

Webinar

'The Role of Laboratory Leadership Programs in Improving Early Detection and Rapid Response to Outbreaks'

September 4, 2025 – 2:00 pm – 3:30 pm CEST

PANELISTS

Mr. Samuel Gidudu,

Program Coordinator of the Laboratory
Leadership Program at Uganda National
Institute of Public Health

Prof. Ibrehima Guindo,

Director of the National Public
Health Institute of Mali

Prof. Bourema Kouriba,

Director of the Centre of Infectiology
Charles Merieux of Bamako, Mali

Prof. Hervé Hien,

Co-chair of the IANPHI Africa Network,
Former director of the National Public
Health Institute of Burkina Faso

MODERATED BY

Dr. Chinwe Ochu,

Vice-Chair of the IANPHI Committee on Pandemic
Preparedness, Response and Recovery,
Director of Planning, Research, and Statistics at the
Nigeria Centre for Disease Control and Prevention

Dr. Alex Riolexus Ario,

Chair of the IANPHI Africa Network,
Director of Uganda National Institute of Public Health

Please keep the **mute function on**, unless you are asking a question.

The webinar is being **recorded**. The recording and speakers' slides will be made available to participants after the webinar.

Please feel free to use the **chat box to ask your questions** and to share comments, ideas and resources related to the discussion.

During the Q&A, if you would like to ask an oral question, **raise your hand and wait for the moderator to give you the floor**.

DISCLAIMER: The views and opinions expressed in this webinar are those of the authors and do not necessarily reflect the official policy or position of IANPHI.



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Public Health

Introduction



Mr. Samuel Gidudu,
Program Coordinator of the
Laboratory Leadership Program
at Uganda National Institute of
Public Health

The Role of Uganda PHFP-LLP in Improving Early Detection and Rapid Response to Outbreaks

Uganda National Institute of Public Health

Role of Uganda's LLP in Improving Early Detection and Rapid Response to Outbreaks

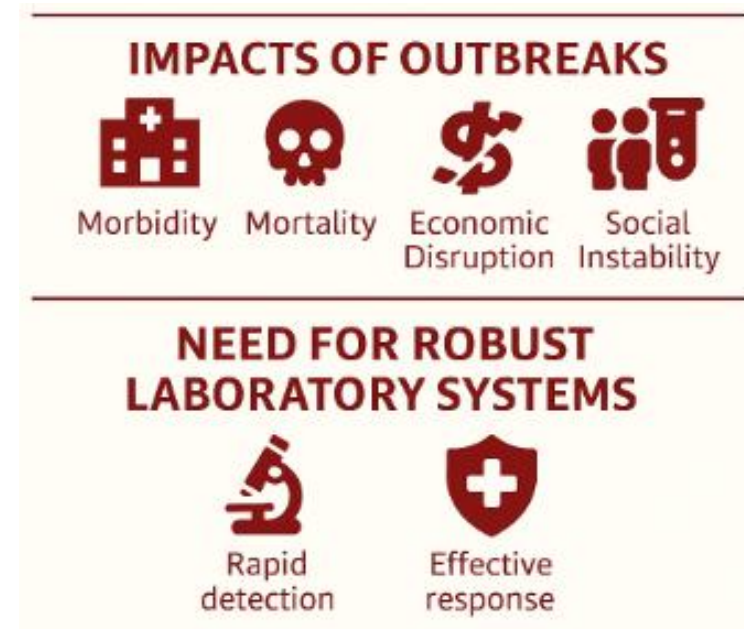
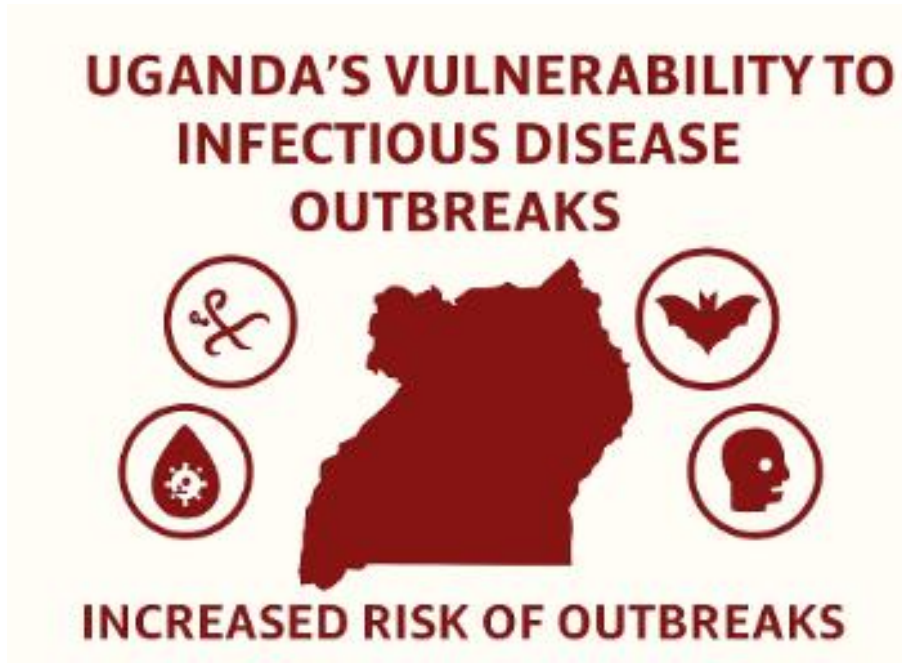
Samuel Gidudu, Program Coordinator
Laboratory Leadership Program



IANPHI Webinar
September 4, 2025



Why Early Detection and Rapid Response to Outbreaks Matters



Laboratory Leadership Program in Uganda

DESCRIPTION



Two-year, part-time,
in-service competency-
based training

STRUCTURE



Didactic



Mentorship



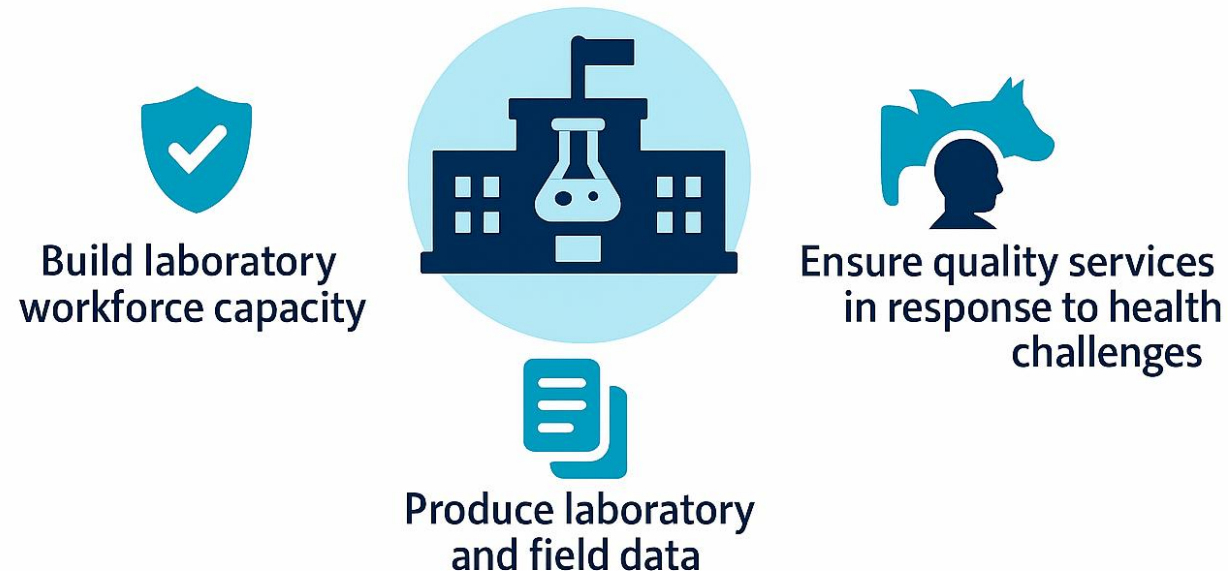
Project



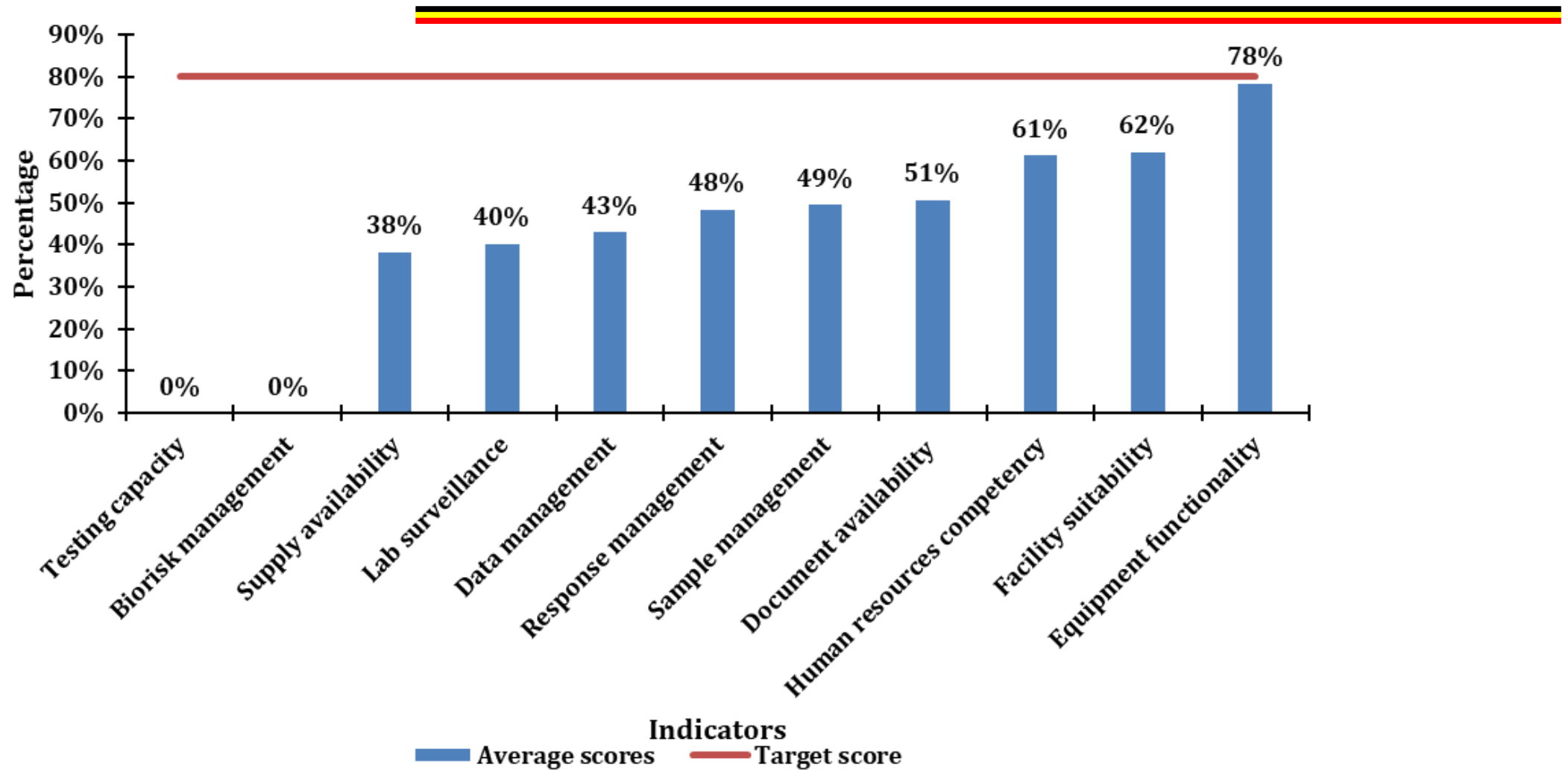
Community
of practice

Goal and objectives

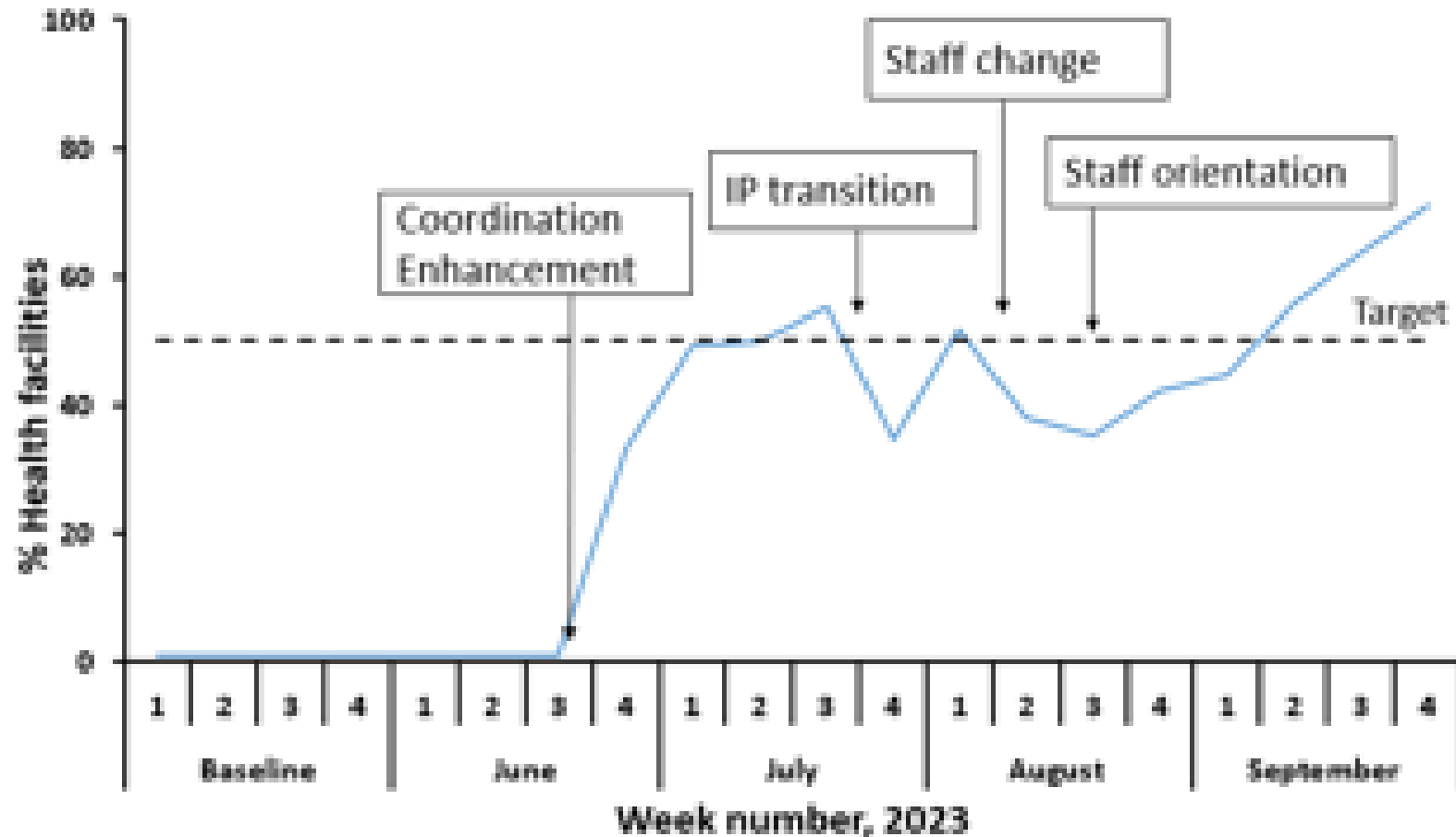
Develop competent workforce of laboratory leaders
able to build and sustain the national laboratory
system that effectively and efficiently respond to
human, animal, and environmental health challenges



Early Rapid assessments



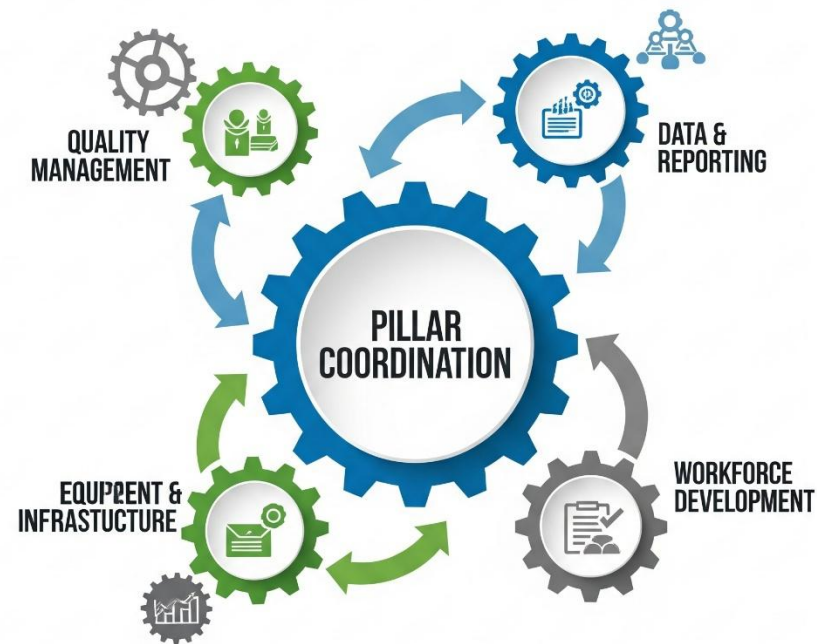
Implementation of Improvement Projects



Joint field investigation and response



Laboratory Pillar Coordination Meetings




Leadership Development




Workforce Strengthening



Development of training materials




The image shows a large, modern, multi-story building with a mix of brick and glass facades. The building has several towers and is surrounded by greenery and a paved area in the foreground. The acronym 'UNHLS' is visible on one of the building's facades.


National Health Laboratory & Diagnostic Services

Outbreak Preparedness and Response Training

MODULE 01: Introduction to Basic Outbreak Preparedness and Response Course

Venue
Facilitator's name
Date

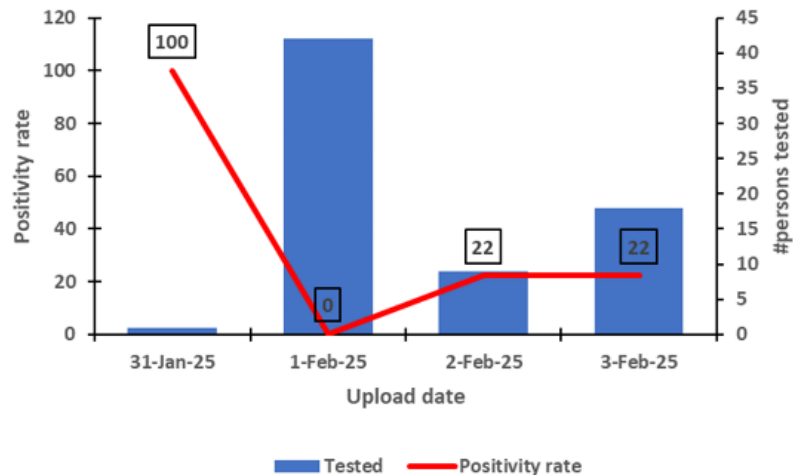


Laboratory response updates

Laboratory update on Ebola outbreak response to National Laboratory Pillar as of Feb 3, 2025 as of 23:59hrs

	Tested (n=70)	Positive (n=7)	Positivity rate
CERSL	62	7	11
UVRI-VHF	8	0	0

Downloaded from RDS on Feb 4, 2025 at 8am



Downloaded from RDS on Feb 4, 2025 at 8pm

Investigating District	Tested (n=70)	Positive (n=7)	Positivity rate
Arua	2	0	0
Kampala	58	6	10
Kassanda	1	0	0
Kibuku	2	0	0
Kotido	1	0	0
Kyegegwa	1	0	0
Luwero	2	0	0
Mbale	1	1	100
Mukono	1	0	0
Soroti	1	0	0

Testing lab	District	Tested	Median TAT (hrs)	
			Collection to Receipt	Receipt to Upload
CERSL	Kampala	54	18 (10-34)	12 (4-44)
	Others	8	38 (10-76)	10 (3-12)
UVRI-VHF	Kampala	4	21 (21-35)	3
	Mukono	1	35	3
	Others	3	59 (40-59)	3 (3-18)
Overall TAT		70	18 (10-76)	12 (3-44)

Downloaded from RDS on Feb 4, 2025 at 8pm

What has been done

1. 2nd national lab pillar meeting held

What to do

1. Re-orient lab response team on EVD sample collection



UGANDA NATIONAL INSTITUTE OF PUBLIC HEALTH

The Uganda Public Health Bulletin: April – June 2025,
2025 Volume 10 / Issue 2 / Article No. 4



Uganda Public Health Fellowship-Laboratory Leadership Program support, achievements, and challenges experienced in response to an anthrax outbreak, Amudat District, June 2024

Authors: Esther Nabatta^{1,2}, Hannington Katumba^{1,7}, Patrick Kwizera¹, Annet Martha Nankya^{1,5}, Rutogire Tracy^{1,6}, Joshua Kayiwa¹, Rebecca Nakidde⁴, Samuel Gidudu¹

Institutional affiliation: ¹Uganda National Institute of Public Health, Ministry of Health, Kampala Uganda; ²National Animal Disease Diagnostics and Epidemiology Center, Ministry of Agriculture Animal Industry and Fisheries, Entebbe, Uganda ³; Amudat District local government, Amudat, Uganda; ⁴National Health Laboratory and Diagnostics Services, Ministry of Health, Kampala, Uganda; ⁵Uganda Virus Research Institute, Ministry of Health, Entebbe, Uganda; ⁶Kampala Capital City Authority, Kampala Uganda

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Technical support supervision

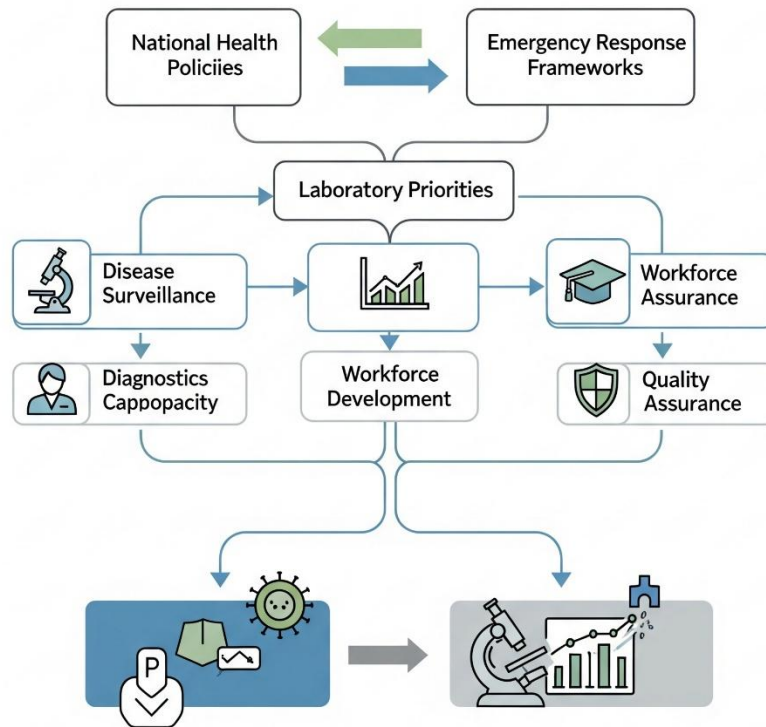


Meeting between national and subnational laboratory response teams



Clinician – laboratory interface meeting



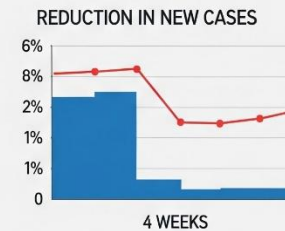
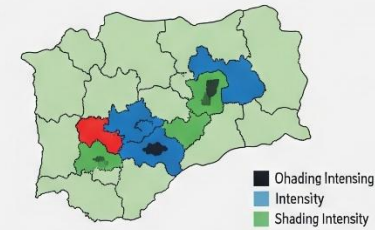


Monitoring and Evaluation

LABORATORY PERFORMANCE TRACKING



OUTBREAK RESPONSE EFFECTIVENESS



- LLP enhances early detection through rapid assessments and field investigations
- Strengthens response via coordination, training, and supervision
- Builds leadership and technical capacity across the lab workforce

Uganda Public Health Fellowship Program

Acknowledgement

- MOH
- US CDC
- APHL
- WHO
- GLLP secretariat
- MakSPH
- Baylor Uganda





Prof. Bourema Kouriba,
Director of the Centre of Infectiology
Charles Merieux of Bamako, Mali

Implementation of the GLLP experience of CICM-Mali

Implementation of the Global Laboratory Leadership Program (GLLP): experience of Center of Infectiology Charles Merieux-Mali (CICM-Mali)

Bourèma KOURIBA, PharmD, PhD

Professor of Immunology

University of Sciences Techniques and Technologies of Bamako

Executive Director

Centre of Infectiology Charles Merieux-Mali

Centre of Infectiology Charles Merieux-Mali

- Established in 2005, in partnership with the government of Mali and the financial support of the “Fondation Christophe et Rodolphe Mérieux”, Mérieux Foundation Lyon, France (**Public-Private partnership**) .
- The aim to fight against infectious diseases in Mali.
- Consists of a diagnostic laboratory named “Rodolphe Mérieux Laboratory”
 - ✓ accredited ISO 15189.
- Training unit equipped with several class rooms and laboratories where students are trained for a Master of Medical Biology.

Centre of Infectiology Charles Merieux-Mali

- Organized two training on the **Global Laboratory Leadership Program** .
- With WHO for central African leaders in human and animal health and environment sectors.
- With Foundation Merieux for Malian leaders in human and animal health sectors.

GLLP /WHO «Afro»

- CICM-Mali signed and MOU with WHO Afro (déc. 2021).
- Scientific committee : OMSA, FAO et OMS
- Five countries in central Africa:
 - ✓ Congo Brazza,
 - ✓ Gabon,
 - ✓ RCA,
 - ✓ RDC
 - ✓ Tchad)
- Animal and human health sectors.
- **Main objective of the training program**
 - ✓ To train current and future laboratory leaders to acquire leadership skills to build, strengthen, and manage national laboratory systems.

GLLP /WHO «Afro»

- **Specific Objectives**

1. Train twenty-five laboratory professionals
2. Prepare 10 to 15 experienced, high-level laboratory professionals to serve as mentors to support participants;
3. Establish synergies and exchanges to strengthen collaboration between national laboratory leaders in the human and animal health sectors at the national and sub-regional (supranational) levels;

GLLP /WHO «Afro»

- **Specific Objectives**

4. Consolidate GLLP content, methodologies, and processes;
5. Create and maintain a virtual discussion and information/experience sharing group for participants;
6. Establish a mechanism to sustain the training outcomes.

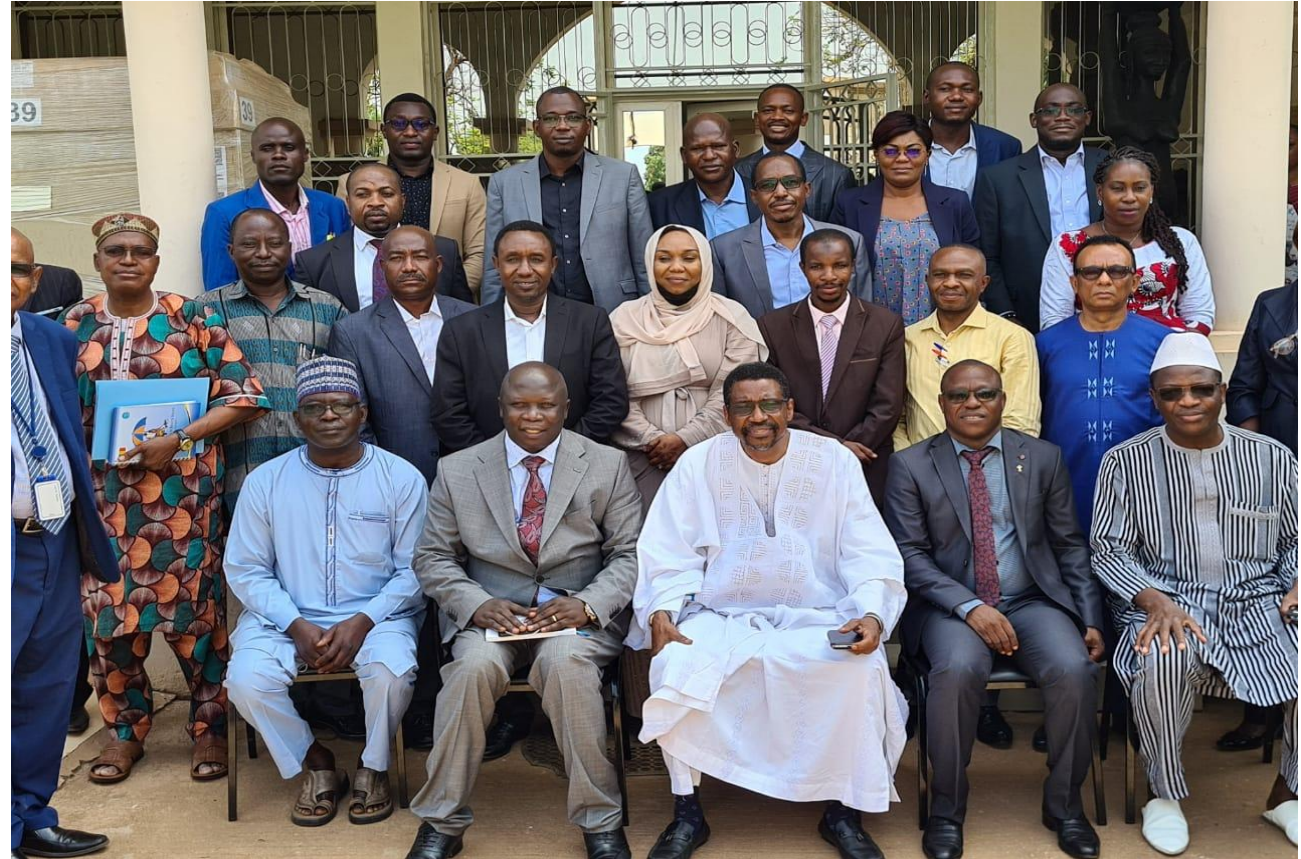
GLLP /WHO «Afro»

- The 12-month program, from May 2022 to April 2023, alternates between two in-person and one online session, and the completion of a personal project per participant.
- Two in-person phases in May and September, and one online phase in June and July. The personal project implementation monitoring phase took place from October to December.
- In April 2023, the final session of presentation of the work was held before a jury, followed by the presentation of certificates.

GLLP /WHO «Afro»



Photo 1: View of the presidium from left to right: the WHO representative, the Secretary General of the Ministry of Health, and the Director General of CICM-Mali



GLLP /WHO «Afro»

- **First in-person session**

- ✓ 25 participants were expected, 21 were able to travel to Bamako and 2 followed online.
- ✓ Eleven facilitators were selected by the CICM based on their areas of expertise to deliver the modules of this training:
 - 4 WHO staff members (2 from the AFRO regional office and 2 from WHO/HQ in Lyon),
 - 1 from the CICM
 - 6 from public and private institutions in Mali.
- ✓ 60 hours of teaching over 10 working days;
- ✓ Face-to-face and remote facilitation for those unable to travel;
- ✓ Didactic sessions and alternating group activities and scenario-based exercises;
- ✓ A presentation of the quality approach at the Rodolphe Mérieux laboratory in Bamako (to obtain ISO 15189 certification).

GLLP /WHO «Afro»

- **First in-person session**

- ✓ **Training Content**

- Introduction to GLLP;
- Introduction to the Laboratory System;
- Laboratory Management;
- Financial Management;
- Human Resource Management;
- Information Systems;
- General Leadership;
- Laboratory Policy and Strategic Planning;
- Organizational Leadership.

GLLP /WHO «Afro»

- **First in-person session**

- ✓ **Participant and facilitator satisfaction assessment**

- **Daily module assessment:** conducted at the end of the day by all participants through the identification in plenary session of the three weaknesses and three strengths of the training.
 - **Final module assessment by participants:** conducted at the end of the training using an individual paper questionnaire, covering course objectives, methods, content, the facilitation team, facilities, and administration.
 - **Final module assessment by facilitators:** conducted after the training using an online questionnaire, covering general coordination, communication, administrative and logistical aspects, pedagogical aspects, evaluation, and the role of the various participants.

GLLP /WHO «Afro»

- **First in-person session**
 - ✓ **Participant Knowledge Assessments:**
 - **Pre- and Post-Test**

GLLP /WHO «Afro»

- **Online session**

- ✓ Of the 25 expected participants, 21 were able to participate online.
- ✓ Nine (9) facilitators from Malian public and private institutions.
- ✓ 12 days of training divided into 2.5-hour sessions twice a week, for a total of 27 hours.
- ✓ The virtual sessions were systematically recorded to allow those absent to access the audio of the course.
- ✓ An alternation between didactic sessions and scenario-based group activities.
- ✓ Course materials were sent electronically.

GLLP /OMS Afro

- **Second in-person session**

- ✓ September 12-23, 2022, with a total of 45.5 hours.
- ✓ The session concluded with a presentation of personal projects in the presence of mentors in front of a five-member jury chaired by Professor Issaka Sagara of the MRTC.
- ✓ 23 participants were expected, 20 were able to travel to Bamako.
- ✓ **Training program:**
 - Message and media relations;
 - Risk communication;
 - Scientific communication;
 - Overview of a model laboratory system;
 - Infectious disease case study.

GLLP /OMS Afro

- **Final Session**

- ✓ Organized in April 2023
- ✓ Four members of jury.
- ✓ Personal projects were presented in French.
- ✓ Each participant had 30 minutes to present their project. Each presentation, were followed by questions.
- ✓ Jury members provided suggestions for improvement.
- ✓ The jury then proceeded to score the results.

- **Result:** Overall, the participants were satisfied.

GLLP /OMS Afro

- **Result:**

- ✓ 19 participants received their certificate of completion
- ✓ Only one received a certificate of participation
- ✓ This training was an example of success

GLLP / Merieux Foundation

- FMx signed the MOU with WHO for training in Mali, Guinea, and Chad.
- CICM-Mali implemented the project in collaboration with the Mérieux Foundation.
- Activities were organized from May 26, 2022, to December 31, 2023, with 14 participants.
- Four (04) training sessions were organized and held at the Centre of Infectiology Charles Mérieux-Mali (CICM-Mali)

GLLP / Merieux Foundation

- During the project implementation, participants were assisted by six mentors, four of whom were from CICM.
- Final session: presentation of project results to a jury.
- Ceremony certificate presentation concluded the GLLP/FMx program at CICM-Mali on November 30, 2023.

GLLP / Merieux Foundation

- Assessment of the implementation of national quality control in public laboratories in Sikasso (according to the Malian GBEA).
- Improvement of bacteriology sample processing during shifts at the medical biology analysis laboratory of the Mali University Hospital
- Improvement of the return of analysis results from the National Health Laboratory according to pre-established requirements and deadlines
- Improvement of the diagnostic capabilities of the Central Veterinary Laboratory (LCV)

GLLP /Fondation Mérieux

- **Points discussed for the future:**
 - ✓ The need to continue training through the GLLP Program—particularly for the cohort that has just completed the missing modules;
 - ✓ How to help participants for implementation of their projects;
 - ✓ Needs to create a Direction of Laboratory system;
 - ✓ How laboratory leaders can be involved in this future direction;



Figure 2: Close up ceremony with certificate



Prof. Ibrehima Guindo,
Director of the National Public
Health Institute of Mali

Leadership and coordination of the laboratory network in epidemic management in Mali

Leadership and coordination of the laboratory network in epidemic management in Mali

Prof. Ibrehima Guindo, PharmD, PhD
Director of National Public Health Institute
Bamako, Mali
iguindo@insp.ml

Outline

Introduction

- I) Context: Epidemic Challenges in Mali**
- II) Rôle of Laboratory Network**
- III) Leadership and coordination**
- IV) Recommendations and future outlook**

Conclusion

Introduction

- Several outbreak occurred past years and now in the World, in Africa
 - ✓ Ebola, CCHV, COVID-19, Dengue, RVF, Chikungunya, etc.
- Preparedness and response :
 - ✓ Risk assessment, Lab capacity assessment, Sample transport.
- Effective leadership and coordination of the laboratory network
 - ✓ essential for timely and accurate disease detection, which directly impacts the success of epidemic management

Country Presentation

- Vast country
- 1.241.00 Km²
- 7 neighboring countries
- 22 million inhabitants
- 20 administrative regions
- 65 functional health districts
- > 1200 Community Health Centers



Map of Mali

I. Context: Epidemic Challenges in Mali

- **Geographic and Socioeconomic Factors:**

- ✓ Large land area and dispersed population affect public health response.
- ✓ Climate change

- **Disease Burden:**

- ✓ Ebola, cholera, measles, Yellow fever, Dengue,
- ✓ etc.

- **Pre-existing Challenges:**

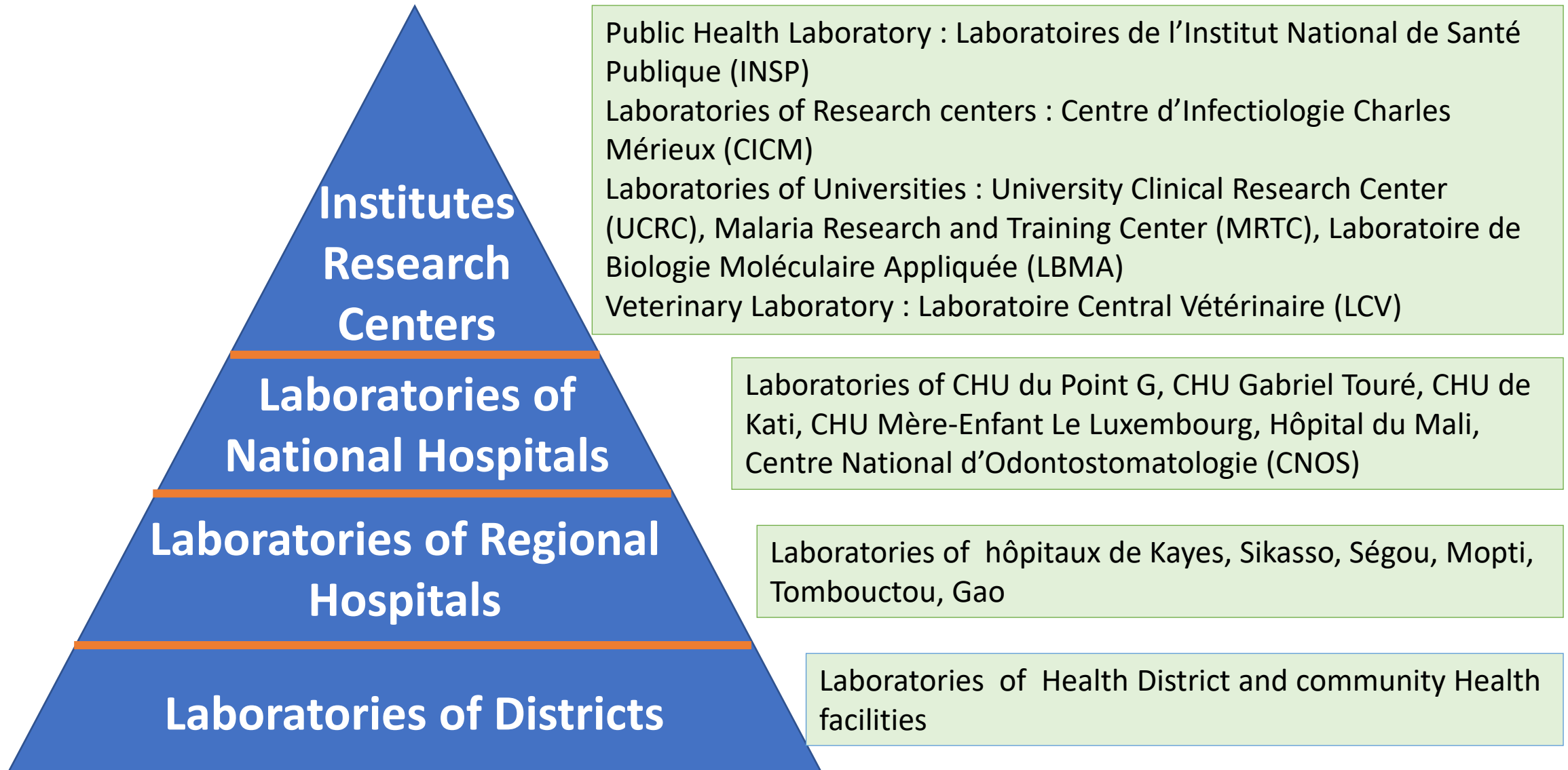
- ✓ Limited capacities : infrastructure, QMS, Biosafety, Human resources, Turn-around time
- ✓ Recent improvements

II. The Role of the Laboratory Network

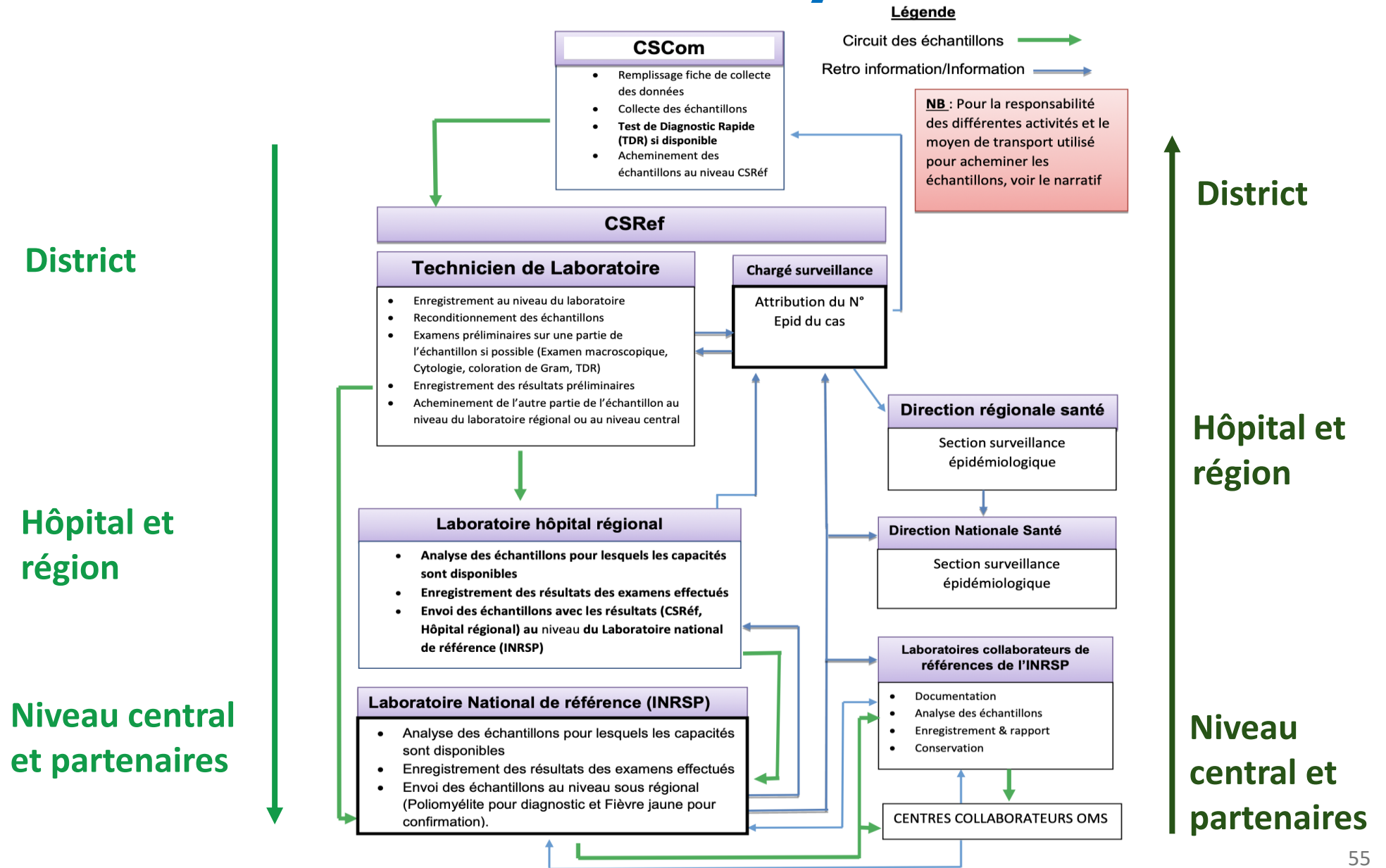
Structure of the Network:

- National reference labs,
- Regional hospital labs,
- National hospital labs
- District labs
- **WHO collaborating centres**
- **Other sectors**
- Regional Direction
- National Direction
- WHO
- Africa CDC
- International network
- Other partner

II. The Role of the Laboratory Network



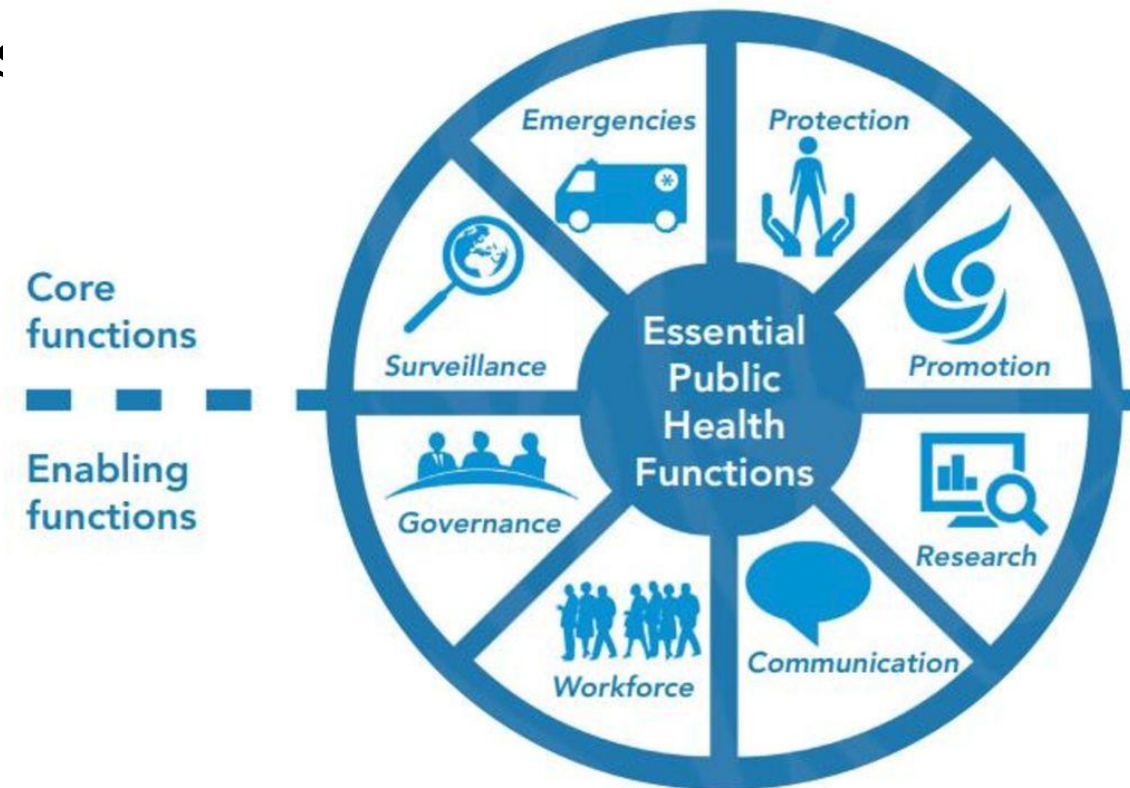
II. The Role of the Laboratory Network



II. The Role of the Laboratory Network

Core Functions

- roles of the lab network in an epidemic, such as:
 - ✓ Sample transportation system
 - ✓ Surveillance and early detection.
 - ✓ Diagnosis and confirmation of cases.
 - ✓ Tracking the spread of the disease.
 - ✓ Research and genomic sequencing.
 - ✓ Continuous risk assessment



III. Leadership and Coordination

Focus: CCHVF outbreak and COVID-19 pandemic

Leadership in Action:

- Lab network is a group on Structured response
- Structured Organisation : coordination, EOC, surveillance and contact tracing, Logistic, care, communication, finance
- Key decisions made (3 groups) :
 - ✓ Who is the lead ?, Periodic meeting and where,
 - ✓ Sample and Transport centralization or zoning, Result in 24h
 - ✓ Equipements, consommables, reagent : wich one and why ??

III. Leadership and Coordination

- **Coordination Mechanisms:**

- ✓ Weekly meeting
- ✓ Daily whatsapp discussion
- ✓ Logistics for sample transport and supply chain management.
- ✓ Standardized protocols for testing and reporting.
- ✓ Result sharing for daily release



III. Leadership and Coordination

Successes and Challenges:

- **Successes:**

- Laboratory networking.
- Reduced diagnostic time,
- Variant follow-up

- **Challenges:**

- Funding gaps,
- Communication breakdowns, security issues
- Reagent
- Certification of lab, equipments



IV. Key Recommendations and Future Outlook

- **Recommendations for Strengthening the Network:**

- ✓ Investing in infrastructure and equipment.
- ✓ Continuous training for lab personnel.
- ✓ Strengthening partnerships with international organizations.



- **Future Outlook:**

- ✓ Improve Role of laboratories, coordination and leadership
- ✓ What lesson to learn from experience and Build a more resilient public health system in Mali



Conclusion

- No laboratory can evolve alone.
- Laboratory networks guide the system for decision making
- The crucial and essential role in being further supported to improve early detection and characterization for a more resilient system.

Thank you for your attention





Prof. Hervé Hien,
Co-chair of the IANPHI Africa Network,
Former director of the National Public
Health Institute of Burkina Faso

Q&A SESSION

If you wish to ask a question, please write it in the chat box or raise your hand and wait for the moderators to give you the floor.

Thank you!