FIND: Enhance Laboratory Capabilities, Data Visualisation, and Digital Health Platforms

Value: £2,586,227

Duration: Apr 2021 - Feb 2024



Phase 1 – Key Achievements

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Supported seven HH and AH bacteriology laboratories with equipment, reagents, consumables; and renovations.



Updated laboratory information management system, LabBook software in all five HH laboratories, with staff trained.



Supported the training of LNERV staff in using automated system (MALDI-TOF and Vitek) to perform bacterial identification and determine minimum inhibitory concentrations.

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11 sites in Senegal enrolled in the EQA network, with Institut Pasteur de Dakar becoming one of the EQuAfrica EQA providers.

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Conducted AMU Point Prevalence Surveys (PPS) at three hospitals.



Developed and piloted active surveillance protocol for the commercial poultry sector, with data gathered, analysed and isolates of interest sequenced.



1,140 poultry farms surveyed and mapped, which represent most poultry farms in Senegal. Active surveillance activities also conducted in regional abattoirs.

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15 veterinary staff trained on AMR surveillance protocols in commercial poultry farms, sensitised on sample collection for AMR. Conducted retrospective survey on AMU and biosecurity levels in poultry.



Shared AH AMU data with WOH from 2020-2022.



Provided support to Directorate of Veterinary Services for installing data management system to facilitate sharing data with AMR stakeholders and other partners.



Conducted survey on use of antibiotics by private veterinarians and para veterinarians in Senegal, and use of antibiotics in livestock sector.



Survey carried out on incorporation of antimicrobials into poultry feed and presence of antimicrobial residues in eggs.

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Retrospective AMR and AMU data collected and analysed from 16 laboratories and 17 selected pharmacies.



Fleming Fellows undertook published academic papers on resistant strains of Escherichia coli, Salmonella and uropathic bacteria from locations across Senegal.



Developed and piloted procedure for preventing healthcare-associated infections in two hospitals.



Developed and shared good practice guidelines on the use of antimicrobials in AH.



The Fleming Fund

