



**AfricaCDC**

Centres for Disease Control  
and Prevention



Health Emergency Preparedness  
and Response Authority (HERA)

The Africa Pathogen Genomics Initiative (Africa PGI)  
**Integrated Genomic Surveillance and  
Data Sharing Platform (IGS)**



Co-funded by the  
European Union

In collaboration with:



## Background

Africa CDC Institute of Pathogen Genomics (IPG) was launched in November 2019 and operates under the Division of Laboratory Systems and Networks. IPG coordinate the implementation of molecular diagnostics, pathogen genomics and bioinformatics in National Public Health Institutions (NPHIs) and/or Reference Laboratories (NRLs) across Africa.

Africa CDC and ASLM are coordinating a continental initiative to maximize the benefits of molecular approaches and pathogen genomics for more effective outbreak preparedness, prevention, response, and for the control and elimination of endemic diseases in Africa. One of Africa CDC's flagship initiative is the Africa Pathogen Genomics Initiative (Africa PGI), a partnership that aims to strengthen laboratory systems and enhance genomic surveillance by equipping the continent's public health institutions with the tools, training, and data infrastructure.

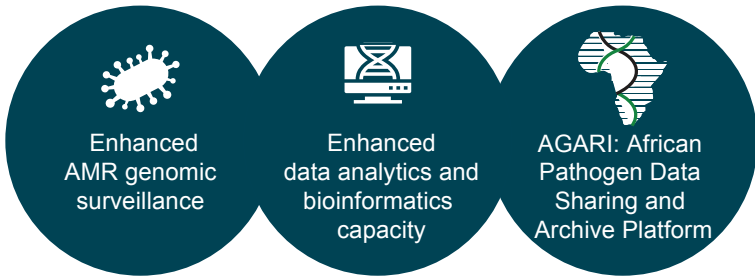
## About the Project

Approximately 700,000 deaths occur globally annually due to infections caused by antimicrobial-resistant (AMR) pathogens. In Africa, western sub-Saharan Africa, is disproportionately affected by AMR relative to other regions. The pervasiveness of AMR in this region threatens to reverse health gains made over the past years, curtailing the achievement of sustainable development goals. Thus, a robust surveillance system to the emergence and spread of AMR, particularly in bloodstream infections (BSIs) which are associated with high morbidity and mortality is much needed. In this project, genomic sequencing technologies will be employed to rapidly analyse genomic sequences, identify markers of resistance, and facilitate timely data sharing to support evidence-based decision-making for public health interventions.

## Project objectives

- to integrate genomic surveillance of selected AMR pathogens with epidemiological importance through timely sharing of high-quality sequencing data on the Africa CDC data sharing platform
- to strengthen the capacity of the Africa CDC laboratory network to support integrated genomic surveillance of AMR (*K. pneumoniae* and *E. coli*) and other priority pathogens
- to support the development and piloting of the Africa CDC data platform to ensure timely sharing of high-quality sequencing data on AMR and other priority pathogens.

# Theory of Change



## Outcomes



Retrospective genomic surveillance of AMR pathogens conducted in selected Member States



Strengthened capacity and trained personnel equipped with the necessary skills and expertise in AMR genomic data analysis and interpretation



Strengthened data analytics capacity, infrastructure, and AGARI platform



## Impact

Genomics integrated into existing AMR surveillance and timely data sharing for public health actions

# Participating Member States



## Contact us

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