

## **Terms of Reference**

### **Regional**

#### **Epidemiologist - Antimicrobial Resistance Surveillance**

##### **1.BACKGROUND**

The Caribbean Public Health Agency (CARPHA), as the lead regional public health agency and an expression of Caribbean Cooperation in Health, is mandated by its Inter-governmental Agreement (IGA) to support its 26 Member States in bolstering national systems and coordinating regional response to public health threats. CARPHA has established programs for pandemic prevention, preparedness and response (PPR) and coordination (Communicable Diseases, Emergency Response, Tourism and Health, Foodborne, Vector-borne, and Field Epidemiology) and serves as the Regional Reference Laboratory. The Agency works closely with regional and international agencies and uses regional mechanisms, surveillance systems, and networks for coordinating its public health response work. CARPHA is competent in all three areas of PPR and has a successful track record of the same, as demonstrated by its regional COVID-19 response. The Agency is uniquely positioned for successfully implementing PPR capacities in the region, and to leverage its coordinating ability to encourage complementarity.

The Caribbean Public Health Agency (CARPHA) recognizes these risks and is leading the regional response through its Integrated AMR Program, which aligns national and regional efforts to combat resistance and strengthen surveillance across human, animal, and environmental health sectors. CARPHA's integrated AMR program will have four strategic objectives:

1. Establish a regional integrated (human, environmental and animal) AMR surveillance program
2. Strengthening Laboratory Capacity
3. Promoting Responsible Antimicrobial Use and Stewardship
4. Fostering One Health Collaboration and Coordination

CARPHA, in collaboration with the UK Health Security Agency (UKHSA), is leading the development of an Integrated AMR Programme. This initiative is supported by funding from the Pandemic Fund and the Fleming Fund and seeks to establish a coordinated, multi-sectoral approach to AMR surveillance, laboratory capacity strengthening, antimicrobial stewardship, and One Health collaboration. A crucial element of this programme is the establishment of the Caribbean Antimicrobial Resistance Alliance (CARA), which will facilitate regional cooperation and engagement among CARPHA Member States (CMSs).

The Caribbean AMR Alliance (CARA) funded through the UK Department of Health and Social Care (DHSC) Fleming Fund to facilitate establishing CARPHA's laboratories as regional reference referral laboratories for AMR testing. The Alliance will:

- Serve as a regional coordination mechanism for AMR-related activities.

- Promote advocacy and capacity-building initiatives at CARPHA and CMSs.
- Facilitate policy alignment with international AMR strategies.

This Consultancy is concerned with: Establishing a regional integrated (human, environmental and animal) AMR surveillance program which seek an individual to function as the Epidemiologist for Antimicrobial Resistance Surveillance.

## **2. OBJECTIVE**

The objective of the Epidemiologist (Antimicrobial Resistance Surveillance) is to develop/ expand, operationalize and implement regional AMR surveillance system. This includes eliciting and promoting timely data collection from CMS and regional reference laboratories, integration of multiple datasets, data analysis and regular reporting at country, regional and global levels. The postholder will also support capacity building at CARPHA and at CMS. Their work will assist to inform on outbreak control strategies, help shape guidelines for antimicrobial stewardship throughout the Caribbean and enhance the One Health approach to AMR surveillance across human, veterinary, and environmental health.

## **3. SCOPE OF SERVICES, TASKS AND EXPECTED DELIVERABLES**

### **3.1 AMR Surveillance System Development and Implementation**

- Design, implement and deliver AMR surveillance systems for human, animal and environmental health sectors (One Health approach) in the Caribbean. This should work should build on existing infrastructure where possible and Develop AMR data outputs for dissemination, ensuring quarterly and annual AMR reporting to CMS and other partners (aligning with existing CARPHA surveillance products where possible).
- establish protocol for AMR data collection, analysis and reporting, ensuring compliance with and national guidelines.

### **3.2 Data Collection, Analysis & Reporting**

- Interpret data, Identify trends, emerging patterns and high-risk strains
- Establish data flows to CARPHA from CMS that undertake AMR diagnostics in-house
- Process, analyse and integrate datasets from multiple sources including CMS laboratories, the three CARPHA AMR reference laboratories and any other regional reference laboratories
- Set-up AMR data reporting from CARPHA to WHO GLASS, on behalf of all CMS and to complement rather than duplicate any existing reporting.
- Assess antimicrobial consumption and resistance correlation in CMS

### **3.3 Capacity Building & Training**

- Conduct training workshops for healthcare professionals on AMR surveillance and response.
- Develop educational materials/ promotional materials for AMR awareness.
- Develop guidelines for AMR reporting and outbreak response.

### **3.4 Reporting & Documentation**

- Prepare scientific reports, briefs and recommendations based on surveillance findings.
- Provide timely alerts and reports on emerging AMR threats to relevant health authorities.

### **3.5 Other Related Tasks**

- Work with AMR Lead to ensure the activities are implemented in alignment with what is required by the relevant department leads.
- Interact with CARPHA departments and CARPHA Member States, international experts and other stakeholders in accordance with the Projects Operations Manual, including aligning to CARPHA's communication protocols with MS and other stakeholders.
- Other duties that may be implied in the contract or assigned by the Project Director, CARPHA.

#### **4. QUALIFICATIONS AND EXPERIENCE**

##### **Academic Qualification**

- At least a post graduate degree (Master's or above) in Public Health/ Epidemiology, Field Epidemiology, Global Health or related field and experience.

##### **General Professional Experience:**

- Ability to train and mentor health personnel.
- Knowledge of regional public health.
- Ability to work under pressure and meet tight deadlines.
- Knowledge of the health situation in the Caribbean.

##### **Specific Professional Experience:**

- Minimum 5-10 years in public health in areas of field epidemiology, disease surveillance and infectious disease in public health. Experience in AMR or multidisciplinary setting is highly desirable.
- Understanding of laboratory detection and reporting of AMR
- Operating early warning surveillance systems and conducting outbreak investigations.
- Strong data management skills and familiarity with laboratory information systems.
- Ability to communicate effectively with diverse stakeholders.
- Working in a regional public health setting will be an asset.
- Disease/risk modelling would be an asset.
- Ability to initiate, develop, maintain and leverage partnerships with key stakeholders.
- Ability to successfully apply the Agency's communication policies and strategies in interactions with key stakeholders in member states and international partners.
- Extensive knowledge of information management and data analysis issues gained from a public health, scientific or research environment.
- In-depth knowledge of electronic information systems design principles and their applications.
- Ability to think strategically, to set direction and apply a results-based approach.
- Familiarity with public health issues and trends, epidemiological theory, principles and practices and surveillance techniques, systems and procedures.
- Strong analytical and systems-thinking skills with experience of handling complex data and the ability to adapt software systems.
- Considerable experience of collecting, storing, manipulating, analysing and interpreting data from disparate sources bringing them together to provide public health intelligence.
- Excellent problem-solving skills and ability for critical thinking.
- Strong knowledge of Microsoft Office - Word, Excel, PowerPoint, SharePoint, MS Project, etc. Other statistical programs will be an asset.

#### **5. MANDATORY COMPLIANCE:**

#### **6. CHARACTERISTICS OF THE CONSULTANCY**

- Type of Consultancy: Individual

- Duration: June 2025 to March 31<sup>st</sup>, 2026 (first 6 months probationary).
- Place of Work: Caribbean Public Health Agency (CARPHA) HQ, Port of Spain, Trinidad and Tobago (in-person)
- Working Language: English

## **7. CLIENT’S INPUT AND COUNTERPART PERSONNEL**

The Client shall ensure that all consultants are supported and equipped. In particular, the Client must ensure that there is sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. The Client will provide office accommodation, internet connectivity for use during this consultancy and all currently available data, information, documentation and reports to inform assessment, consultations and recommendations. The Consultant shall be required to provide his/her personal computer.

## **8. REPORTING REQUIREMENTS AND TIME SCHEDULE FOR DELIVERABLES**

All payments will be made upon submission and acceptance of monthly invoices and timesheets by the Project Director (CARPHA Technical Lead) or designate.

## **9. COORDINATION**

The **Epidemiologist Antimicrobial Resistance Surveillance** will report to the Project Lead/CARPHA Technical Lead/designate. The Technical Advisor will be responsible for the coordination of activities under the contract, for accepting and approving reports on behalf of CARPHA. The Project Lead will be responsible for receiving and approving invoices for payment and preparing performance evaluation reports.

The **Epidemiologist Antimicrobial Resistance Surveillance** is expected to collaborate, liaise or meet as required with specialist team members in the PEU, CARPHA’s personnel, assigned subject matter experts, executives and stakeholders, and representatives as needed.

## Annex 1: Evaluation Criteria

Selection Component	Evaluation Criteria	Maximum Points
<b>1. Academic Qualifications</b>	Advanced post graduate degree (master's or above) in Public Health/ Epidemiology, Field Epidemiology, Global Health or related field and experience.	25
<b>2. Required Experience</b>	Minimum 5-10 years in public health in areas of field epidemiology, disease surveillance and infectious disease in public health.	15
	Experience in AMR or multidisciplinary setting is highly desirable.	15
	Strong data management and data analysis skills	10
	Ability to communicate effectively with diverse stakeholders.	5
	Excellent problem-solving skills and ability for critical thinking.	5
<b>3. Specific Professional Experience</b>	Ability to train and mentor healthcare personnel.	10
	Knowledge of operating early warning surveillance systems and conducting outbreak investigations	5
	Ability to work under pressure and meet tight deadlines	5
	Knowledge of the health situation in the Caribbean	5
<b>Total Points</b>		<b>100</b>

