



**USAID**  
FROM THE AMERICAN PEOPLE

## Infectious Disease Detection and Surveillance (IDDS)

### Quarterly Report

**April 1, 2021–June 30, 2021**



*Onsite bench marking during quality management system training at the Moroto Regional Referral Hospital in Uganda*

Submission Date: June 30, 2021

Contract Number: GS00Q14OADU119

Activity Start Date and End Date: May 22, 2018–May 21, 2023

COR/Alternate COR Name: Amy S. Piatek, USAID—Bureau for Global Health

Submitted by: IDDS Team

Denise Johnson, Project Director

ICF

9300 Lee Highway, Fairfax, VA 22031

Tel: +66 (2) 655-8311

Email: Denise.Johnson@icf.com

*This document was produced for review by the United States Agency for International Development  
Washington (USAID/Washington)*

# Table of Contents

List of Abbreviations .....	iii
Program Overview .....	1
Quarterly Progress .....	3
CURRENT AND CUMULATIVE WORK PLAN PROGRESS .....	20
GHS FY 2021 Q3 Achievements.....	21
Burkina Faso.....	21
Cameroon .....	23
Democratic Republic of the Congo .....	25
Guinea .....	27
Indonesia.....	29
Kenya.....	31
Liberia.....	34
Madagascar.....	36
Mali.....	38
Senegal.....	41
Tanzania .....	45
Thailand.....	48
Uganda.....	50
Vietnam .....	53
COVID-19 FY 2021 Q3 Achievements .....	57
Philippines.....	57
American Rescue Plan FY 2021 Q3 Achievements .....	59
India.....	59
GHS Funding for Ebola Virus Disease FY 2021 Q3 Achievements.....	60
Democratic Republic of the Congo .....	60
Guinea .....	62
Liberia .....	65
Mali.....	66
Senegal.....	68
Integrated Disease Surveillance and Response FY 2021 Q3 Achievements .....	69
TB FY 2021 Q3 Achievements .....	70
CORE TB.....	70
Bangladesh .....	71
Burma .....	72
Cambodia.....	73
India.....	74
Tanzania .....	75
Vietnam .....	77
Zimbabwe.....	79

Annex A: Activity Implementation Progress .....	81
Annex B: Success/Highlight Stories.....	82
Annex C: Country Monitoring and Evaluation Tables for GHS and TB.....	83

## List of Figures

Figure 1: IDDS project map .....	2
----------------------------------	---

## List of Tables

Table 1: Project outputs related to strengthening diagnostic networks for FY 2021 Q3 and the countries that contributed to these outputs .....	6
Table 2: Project outputs related to strengthening surveillance systems for FY 2021 Q3 and the countries that contributed to these outputs .....	9

## List of Abbreviations

AMR	Antimicrobial Resistance
ANSS	<i>Agence Nationale de Sécurité Sanitaire</i> (National Health Security Agency)
ASLM	African Society for Laboratory Medicine
AST	Antimicrobial Susceptibility Testing
CBS	Community-based Surveillance
CENAT	Center for Tuberculosis and Leprosy Control
COMMIT	Community Mobilization Initiatives to End Tuberculosis
COVID-19	Coronavirus Disease 2019
CTD	Central Tuberculosis Division
CTRL	Central Tuberculosis Reference Laboratory
DAH	Department of Animal Health
DGSHP	<i>Direction General de la Santé et de l'Hygiène Publique</i> (General Directorate of Health and Public Hygiene)
DHIS2	District Health Information Software, Version 2
DNA	Diagnostic Network Assessment
DR	Drug-resistant
DRC	Democratic Republic of the Congo
DST	Drug Susceptibility Testing
EBS	Event-based Surveillance
EID	Emerging Infectious Disease
EQA	External Quality Assurance
EVD	Ebola Virus Disease
FY	Fiscal Year
GHS	Global Health Security
GX	GeneXpert
HIS	Health Information System
IDDS	Infectious Disease Detection and Surveillance
IDSR	Integrated Disease Surveillance and Response
INRB	<i>Institut National de Recherche Biomédicale</i> (National Institute for Biomedical Research)
INSP	National Institute of Public Health
IR	Intermediate Result

IT	Information Technology
LGU	Local Government Unit
LPA	Line Probe Assay
MDR	Multi-drug Resistant
MoH	Ministry of Health
NASIC	National Antimicrobial Stewardship Interagency Committee
NDD	National Diagnostics Division
NPHL	National Public Health Laboratory
NPHRL	National Public Health Reference Laboratory
NTEP	National Tuberculosis Elimination Program
NTP	National Tuberculosis Program
NTLP	National Tuberculosis and Leprosy Program
NTRL	National Tuberculosis Reference Laboratory
PCR	Polymerase Chain Reaction
QMS	Quality Management System
RAHO	Regional Animal Health Office
RDT	Rapid Diagnostic Test
RPHL	Regional Public Health Laboratory
RRH	Regional Referral Hospital
RTRL	Regional Tuberculosis Reference Laboratory
SIZE	<i>Sistem Informasi Zoonoses dan Emerging Infectious Diseases</i> (System for Zoonotic and Emerging Infectious Disease)
SLIPTA	Stepwise Laboratory Improvement Process Towards Accreditation
SLMTA	Strengthening Laboratory Management Toward Accreditation
SOP	Standard Operating Procedure
SRS	Specimen Referral System
TB	Tuberculosis
TOT	Training of Trainers
TWG	Technical Working Group
USAID	United States Agency for International Development
WHO	World Health Organization

# Program Overview

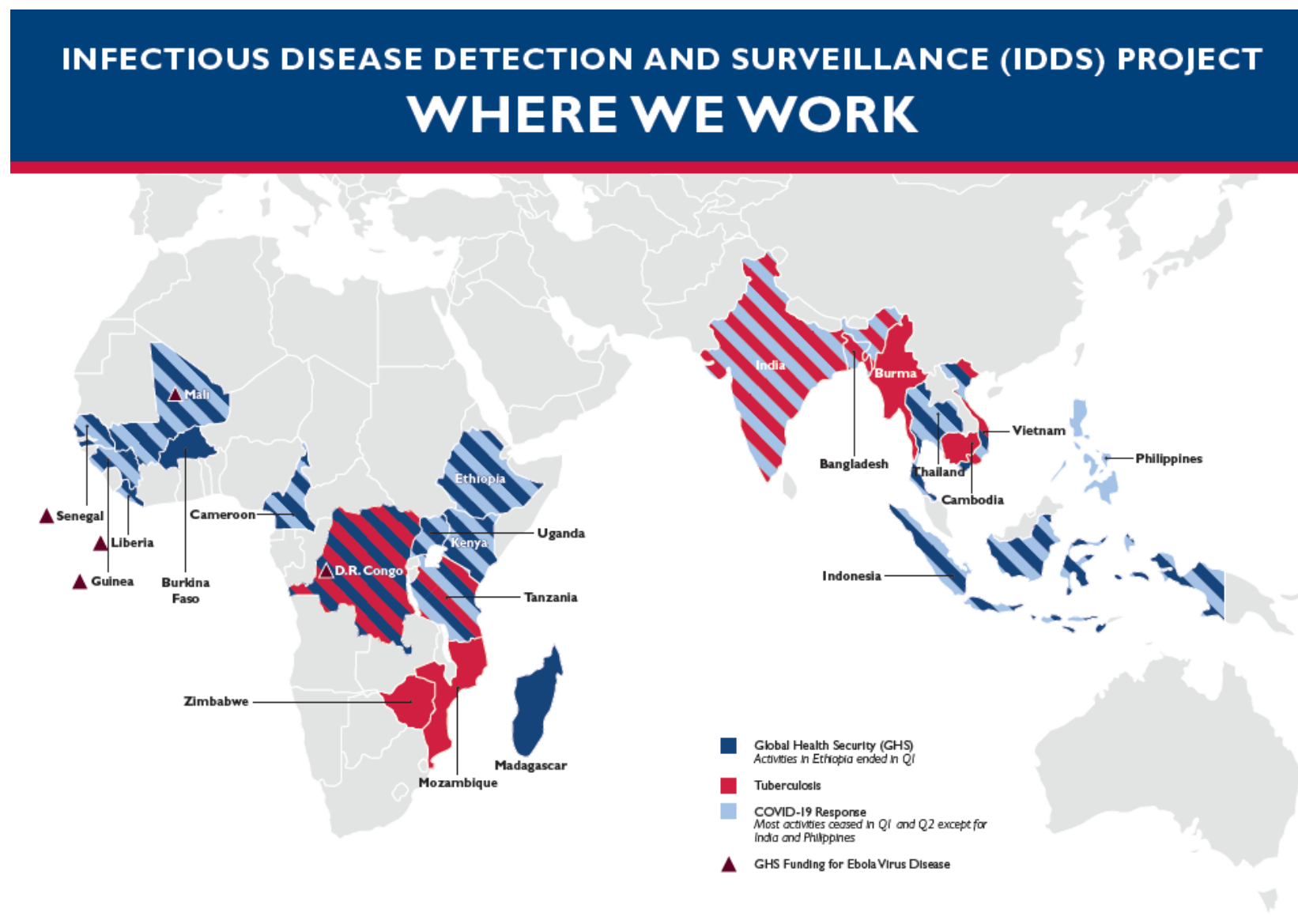
## Summary Overview

<b>Activity Name:</b>	USAID Infectious Disease Detection and Surveillance
<b>Activity Start Date and End Date:</b>	May 22, 2018–May 21, 2023
<b>Name of Prime Implementing Partner:</b>	ICF Incorporated, LLC
<b>Contract Number:</b>	GS00Q14OADU119
<b>Names of Partners:</b>	PATH, FHI 360, African Society for Laboratory Medicine, Metabiota, Abt Associates, Gryphon Scientific, Association for Public Health Laboratories, Fondation Mérieux
<b>Geographic Coverage:</b>	<i>Countries:</i> Bangladesh, Burkina Faso, Burma, Cambodia, Cameroon, Democratic Republic of the Congo, Guinea, India, Indonesia, Kenya, Liberia, Madagascar, Mali, Philippines, Senegal, Tanzania, Thailand, Uganda, Vietnam, Zimbabwe <i>Regions:</i> Regional Development Mission Asia <i>Core:</i> Tuberculosis
<b>Reporting Period:</b>	April 1, 2021–June 30, 2021

## Program Description

The Infectious Disease Detection and Surveillance (IDDS) project is strengthening the capacity of 20 countries in Africa and Asia to effectively detect and monitor outbreaks of infectious diseases, improve identification and reporting of antimicrobial resistance (AMR) pathogens, increase tuberculosis (TB) detection and notification, and strengthen disease surveillance (Figure 1). The project's two primary intermediate result (IR) objectives are to strengthen country-level **diagnostic networks (IR1)** and **surveillance systems (IR2)**.

Figure 1: IDDS project map





# Quarterly Progress

## FY 2021 Q3 Overall Achievements

This report summarizes activities that occurred during quarter 3 (Q3) of fiscal year (FY) 2021 and program year 3: April 1, 2021, through June 30, 2021. This quarter, the project operated 14 Global Health Security (GHS) programs and 8 Tuberculosis programs, served as a critical partner for the U.S. Government's response, including through the American Rescue Plan, to the Coronavirus Disease 2019 (COVID-19) pandemic in 2 countries and the Ebola outbreak and preparedness in 5 countries.

## GLOBAL HEALTH SECURITY

### Strengthening National Diagnostic Networks

IDDS is a key partner for countries in meeting objectives of the Global Health Security Agenda partnership and the U.S. Government's Global Health Security Strategy. Through GHS funding, IDDS is developing national diagnostic networks that are accessible, accurate, adaptable, timely, and integrated. A strengthened network is one that:

- Is reliable and accurate, and provides rapid testing and reporting
- Enables effective communication between patients, clinicians and veterinarians, laboratories, and public health officials
- Spans the tiered levels from point-of-care to national and supranational sites

In FY 2021 Q3, IDDS supported 14 countries to strengthen their diagnostic networks. Key progress in this area is presented in the sections that follow.

### Identifying gaps diagnostic networks and supporting essential components (IR 1.1)

In FY 2021 Q3, IDDS provided support to countries to identify and address gaps in diagnostic networks, which included mapping and assessing existing capacity in diagnostic networks, strengthening national action plans, supporting quality control and assurance of diagnostic services, strengthening capacity for diagnostic testing of AMR and other priority pathogens, and enhancing specimen transport referral and reporting systems.

IDDS country teams **assessed diagnostic capacity** through review, validation, and operationalization of national laboratory plans in two countries (the **Democratic Republic of the Congo [DRC]** and **Madagascar**) and through activities related to mapping the diagnostic network in three countries (**Cameroon, DRC, and Mali**). To strengthen laboratory networks, it is essential to know where laboratories are located, what they can do, the population of their catchment area, and the gaps between national benchmarks and the actual country context. Through laboratory capacity mapping, IDDS continued to provide answers to these questions and used collected data to improve functioning and management of national diagnostic networks. In **DRC**, IDDS provided inputs into the National Laboratory Policy and Strategic Plan, which was submitted to the Director of Laboratory Services and the Directorate General for Disease Control, and in **Madagascar**, IDDS financially supported a workshop to develop a first draft of the National Laboratory Strategic Plan. Related to **mapping the diagnostic**



**network**, IDDS completed trainings for 22 medical doctors, biologists, and laboratory technicians on laboratory mapping and successfully mapped 232 laboratories across 2 provinces in **DRC**. IDDS presented laboratory mapping results from data collected in **Cameroon** during FY 2020 to 20 stakeholders. In **Mali**, IDDS technically and financially supported the *Direction de la Pharmacie du Medicament* to produce, validate, and finalize the diagnostic facilities mapping report for the Bamako, Kayes, Koulikoro, Ségou, and Sikasso regions. IDDS also continued support to the Regional Public Health Laboratories (RPHL) Network in **Thailand** to facilitate videoconferences on COVID-19 variants and biosafety, and maintained the Network website, for which a plan to transition to national ownership was developed.

IDDS worked in five countries to **strengthen the quality of laboratory services and management systems**. In **Cameroon**, IDDS prepared to train central-level Ministry of Health (MoH) staff on using the PlanWise method to inform decision-making on laboratory strengthening and quality services. IDDS provided technical assistance to the National Diagnostics Division (NDD) and the National Public Health Reference Laboratory (NPHRL) in **Liberia** for a countrywide integrated support and supervisory visit for priority infectious disease programs. The integrated visit covered distribution of bacteriology specimen management materials, external quality assurance (EQA) amongst other aspects of quality assurance systems (QMS). IDDS mentored district hospital laboratories on Strengthening Laboratory Management Toward Accreditation (SLMTA)/Stepwise Laboratory Improvement Process Towards Accreditation (SLIPTA), QMS, and routine equipment maintenance related activities in Lofa, Nimba, and Bong counties, and initiated Phebe Hospital Laboratory into the World Health Organization (WHO) Regional Office for Africa EQA scheme for bacteriology. In **Mali**, IDDS provided SLMTA/SLIPTA mentorship at two facilities to move them toward accreditation, finalized improvement plans for the Ségou Regional Hospital and the National Institute of Public Health (INSP), and shared validated biosafety/biosecurity manual and assessment tools with multisectoral committee members to implement quality biosecurity/biosafety activities at diagnostic facilities. In **Kenya**, IDDS and the National Public Health Laboratory (NPHL) virtually trained all AMR surveillance sites on corrective and preventive actions and root cause analysis on unsatisfactory EQA analysis. IDDS also provided technical assistance to three sub-country and referral hospital laboratories on prepare for accreditation on providing bacteriology services, one of which, Murang'a was successfully accredited under ISO 15189:2012. IDDS continued to roll out QMS trainings in **Uganda** using a training of trainers (TOT) model. The country team worked with the national-level trainers they had trained previously to provide trainings on QMS implementation, based on ISO 17025, for national-level animal, veterinary, livestock stakeholders. IDDS technical advisors and the national trainers followed up on the trainings with onsite mentorship and technical assistance for laboratory and quality managers implementing QMS based on ISO 17025 to strengthen detection of priority zoonotic diseases.

Supporting facilities to **improve testing capacity for AMR and priority pathogens** remained a focus this quarter for IDDS in six countries. By building laboratory testing capacities through its programs, IDDS strengthened both AMR and priority pathogen laboratory surveillance. In three countries, IDDS provided mentorship for microbiology. In **Kenya**, IDDS tailored the mentorship visit to address gaps in skills and knowledge to prepare and run quality control checks on critical reagents for AMR testing. IDDS procured gram staining reagents and trained staff on gram stain preparation, internal quality control procedures, and methods to verify in-house prepared stains for standard organisms. In **Guinea**, training focused on similar topics but also focused on antimicrobial susceptibility testing (AST), proficiency testing, and data

management and analysis. To support decentralization of microbiology activities, IDDS procured basic bacteriology equipment, reagents, and consumables. In **Liberia**, IDDS provided mentorship remotely. IDDS also focused on strengthening supply chain and inventory management of laboratory commodities in **Liberia** and **Mali**. In **Liberia**, IDDS developed and distributed laboratory standard operating procedures (SOPs), supported stock assessments for laboratory reagents and consumables, improved documentation, and inventory management of commodities, and strengthened communication between laboratories and pharmacies. In **Mali**, IDDS technically and financially supported the INSP to hold multisectoral committee meetings for laboratory system strengthening and supported the first round of biannual follow-up supervision visits at diagnostic facilities that IDDS had trained in FY 2019. In **DRC**, IDDS completed the draft of the Laboratory Equipment Maintenance Manual, which is currently under review. IDDS work in **Madagascar** included training on sampling, storage, and transportation methods for COVID-19 specimens; procurement of polymerase chain reaction (PCR) equipment; delivery of refrigerators and autoclaves to laboratories; and training on management, governance, and technical aspects related to strengthening laboratory testing capacities.

For four countries, IDDS worked to strengthen the **specimen transport referral and reporting systems** for human and animal health. In **DRC**, IDDS began to assess and map the existing specimen management and referral system in the Eastern region, and in **Burkina Faso**, IDDS met with One Health ministries and stakeholders to validate a document on a national specimen and referral and transport system. IDDS work in **Liberia** and **Vietnam** related to looking at the costs of an integrated specimen referral system (SRS), considering sustainable financing mechanisms, and providing technical assistance on specimen management. In **Liberia**, IDDS met with the NDD to discuss costing for the SRS-based on specimen collection guidelines IDDS had finalized previously, and IDDS also provided technical assistance on specimen management for priority pathogens and transport media for stool specimens. In **Vietnam**, IDDS planned for a workshop to be held in Q4 to advocate for an integrated SRS, obtain cost estimates, and explore sustainable financing mechanisms. IDDS concurrently met with relevant stakeholders to explore the utilization of Social Health Insurance to finance specimen transportation. Finally, IDDS developed a plan, tools, and materials for a pilot of the proposed human health SRS; worked with the Department of Animal Health (DAH) to update national guidelines for SRS to incorporate animal health and began the process to validate these; and prepared for a pilot of the animal SRS.

Throughout all activities, IDDS jointly implemented activities with in-country stakeholders, **building institutional capacity and ownership where possible and creating linkages between stakeholders**. For example, in **Uganda**, IDDS implemented a TOT model to roll out the QMS, training a set of national trainers from the Uganda Wildlife Agency, government, academia, and research sector facilities previously. IDDS then worked with these trainers to further train participants from the following animal veterinary diagnostic sites: the National Animal Disease Diagnostics and Epidemiology Center; Mbale, Moroto, Gulu, and Mbarara Regional Animal Disease Diagnostics and Epidemiology Centers; the National Livestock Resources Research Institute; and the Makerere University College of Veterinary Medicine, Animal Resources and BioSecurity. IDDS also partnered with the Food and Agriculture Organization of the United Nations in **Uganda** for animal health-related work. In **Burkina Faso**, IDDS worked with regional directors from One Health ministries, Davycas International, and Centre Murraz to support creation of a national SRS. In **Vietnam**, IDDS worked with the DAH, the National Center for Veterinary Diagnosis, and Regional Animal Health Offices (RAHOs) to finalize animal health SRS pathways. For laboratory strengthening activities in **Liberia**, IDDS worked closely with county diagnostic

officers to improve documentation and inventory management of commodities. In **Kenya**, IDDS worked closely with the NPHL through joint trainings for all AMR surveillance sites. Finally, IDDS support in **Thailand** included a plan to transition management and maintenance of the RPHL Network website to national ownership.

**Table 1: Project outputs related to strengthening diagnostic networks for FY 2021 Q3 and the countries that contributed to these outputs**

<b>GHS IR 1.1: Gaps in diagnostic networks identified and essential components supported</b>								
	TOTAL	Testing Procedures	Equipment Maintenance	Commodity Management	QMS	Specimen Referral	Biosafety	Other Diagnostic Network Topics <sup>3</sup>
People Trained	250	12	0	18	119	0	0	101
SOPs, Plans, and Guidelines Developed, Revised, or Disseminated	76	15	28	1	31	1	0	0
TWG Group Meetings Held	17	8	0	0	1	3	1	4
Supervisory Visits Conducted	4	3	0	0	1	0	0	0
Items Procured and Delivered <sup>1</sup>	87,915	87,915	0	0	0	0	0	0
Pilots Conducted	0	0	0	0	0	0	0	0
Assessment Reports Completed	4	1	0	0	0	1	0	2
Persons mentored	60	23	10	0	27	0	0	0
<b>Countries<sup>2</sup></b>								
Burkina Faso								
Cameroon		•	•					
DRC								•
Guinea		•	•	•	•			
Indonesia								
Kenya		•			•	•		
Liberia		•			•			
Madagascar		•						•
Mali					•		•	
Senegal		•						
Tanzania				•				
Thailand								
Uganda					•			
Vietnam						•		

<sup>1</sup> Items procured include equipment, supplies, or reagents for either diagnostic or surveillance activities, as per the approved work plan.

<sup>2</sup> Countries listed are those that contributed to specific outputs in Q3. Countries that are working toward an output but have not achieved it are not included.

<sup>3</sup> Outputs that encompassed more than one of the topic areas (e.g., commodity management and biosafety) are reported as “other diagnostic network topics” to avoid double counting.

## Integrating appropriate diagnostic network components among various infectious diseases (IR 1.2)

To support country efforts in strengthening their diagnostic networks, in FY 2021 Q3, IDDS provided **technical, financial, and operational assistance for One Health platforms and policies** by integrating diagnostic network components through technical assistance for coordinating platforms, developing testing standards and providing training for QMS for zoonotic diseases, and enhancing integration of human and animal health specimen transport referral and reporting systems. IDDS supported the One Health Laboratory Network Sub-Working Group in **Indonesia** to facilitate a virtual meeting on mapping *leptospira serovar* for diverse participants from ministries, professional organizations, and international partners. IDDS also collaborated with the Coordinating Ministry for Human Development and Cultural Affairs to disseminate a policy brief on Cross-Sectoral Zoonosis/Emerging Infectious Diseases (EIDs) Detection and Surveillance. In **Uganda**, IDDS revised tiered testing standards across human and animal health for priority zoonotic diseases to include the minimum reagents and consumables required to make animal laboratories operational at each tier. IDDS also provided training and mentoring to facilitate the implementation of QMS at animal veterinary diagnostic facilities across the country to strengthen the detection of zoonotic diseases. IDDS enhanced integration of specimen referral and transport systems in two countries: **Burkina Faso and Vietnam**. In **Burkina Faso**, IDDS organized a meeting for representatives from national referral laboratories, teaching hospital laboratories, and regional directors from the One Health ministries, among others, to validate a document on an integrated national specimen referral and transport system. In **Vietnam**, IDDS worked with the DAH to update guidelines for specimen management to include animal health and finalized animal health specimen referral pathways to prepare for an upcoming pilot of the animal health SRS.

## Improving capacity to detect priority pathogens and AMR (IR 1.3)

As part of **building capacity to detect priority pathogens and AMR**, in FY 2021 Q3, IDDS worked closely with in-country stakeholders, contributing to reviewing and revising national AMR strategic plans, action plans, guidelines, and SOPs, providing training on detection of AMR and priority pathogens, strengthening supply chains by sharing data and collaborating across stakeholders, and procuring necessary equipment to improve diagnostic capacity in several countries.

As part of **strengthening national policies and action plans**, in **DRC**, IDDS met with the Directorate of Epidemiologic Surveillance on plans to collaborate and implement improvements to enhance priority pathogen detection. In **Cameroon**, IDDS translated SOPs for veterinary microbiology procedures from English into French and distributed copies of the SOPs at the National Veterinary Laboratory's microbiology laboratory, and in **Kenya**, IDDS worked with the NPHL to send bacteriology isolates referral guides to all AMR surveillance sites. IDDS provided **training on AMR and priority pathogen detection and surveillance** this quarter in **Kenya and Senegal**. In addition, in **Kenya**, IDDS developed AMR training materials for the MoH e-learning academy, which the MoH uploaded onto its e-learning academy platform.<sup>1</sup> An IDDS diagnostic specialist embedded in the National Antimicrobial Stewardship Interagency Committee (NASIC) secretariat also supported coordination of AMR surveillance activities in the country.

<sup>1</sup> The training is available at: <https://elearning.health.go.ke/course/index.php?categoryid=68>

An important part of improving diagnostic capacity is to also **strengthen commodity quantification, forecasting, and procurement**. In **Tanzania**, IDDS provided on-the-job training to key laboratory personnel and hospital pharmacists on the redesigned electronic logistics management information system for AMR sentinel sites. An expected outcome of this training is timely monthly reporting of stock statuses and improved data visibility across stakeholders for decision-making. In **Kenya**, IDDS engaged with the United States Agency for International Development (USAID)-funded Afya Ugavi project to discuss collaboration to strengthen laboratory supply chains. IDDS also provided technical assistance and guidance on entering equipment placement agreements with bioMérieux and Beckton and Dickson to three counties. Finally, IDDS also **procured essential diagnostic equipment** and materials in **Cameroon**, where it procured basic AMR reagents and microbiology diagnostic equipment, in **DRC**, where it distributed laboratory consumables, and in **Kenya**, where sites received 80 percent of procured microbiology commodities planned for FY 2021 to strengthen diagnostic capacity of AMR surveillance sites.

## Strengthening National Surveillance Systems

IDDS is working to strengthen national surveillance systems at all levels of the health system in countries in which it is operating. By bolstering comprehensive surveillance and response systems, in which surveillance and laboratory data and human and animal health surveillance systems are integrated, IDDS aims to support countries to rapidly and effectively detect events of significance for public health, animal health, and health security. In FY 2021 Q3, IDDS supported countries to strengthen indicator-based surveillance, event-based surveillance (EBS), and community-based surveillance (CBS); strengthen AMR and priority pathogen surveillance; and strengthen interoperability between human and animal health and health security information systems.

### Identifying and addressing gaps in surveillance systems (IR 2.1)

IDDS implemented several activities related to **understanding the surveillance system** in countries by reviewing existing indicator-based surveillance, EBS, and CBS, and providing capacity building and technical assistance to address gaps and expand the system. In **Madagascar**, IDDS completed a report on its surveillance systems assessment for the country, which included an evaluation of the epidemiological components of 28 priority diseases and events to support an integrated disease surveillance approach, and another evaluation of the sentinel surveillance system. Findings from the assessment are expected to inform activities that IDDS and other partners can implement to address identified gaps. IDDS also worked with the MoH to validate the National Surveillance Strategic Plan and technically and financially supported the release of three, monthly electronic surveillance bulletins.

To **strengthen and expand existing surveillance systems**, IDDS provided capacity building and technical assistance activities in three countries in Q3. In **Burkina Faso**, IDDS continued implementation of EBS activities through joint quarterly supervision visits with representatives from the Ministries of Health, Animal Resources and Fishery, and Environment, and submitted data through the One Health electronic platform. IDDS continued support of CBS activities in **Mali**, where it provided technical and financial support to the *Direction General de la Santé et de l'Hygiène Publique* (DGSHP, or General Directorate of Health and Public Hygiene) for a workshop to develop a CBS expansion plan for the entire country. Participants of the workshop included key multisectoral One Health representatives from all tiers of the health system and other partners. IDDS also supported the DGSHP to conduct surveillance reporting data reviews through the District Health Information Software, version 2 (DHIS2) and provided feedback

on data completeness and timeliness to all reporting facilities; provided technical and financial support for the first round of the quarterly integrated disease surveillance and response (IDSR) data reviews; and provided coordination, technical, and financial support to develop annual and monthly bulletins. In **Vietnam**, IDDS supported EBS expansion by producing and printing communication materials for communities to understand EBS signals of disease outbreaks and public health events of concern and provided online technical support for EBS data quality reviews.

**Table 2: Project outputs related to strengthening surveillance systems for FY 2021 Q3 and the countries that contributed to these outputs**

Result area: GHS IR 2.1: Gaps in core functions of surveillance systems identified and essential activities supported							
	TOTAL	Interoperability		Electronic Reporting	Data Quality	Data Analysis and Use	Other Surveillance Topic <sup>3</sup>
People Trained	177	0		147	0	30	0
SOPS, Plans, and Guidelines Developed, Revised, or Disseminated	11	0		1	2	1	7
TWG Group Meetings Held	18	3		2	0	0	13
Supervisory Visits Conducted	9	0		2		0	7
Items Procured <sup>1</sup>	3,298	0		54	3,244	0	0
Pilots Conducted	2	0		2	0	0	0
Assessment Reports Completed	1	1		0	0	0	0
Persons mentored	0	0	0	0	0	0	0
Countries <sup>2</sup>							
Burkina				●			●
Cameroon				●			
DRC							
Guinea							
Indonesia		●					●
Kenya							
Liberia							
Madagascar							
Mali				●			●
Senegal				●	●	●	●
Tanzania					●		●
Thailand							
Uganda							
Vietnam				●	●	●	

<sup>1</sup> Items procured in Q3 include logbooks and EBS posters for community

<sup>2</sup> Countries listed are those that contributed to specific outputs this Q3. Countries that are working toward an output, but have not achieved it, are not included.

<sup>3</sup> For FY 2021 Q3, other surveillance topics include One Health and cross sectoral surveillance, and community based surveillance. I



## Improving interoperability and interconnectedness across national disease reporting systems (IR 2.2)

To strengthen surveillance systems in FY 2021 Q3, IDDS worked toward **interoperability across national disease reporting systems** by bolstering linkages between human and animal health and disease data collection and reporting, building capacity to improve connectedness between the human and animal health sectors, and providing technical assistance to integrate information systems across these sectors.

IDDS **enhanced data sharing and use across disease reporting systems** in several countries. In **Burkina Faso**, IDDS continued operational support of the One Health multisectoral platform, and administrative and technical support for the preparation of the One Health council meeting, which will be chaired by the prime minister. In **Uganda**, IDDS finalized the *National Strategy for Coordinated Surveillance of Priority Zoonotic Diseases in Uganda 2021-2025*. While collaborating with health sector ministries in **Indonesia**, IDDS led the development of the Gap Analysis *Sistem Informasi Zoonoses dan Emerging Infectious Diseases* (SIZE, or System for Zoonotic and Emerging Infectious Disease) document, which informed the development of SIZE 3.0 and its Roadmap by the Indonesian Agency for the Assessment and Application of Technology. IDDS provided technical and facilitation support to develop the SIZE Roadmap with a broad range of stakeholders. Part of this process was to support the Ministry of Agriculture in developing a budget plan for SIZE implementation and to plan for its scale-up. IDDS also worked with the Coordinating Ministry for Human Development and Cultural Affairs to coordinate a meeting to build cooperation among human, animal, and environmental sector stakeholders for extended spectrum beta-lactamase *E. coli* surveillance. In **Vietnam**, IDDS worked to operationalize its plan to strengthen use of the Vietnam Animal Health Information System. IDDS and RAHOs began monitoring and providing virtual technical support at the provincial level to improve animal disease reporting through the Vietnam Animal Health Information System. IDDS provided technical assistance to involve Sub-Department of Animal Health leaders in reporting and to build ownership of the system for reporting animal diseases. IDDS also provided mentorship to provincial health staff to begin EBS data collection and reporting. Finally, IDDS is adapting standard assessment tools and providing online technical support to the Vietnamese provincial Centers for Disease Control staff for site visits and supportive supervision to lower-tier facility staff for EBS in the country.

Another IDDS mandate is to provide **technical assistance and capacity building to develop real-time linkages across information systems and sectors**. IDDS worked extensively with in-country stakeholders to coordinate and facilitate workshops and document outputs, and also developed a series of training materials, tools, and guidelines to strengthen surveillance across several countries. In **Burkina Faso**, IDDS provided technical support to integrate updates into an IDSR guide and to validate the updates during WHO-led workshops. In support of the COVID-19 response in the country, IDDS supervised Rapid Response Teams against COVID-19 and established a platform for the MoH to monitor COVID-19 vaccinations. IDDS also provided training on the One Health platform at vaccination sites, provided training and supervision of health workers providing COVID-19 vaccines, developed an international COVID-19 vaccination card with a QR code to verify nationally and internationally whether the cardholder is vaccinated, and developed an Android application for use at facility and community levels by community health workers. It is expected that the Android application can also be used by other community-level EBS activities in addition to COVID-19 surveillance. IDDS also continued its support for One Health-based CBS activities in **Senegal**, where it developed terms of reference for training using



nationally developed and validated CBS training guides for nurses, livestock agents, and community health volunteers. In addition, IDDS continued its monthly supportive supervision in supported districts.

### **Improving capacity to conduct surveillance of priority pathogens and AMR (IR 2.3)**

IDDS **built capacity to strengthen AMR and priority pathogen surveillance** in seven countries in FY 2021 Q3. To do this, IDDS reviewed and revised AMR strategic plans to inform policy on AMR surveillance, finalized AMR surveillance plans, strengthened capacity at AMR sentinel surveillance sites, and supported AMR reporting systems.

For four countries, IDDS implemented work to support **policymaking for AMR and priority pathogen surveillance**. In **Uganda**, IDDS finalized guidelines for routine quality assessment of animal health data. In **Tanzania**, IDDS's work to implement the pilot for wound-site specimen AMR surveillance will inform processes to collect high-quality AMR data and inform policy at the national level. In **Kenya**, IDDS finalized the AMR surveillance interoperability roadmap for the country and began development of a technical guide for interoperable health information systems (HIS) and laboratory information systems. In **Cameroon**, IDDS supported training related to initiation of a One Health AMR pilot surveillance program and provided mentoring to sentinel sites on the use of WHONET and data reporting to the WHO Global Antimicrobial Resistance and Use Surveillance System.

This quarter, IDDS **strengthened capacity of AMR sentinel surveillance sites** by providing technical assistance on AMR data sharing and use, improving quality of AMR data, and building technical capacity in areas of importance for AMR surveillance. In **Kenya**, IDDS worked with the Fleming Fund to provide technical assistance to the NASIC to develop AMR surveillance dashboards to share AMR data more broadly. In **Senegal**, as part of improving the quality of surveillance data, IDDS provided finalized registers to 12 private sector facilities and focal points for DHIS2 data collection for reporting. IDDS also built AMR sentinel site technical capacity in **Tanzania** by training laboratory staff on biosafety and biosecurity and bacterial isolates management, procuring sheep blood for microbiology laboratories to improve bacterial isolation rates and viable hemolysis, engaging the Tanzania Postal Corporation to provide courier services for bacterial isolates from facilities to the NPHL, finalizing supportive supervision checklists for AMR surveillance, conducting data quality review meetings for more than 100 participants, and distributing registers to collect standardized AMR data to improve data quality. IDDS also **supported AMR reporting** in **Senegal** through technical support to the Directorate of Laboratories to develop tools and guidelines for AMR data collection and reporting into DHIS2. IDDS also trained facilities to report into DHIS2; as a result, this quarter, four of seven supported sites, initiated AMR data reporting into DHIS2 in line with national surveillance guidelines. Finally, in **Kenya**, IDDS continued to monitor implementation of the data quality improvement plans, which had been developed jointly with AMR surveillance sites, NASIC, and the NPHL in FY 2021 Q2, and provided technical assistance to implement actions from the data quality improvement plans, such as communicating with clinicians to completely fill out laboratory test request forms.

## **COVID-19**

IDDS responded to the COVID-19 pandemic to increase country capacity to transport and test COVID-19 specimens, partly funded by the American Rescue Plan. In FY 2021 Q3, IDDS supported two countries in COVID-19 specimen transportation, training and technical assistance, and procurement of essential equipment and supplies.

### Specimen collection and transport

IDDS reinforced specimen transportation in the **Philippines**. IDDS hired staff in Manila to manage and oversee activities for the city and created field teams for each province and Manila. IDDS also contracted four vehicles to transport specimen transport in Bulacan, Palawan, and Rizal provinces. IDDS and the local government unit (LGU) of Palawan finalized the specimen referral mechanism, and in Rizal, IDDS finalized the list of collection unit locations and specimen pickup frequency. The transportation of specimens in all three provinces is ongoing. In addition, IDDS transported specimens from collection sites in Bulacan and Palawan provinces to the Philippine Genome Center in Manila for genome sequencing in May and June.

### Training and technical assistance

IDDS provided training and technical assistance in the **Philippines** and in **India** for COVID-19 this quarter. In Philippines, the team worked with LGUs in the three supported provinces to plan for trainings on safe specimen collection, packaging, and transportation. IDDS trained healthcare workers in person in Bulacan and virtually in Palawan. Planning is underway for training in Rizal in Q4. In India, IDDS identified a senior diagnostic specialist and a COVID-19 project coordinator to support the development and adaptation of SOPs and training materials, lead training and mentorship of laboratory staff, and guide EQA activities.



### Procurement

IDDS supported procurement activities in the **Philippines** and in **India** this quarter. It also delivered outstanding procurements to **Indonesia, Senegal, Tanzania, and Vietnam**, although these country programs have now ended. In the **Philippines**, IDDS initiated procurement of PCR kits and swabs based on a request from the mission. IDDS also submitted a list of PCR extraction reagents and is waiting for feedback from the mission. IDDS ordered specimen transport boxes for Bulacan, Palawan, and Rizal provinces; IDDS handed over the specimen transport boxes to Bulacan and Rizal this quarter and has scheduled the handover in Palawan. In **India**, IDDS finalized the number of GX Express SARS-CoV-2 cartridges and Truenat tests to procure. IDDS developed and shared purchase orders for 67,000 GX cartridges and 106,500 Truenat tests with vendors. IDDS also initiated discussions with the mission and India's Ministry of Health and Family Welfare to identify supported sites and quantities of tests to be delivered to each site.

## GHS SUPPORT TO EBOLA VIRUS DISEASE

In FY 2021 Q3, IDDS continued implementing activities related to supplemental GHS funding to support a response and preparedness to Ebola Virus Disease (EVD) in five countries. IDDS activities included planning for and implementing EVD diagnostic strengthening activities, such as supporting specimen transportation and tracking, providing diagnostic training and technical assistance, bolstering information management systems for EVD, and improving diagnostic capacity through Xpert Ebola assay quality assurance and procurement of essential commodities.

### Specimen transportation and tracking

This quarter, IDDS worked to strengthen specimen transport in one country—**Guinea**. IDDS printed SOPs and developed a handwritten letter for the National Directorate of Laboratories in the country.

### Diagnostic training and technical assistance

IDDS provided substantial diagnostic training and technical assistance to respond to and prepare for EVD this quarter in four countries. In **Guinea**, IDDS organized three sets of trainings on contact tracing and case definition, supported rollout and trainings on rapid diagnostic tests (RDTs) for cadaveric surveillance, and began technical assistance. IDDS continued to provide onsite mentorship for specimen collection, internal quality control, and laboratory result management to national stakeholders. IDDS also transported 1,200 RDT kits, which were handed over to the Regional Health Directorate in Nzérékoré and distributed 800 RDTs to 18 health areas and the regional hospital in Nzérékoré, enough to cover a 90-day enhanced surveillance period. Finally, IDDS developed a presentation with USAID to detail the rollout and use of the RDT trainings in Guinea and shared it widely. Similarly in **DRC**, IDDS collaborated with in-country stakeholders to plan for the rollout of RDT and met with the Centers for Disease Control and Prevention, local and national officials, and other partners to detail each partner's role for training related to the RDT rollout. In **Liberia**, IDDS participated in the laboratory TWG and supported the development and dissemination of Ebola specimen collection guidelines, EVD training materials, and an EVD laboratory testing capacity assessment checklist for the NPHRL. IDDS also provided additional technical assistance on assessing EVD laboratory testing capacities using the developed checklist. In **Mali**, to strengthen laboratories, IDDS met with the INSP to plan for training INSP and regional hospital laboratory personnel on EVD molecular testing. IDDS also worked with the INSP to develop training modules on safe specimen collection, packaging, and transport, EVD molecular testing, and EVD RDT utilization. IDDS also provided training and technical assistance for surveillance and contact tracing. IDDS planned for and developed TOR for trainings for health professionals on topics such as early detection, contact tracing, case investigation, surveillance reporting, protocols, SOPs, and suspect case management. IDDS also planned for and conducted CBS trainings for community health center staff and community health workers. The training covered detection of 24 diseases and events under surveillance, including EVD, and reporting through text message on the Frontline SMS platform. IDDS also procured CBS-related communication equipment, which were handed over to the regional health director. In **Senegal**, IDDS largely supported logistics around planning for training this quarter, such developing terms of reference and a training plan for a training for nurses and district health management teams.

### Information management system

This quarter, IDDS implemented this activity in two countries. In **Guinea**, IDDS began to configure key laboratory variables and indicators for EVD data into the existing health management information system. In **Senegal**, IDDS supported the development of an EVD tracker in DHIS2 that will allow for following and contact tracing of suspected EVD cases, rather than aggregating them as currently done in the routine surveillance system. IDDS also participated in the technical development of the DHIS2 tracker application for Ebola and developed terms of reference for validating the EVD tracker.

### Xpert Ebola assay quality assurance

This quarter, IDDS carried out this activity in one country. In **Guinea**, IDDS held initial discussions with the laboratory in Nzérékoré and began development of the Xpert Ebola assay quality assurance plan.

### Procurement

IDDS supported procurement activities in four countries this quarter. In **DRC**, IDDS finalized a list of priority laboratory reagents and commodities to procure and placed an order of 1,000 GX cartridges from Cepheid. In **Guinea**, IDDS planned to procure 1,000 GX cartridges, but only 500 were available to be delivered; IDDS is working on plans for the formal handover. IDDS also handed over 50 cooler boxes to the National Health Security Agency in the country.

## INTEGRATED DISEASE SURVEILLANCE AND REPORTING

In FY 2021 Q3, IDDS, through collaboration with the World Health Organization African Regional Office, provided support for IDSR in two countries—**Cameroon** and **Senegal**. For both countries, IDDS provided technical and operational support for the rollout of the third edition of the WHO-developed IDSR guidelines through TOT workshops held this quarter in **Cameroon** and planned for in Q4 in **Senegal**.

## TUBERCULOSIS

### Strengthening National Diagnostic Networks

IDDS is implementing programs globally to strengthen TB diagnostic networks with both core and field funding from USAID. Through its work, IDDS is building diagnostic capacity for drug sensitive TB, drug-resistant (DR)-TB, and multi-drug resistant (MDR)-TB case detection and enhancing capacities of national and regional reference laboratories and staff in the eight countries where IDDS operated in FY 2021 Q3.

#### Identifying and addressing gaps in diagnostic networks (IR 1.1 TB)

Activities this quarter focused on preparing for and conducting TB diagnostic network assessments (DNAs), strengthening the TB SRS, expanding use of GeneXpert (GX), strengthening leadership and management of and within the TB network, expanding TB diagnostic connectivity solutions, and strengthening engagement with the private sector.

IDDS supported the **preparation and implementation of TB DNA**-related activities in several countries this quarter. In **Bangladesh** and **Burma**, the TB DNA was delayed by the COVID-19 pandemic; however, IDDS met with national laboratory working groups in **Bangladesh** and the USAID mission in **Burma** to make plans for the TB DNA. In **Burma**, IDDS began analysis for the TB DNA using available 2019 data to understand the network and NTP workload prior to the pandemic. In **Tanzania**, IDDS provided technical and logistical support and trained staff from the Central Tuberculosis Reference Laboratory (CTRL) and

the National Tuberculosis and Leprosy Program on the TB DNA, supported the self-assessment, and coordinated and financed the verification phase site visits and stakeholder interviews. In **Vietnam**, the TB DNA report was finalized and submitted. **Core TB** funding moved forward many activities this quarter. IDDS revised the Manual for Assessors, training tools, and TB-NET checklists to allow for remote TB DNA implementation. The team is currently translating the tools into French for use in TB DNAs in French-speaking countries. IDDS completed development of an electronic version of the TB-NET tool. IDDS also completed a first draft of the pediatric-specific checklist. IDDS piloted the electronic TB-NET tool and the pediatric-specific checklist during the TB DNA in **Tanzania** and will review for future DNAs. The IDDS-developed tracking tool for laboratory network analyses in USAID priority countries, which tracks network analyses requests and status, was reviewed on a weekly basis with USAID starting this quarter. IDDS also mobilized geographic information systems, data, and TB diagnostics experts to support laboratory analyses. IDDS completed data compilation in **Afghanistan, Kenya, Mozambique, the Philippines, Tanzania, and Zambia**, and initiated data compilation in **Bangladesh, DRC, and Indonesia**. IDDS also completed data reviews and cleaning for **Afghanistan, Kenya, and Mozambique**, and completed a detailed data analysis of the TB diagnostic network for **Afghanistan and Mozambique** and a partial provincial analysis for the **Philippines**. The reports and recommendations for improving access and reach of the TB diagnostic networks were also shared and discussed with respective National TB Programs.

IDDS implemented activities to **strengthen the TB SRS** in **Vietnam** this quarter. The country team conducted a baseline assessment in five provinces to inform action plans to strengthen the specimen referral network. IDDS and the NTP discussed baseline results and key findings and developed a plan for an electronic tool to track specimens using a QR code, which would also be integrated with the referral system being developed for the GHS program and allow for tracking of other diseases.

IDDS supported activities to **expand the use of GX** in five countries this quarter. Efforts related to advocacy for GX as an initial diagnostic tool, establishing a functional network of GX centers, and building capacity around GX use and testing. In **Bangladesh**, IDDS advocated for increased use of GX. IDDS worked with the NTP to provide programmatic guidance to facilities to use GX as an initial diagnostic tool, expanding coverage nationally. Additionally, in **Bangladesh**, IDDS collected data on GX utilization and prepared a report on GX utilization and performance that is under internal review. To increase the functional network in **Tanzania**, IDDS provided troubleshooting of GxAlert connectivity at 62 facilities that had not reported for 2 months, began procurement of essential equipment that would enhance GxAlert connectivity and real-time TB reporting, and provided financial and logistics support to the CTRL to distribute inter-laboratory comparison samples and EQA panels in support of high-quality testing and reporting. In **Zimbabwe**, IDDS conducted a virtual assessment of GX laboratories to select those with inconsistent power to expand GX functionality by procuring and installing solar systems in these laboratories. IDDS also conducted activities to build capacity for GX use. In **Burma**, IDDS started developing SOPs and training aids on performing GX MTB/XDR TB testing and developed reports on previously conducted supervision visits with recommendations on how to improve GX testing and use. IDDS used these reports to develop a detailed capacity building plan for enhanced use of GxAlert and GxAlert installations. In **Vietnam**, IDDS trained district and provincial laboratory staff on the use of GX stool testing for TB pediatric diagnosis and will continue providing virtual technical assistance for TB diagnosis. IDDS also collected GX testing data from provincial lung hospitals in the three supported provinces.

IDDS continued to **build governance and management capacity** for the TB diagnostic network this quarter. In **Bangladesh**, IDDS revised the TB Laboratory Strategic Plan based on feedback from the NTP. IDDS also received endorsement for its proposal for a national QMS during the Laboratory Working Group meeting and organized a virtual meeting with microbiologists from the National Tuberculosis Reference Laboratory (NTRL) and Regional Tuberculosis Reference Laboratory (RTRL) to recommend a phased approach to building out components of the QMS. IDDS also held discussions with the NTP on transitioning NTRL diagnostic activities to the Shyamoli TB Hospital when it is operational and will support capacity building at Shyamoli TB Hospital so it can take on the additional responsibilities. In **India**, IDDS prepared drafts of a framework to strengthen National Reference Laboratories and Intermediate Reference Laboratories and a framework for comprehensive monitoring and evaluation of TB services. This work is in support of **institutional strengthening of the public sector network of TB laboratories** in the country. In **Tanzania**, IDDS conducted assessments of four of Tanzania's six zonal TB laboratories to determine the status of the QMS and steps needed to expand the scope of accreditation and improve overall capacity and quality of TB testing at decentralized testing facilities. During the TB laboratory technical working group (TWG) meeting, IDDS led a discussion on the performance of decentralized zonal laboratories, progress toward connectivity and reporting on GX machines, TB sample referral mechanisms, and management of the TB supply chain and the TB DNA. IDDS built capacity in **Zimbabwe** through supportive supervision visits at private sector and uniformed forces laboratories using the TB DNA supportive supervision checklist. IDDS also provided supportive supervision to national and provincial TB reference laboratories, the Beatrice Road Infectious Disease Hospital Laboratory, and the National Microbiology Reference Laboratory using the TB DNA supportive supervision checklist tool. IDDS discussed all findings at a TB DNA TWG meeting and jointly developed recommendations with in-country stakeholders on how to strengthen TB diagnostic activities. IDDS has also initiated discussions related to **sustainability** in **Burma**, where IDDS developed a draft costed plan for an electronic laboratory data information system that will be discussed with the NTRL. Finally, as part of **building global governance and management capacity for TB programs**, the **Core TB** program submitted eight abstracts to the 2021 all-virtual Union World Conference on Lung Health, six of which were accepted. IDDS also held the first meeting of the TB TWG, with participants from across the project and consortium. During this meeting, IDDS hosted a presentation on the TB diagnostics pipeline.

IDDS supported four countries to **expand TB diagnostic connectivity solutions** this quarter. In **Bangladesh**, IDDS continued to reinforce TB diagnostic connectivity at two regional RTRLs and Shyamoli TB Hospital and expanded support to two more RTRLs. IDDS also provided financial and technical support for refurbishment work at Rajshahi RTRL and Shyamoli TB Hospital Laboratory, including adding a negative pressure system. Through **Core TB**, IDDS supported connectivity solution development in **Tanzania** and **Zimbabwe**, and also in **Cambodia** by working with the Center for Tuberculosis and Leprosy Control (CENAT) and the USAID-funded Community Mobilization Initiatives to End Tuberculosis (COMMIT) project. Also in **Cambodia**, IDDS procured supportive commodities, such as printers and uninterruptible power supplies, to GX sites through CENAT to improve GX functionality. IDDS also successfully advocated to the CENAT for use of DataToCare, a TB diagnostic connectivity platform developed by Savics, for GX reporting; IDDS worked with Savics to begin operationalization of platform implementation.

Engaging with and **bolstering private sector linkages for TB diagnostics** remained a high priority. In **India**, IDDS prepared and conducted consultative meetings with private sector laboratories, the Central



TB Division (CTD), and other stakeholders, collaborating with USAID's flagship TB program in **India**, iDEFEAT TB, and private sector partner IQVIA, to discuss a one-stop TB diagnostic model for services at private laboratories. IDDS has submitted a report on recommendations and next steps to the CTD. IDDS also collaborated with USAID, the UNION, and IQVIA on developing an end-to-end diagnostic solution model working with private sector laboratories for diagnosis of TB/DR-TB in the National TB Elimination Program (NTEP). In **Zimbabwe**, IDDS used the TB DNA Supportive and Supervision Checklist for visits to private sector and uniformed forces laboratories and began an activity to revise the national TB-HIV Public-Private Partnerships Framework.

An important aspect of strengthening national TB networks in countries is also to **strengthen linkages between stakeholders and build pathways to sustainability** of investments. IDDS implemented activities actively seeking to build in-country capacity of the health workforce and laboratories and in-country ownership of the strengthened TB diagnostic network. In all countries, IDDS worked closely with national TB programs and coordinating bodies, such as laboratory working groups or the TB DNA TWG, as in **Bangladesh** and **Zimbabwe**, building technical and operation skills and knowledge, and jointly developing action plans. For example, in **Vietnam**, IDDS discussed findings from a baseline assessment on strengthening the specimen referral network with the NTP and then jointly developed a plan for an electronic specimen tracking system that would integrate into ongoing work under the GHS program, maximizing efficient use of resources. IDDS also **strategically maximized activities by collaborating with other USAID-funded initiatives**, such as the Stop TB Partnership's Implementing New Tools Project (iNTP), Ujjiban project, the Alliance for Combating TB in **Bangladesh**, the Global Health Supply Chain Program in **Burma**, the COMMIT project in **Cambodia**, the flagship TB program iDEFEAT TB and the Development Innovation Ventures program in **India**, the Support to End Tuberculosis (SET) project in **Vietnam**, the Ukraine-USA USAID bilateral program in **Ukraine**, and the Local Organizations Network (LON) project in **Zimbabwe**. In **Burma**, IDDS began development of a costed plan for an electronic laboratory data information system, which will be an important step toward ensuring financial sustainability of this initiative in the country.

### Improving capacity to detect TB, DR-TB, and MDR-TB (IR 1.3 TB)

During this quarter, IDDS improved capacity to detect TB, DR-TB, and MDR-TB by continuing to provide technical assistance to introduce new TB diagnostic tools, build diagnostic capacity of laboratory staff, and increase access to quality chest X-rays.

IDDS worked extensively to **introduce new TB diagnostic tools and processes** in countries this quarter. Through funding from **Core TB**, IDDS completed development of the Truenat training curriculum and materials, working with the Stop TB Partnership and Molbio. IDDS is currently preparing for and coordinating the introduction of Truenat as a molecular test for drug-sensitive TB and rifampicin-resistant TB in **Afghanistan, Bangladesh, Cambodia, DRC, Indonesia, Kenya, Nigeria, the Philippines, Uganda, Vietnam, and Zimbabwe**. Coordination support included site selection based on the laboratory network analyses conducted previously, TOT at NTRLs, and reviews of country implementation plans. Through **Core TB**, IDDS also adapted a generic protocol for the collection and processing of stool samples, using the KNCV Tuberculosis Foundation's *Simple One-Step* processing method, in accordance with USAID guidance on pediatric TB diagnosis. IDDS worked with the USAID bilateral project in **Ukraine** to review and revise the generic protocol for stool sample collection and processing and translated the generic protocol into French for use in DRC.



IDDS **developed plans for pilot studies** in several countries to build an investment case to country NTPs. In **Bangladesh**, IDDS received approval on its Truenat pilot, which had been developed with the NTP and other stakeholders, and the Stop TB Partnership will donate 38 Duo (two chip) Truenat instruments and testing chips for the pilot. IDDS completed a laboratory network analysis to support site selection of the pilot. IDDS also developed an Xpert/MTB/XDR pilot implementation design. In **Cambodia**, IDDS worked with CENAT and COMMIT to develop criteria to select pilot sites, finalized the draft pilot protocol, and developed training materials for the Truenat pilot. The Stop TB Partnership is also providing Truenat instruments and reagents. In **India**, IDDS discussed a Truenat DNA feasibility study with national TB and research institutions and developed two proposals: one to gauge whether Truenat DNA could be used for line probe assay (LPA) testing and another to assess invalid and indeterminate rates of Truenat results. IDDS also provided feedback on the USAID/Development Innovation Venture-funded initiative through Yaathum Biotech to develop and validate TB/DR-TB diagnostic assays and sputum processing with DNA extraction reagents or with DNA extraction cartridges. IDDS is also evaluating innovative TB diagnostic care technologies, such as BD Max or Xpert/MTB/XDR assays for efficiency and scale-up. In **Vietnam**, IDDS drafted an implementation plan for the Double-X Algorithm (X-ray for screening, GX for confirmation) and developed a research protocol for collecting trace results data from GX Ultra, and in **Zimbabwe**, IDDS also collaborated with the NTP to develop an operational research protocol for GX Ultra trace results.

Along with the expansion of new TB diagnostic tools, IDDS also **built diagnostic capacity of laboratory staff** in four countries. In **Bangladesh**, IDDS provided training on preventive and routine maintenance of TB equipment, continued to develop training materials for biosafety and biosecurity as part of an e-learning program on TB diagnostics, and completed collection and verification of TB equipment inventory documentation. In **Burma**, IDDS provided trainings on acid-fast bacillus staining reagent preparation and advanced training to GX users, participated in regular coordination meetings with the WHO and TB implementing partners for continuing TB diagnostic and treatment services during the ongoing political crisis, completed development of SOPs for second-line phenotypic drug susceptibility testing for new and repurposed anti-TB medicines, and reviewed and proposed changes for existing NTRL SOPs. In **Vietnam**, IDDS adapted the Global Laboratory Initiative TB Laboratory Safety Handbook and the *Preferred algorithm for universal patient access to rapid testing to detect MTB and rifampicin resistance* to the Vietnam context and provided virtual technical assistance with national stakeholders to implement pediatric TB diagnosis and data collection. In **Zimbabwe**, IDDS provided training on the national TB/MDR-TB diagnostic algorithm and trained a pool of TB diagnostic network supervisors on the latest edition of the Zimbabwe TB DNA Support and Supervision Checklist and on use of the Aspect platform under the Driving Xpert Optimization initiative, which integrates with the machines to transmit test results to clinicians through a secure network. IDDS had worked with the USAID-funded Challenge TB program, prior to its closeout, and WHO to procure a containerized laboratory. As a result of delays, the containerized laboratory was finally delivered this quarter.

In **Cambodia** and **Vietnam**, IDDS began planning for activities related to **increasing access to quality chest X-rays**. In **Vietnam**, planning related to establishing a contract with Qure.ai, an organization based in India, this quarter to conduct a pilot of artificial intelligence reading of chest x-rays.

## IMPLEMENTATION STATUS

Work plans and deliverables submitted in FY 2021 Q3 are summarized in the tables that follow.

### Work Plans Submitted and Approved in FY 2021 Q3

	Submitted/Resubmitted	Received USAID Approval
<b>GHS</b>	<ul style="list-style-type: none"> <li>• <b>Guinea</b> revised Q3-4 work plan 4/22/2021</li> <li>• <b>Liberia</b> revised Q3-4 work plan 5/5/2021</li> <li>• <b>Thailand</b> revised Q3-4 work plan 4/15/2021 and 6/11/2021</li> <li>• <b>Vietnam</b> revised Q3-4 work plan 5/6/2021</li> <li>• <b>Uganda</b> revised work plan 6/29/2021</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Guinea</b> 5/7/2021</li> <li>• <b>Liberia</b> 5/25/2021</li> <li>• <b>Thailand</b> 5/17/2021 with contingencies</li> </ul>
<b>ARP for C-19F</b>	<ul style="list-style-type: none"> <li>• <b>India</b> 6/9/2021 and 6/16/2021</li> </ul>	<ul style="list-style-type: none"> <li>• <b>India</b> 6/22/2021</li> </ul>
<b>GHS EVD</b>	<ul style="list-style-type: none"> <li>• <b>Guinea</b> 4/22/2021</li> <li>• <b>Liberia</b> 5/5/2021</li> </ul>	<ul style="list-style-type: none"> <li>• <b>DRC</b> 4/13/2021</li> <li>• <b>Guinea</b> 5/7/2021</li> <li>• <b>Liberia</b> 5/25/2021</li> <li>• <b>Mali</b> 5/3/2021</li> </ul>
<b>TB</b>	<ul style="list-style-type: none"> <li>• <b>Bangladesh</b> 4/16/2021 and 6/4/2021</li> <li>• <b>Burma</b> 6/18/2021 for no-cost extension</li> <li>• <b>Zimbabwe</b> 4/9/2021</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Bangladesh</b> 6/30/2021 with contingencies</li> <li>• <b>Burma</b> 6/30/2021 for no-cost extension through 7/30/2021</li> <li>• <b>Zimbabwe</b> period of performance extended but not apparent that workplan was approved when comments provided 6/30/2021</li> <li>• <b>Core TB</b> 5/13/2021</li> <li>• <b>Vietnam</b> budget and M&amp;E plan were approved 4/9/2020 (workplan approved 2/9/2021)</li> </ul>

### Deliverables Submitted in FY 2021 Q3

	QASP Deliverables Submitted to USAID during Q3
GHS	7
C-19F	15
EVD	15
IDSR	0
TB	1
<b>Total</b>	<b>38</b>

## CURRENT AND CUMULATIVE WORK PLAN PROGRESS

## GHS FY 2021 Q3 Achievements

### BURKINA FASO

#### Quarterly Highlights

- The IDDS Burkina Faso program will closeout at the end of July with administrative closeout at the end of FY 2021 Q4. Transition and closeout plans have been developed.

#### Surveillance Highlights:

- IDDS and the One Health surveillance focal points of the Ministries of Health, Animal Resources and Fishery, and Environment held joint quarterly supervision visits to strengthen capacities of One Health field actors and facilitate sustainment of activities post-project.
- IDDS provided technical support to the One Health Technical Secretariat to prepare for the national One Health council meeting, which was chaired by the prime minister. This meeting helped engage national and sub-national government actors and One Health partners in implementing activities.
- IDDS provided financial and technical support in the development of the One Health strategic plan, which will define national strategies for One Health and the seven technical committees for the next three to five years.
- The IDDS surveillance specialist provided technical support to finalize the IDSR guide. This guide defines the surveillance of infectious diseases and priority diseases in the country.
- The IDDS information technology (IT) specialist provided technical support to the One Health platform. The difficulties related to use of the platform were resolved and the application was updated.

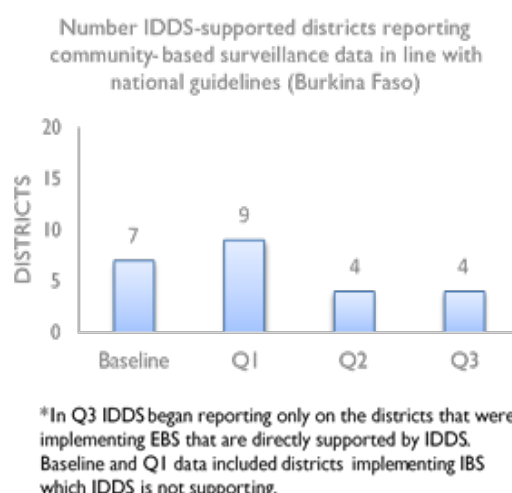
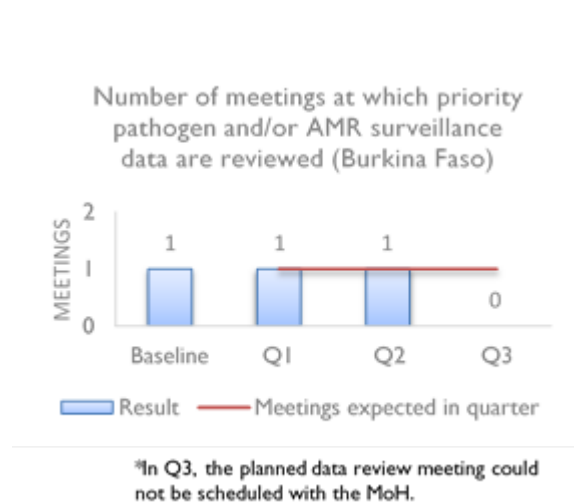
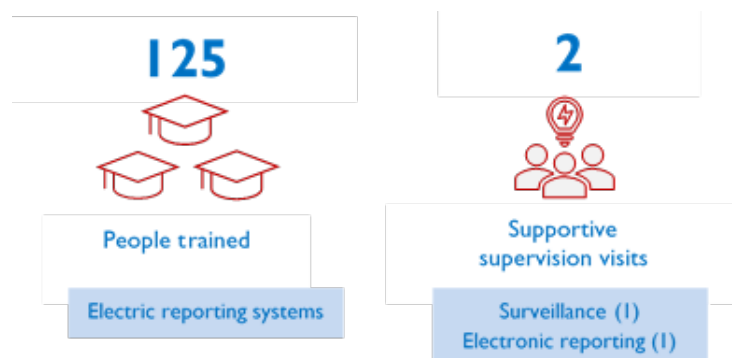
#### Problems Encountered and Solutions

Problem	Resolution	Status
Poor follow-up of EBS activities at regional and provincial levels.	The team held regular phone calls with regional directors and field EBS focal points and conducted joint field visits with representatives from the three ministries to boost activities and encourage engagement.	In progress
Lack of financial resources for community-level surveillance and sensitization activities.	IDDS developed a report on challenges to community-level EBS activities with suggestions for relevant stakeholders such as the One Health Technical Secretariat, USAID, and regional directors).	In progress

## Lessons Learned

- Maintaining good collaboration with government stakeholders and field partners is key to ensure the successful implementation of project activities. For example, field visits were planned jointly with government counterparts, and IDDS maintained regular communications to discuss activity implementation and findings from the joint visits. IDDS regularly reinforced that the project was playing a supportive role to the government to also encourage ownership.
- Community workers' lack of motivation has a negative impact on their engagement in surveillance and data transmission activities. For example, it would be helpful to provide financial compensation, such as meals and transportation for field visits, and provide regular supervision of work to emphasize the importance of their role.
- Regular joint supervisions of One Health implementing actors in the field are essential to improve surveillance and data transmission activities. This helps ensure that in-country stakeholders understand their respective roles. IDDS regularly reinforced their supportive role to build ownership for activities by the government. This in turn increased the interest and engagement of in-country stakeholders and improved overall implementation of the project. This level of engagement will facilitate the continuation of activities when IDDS ends its active role in the country.

## FY 2021 Q3 Output Results



# CAMEROON

## Quarterly Highlights

### Diagnostic Highlights:

- IDDS procured laboratory reagents, consumables, and small equipment to support AMR detection and data management at five human health (NPHL of Yaoundé, Laquintinie Hospital Bacteriology Laboratory of Douala, General Hospital Bacteriology Laboratory of Yaoundé, Regional Hospital Bacteriology Laboratory of Limbé, and Military Hospital Bacteriology Laboratory of Yaoundé) and two animal health (National Veterinary Laboratory of Garoua and National Veterinary Laboratory of Yaoundé) surveillance sites. The basic AMR reagents and equipment procured will improve AMR detection and reporting of priority pathogens.

Breakdown of items procured and delivered by activity

Row Labels	Equipment	Reagents	Supplies	Grand Total
NTW-2.3: Supply basic AMR reagents and equipment to human and animal sentinel surveillance sites	40	12,356	11,422	23,818
NTW-3.1: Provide limited microbiology diagnostic equipment and maintenance support	392		9	401
SURV-1.3: provide required information and technology equipment to support WHONET data entry	4			4
<b>Grand Total</b>	<b>436</b>	<b>12,356</b>	<b>11,431</b>	<b>24,223</b>

- IDDS trained 10 laboratory staff on using new equipment that was handed over to the National Veterinary Laboratory and the NPHL. Staff were also trained on developing equipment SOPs, which were translated into French and placed in the two microbiology laboratories for use.

### Surveillance Highlights:

- IDDS trained and mentored 22 laboratory staff from 12 sentinel sites (10 human and 2 animal) on AMR data management as part of a One Health AMR pilot surveillance program. This capacity building will support AMR data collection and enable data to be reported for the first time into the WHO Global Antimicrobial Resistance and Use Surveillance System.

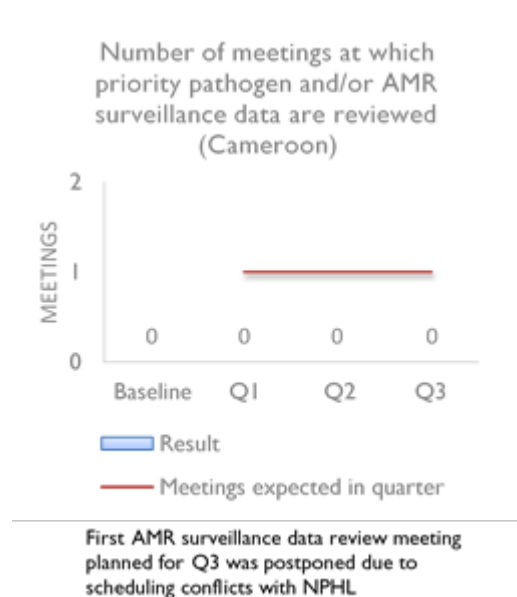
## Problems Encountered and Solutions

Problem	Resolution	Status
The Department of Pharmacy, Drugs and Laboratories and NPHL staff in charge of coordinating AMR laboratory activities were unavailable due to competing priorities related to COVID-19. This delayed implementation for many planned activities this quarter.	IDDS continues to communicate with NPHL and other partners to adjust scheduled activities based on staff availability.	In progress

## Lessons Learned

- Maintaining regular communication with the NPHL and other partners through virtual means may facilitate progression of activities even during COVID-19-related constraints.

## FY 2021 Q3 Output Results





# DEMOCRATIC REPUBLIC OF THE CONGO

## Quarterly Highlights

### Diagnostic Highlights:

- IDDS collaborated with the Provincial Health Divisions of South Kivu and Maniema to map out 232 public health laboratories, which included laboratories at the provincial level, general reference hospitals, and reference health centers in the health zones. A total of 22 investigators were trained on how to use the laboratory capacity mapping protocol. The final report highlights gaps and recommendations to strengthen the provincial and national laboratory network to meet diagnostic needs and strengthen disease surveillance.
- IDDS completed the draft Laboratory Equipment Maintenance Manual, which will facilitate training in Eastern DRC to help address identified gaps related to laboratory equipment maintenance.
- IDDS initiated assessment and mapping of existing SRS in Eastern DRC to identify potential synergies. Led by Fondation Merieux, IDDS completed a pilot assessment in four laboratories in Goma (North Kivu). In addition, IDDS completed data collection for 10 laboratories in Bukavu (South Kivu). IDDS deployed an assessment team to Bunia (Ituri) and Beni and Butembo (North Kivu) the week of June 28, and the data are currently being processed. The next step is to develop terms of reference based on collected data that will inform development of the operational plan.

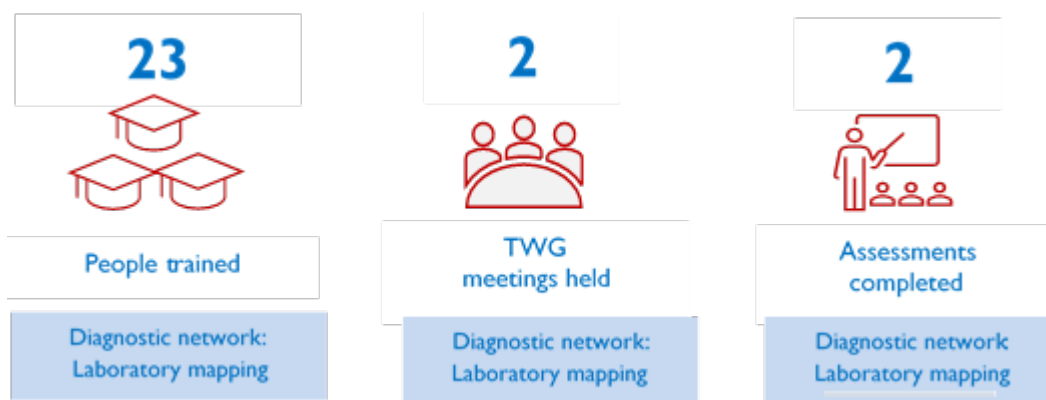
## Problems Encountered and Solutions

Problem	Resolution	Status
IDDS had planned to conduct mapping in four provinces (North Kivu, South Kivu, Maniema, and Ituri). Due to security concerns in Ituri, which has been in a state of emergency since April 30, the team could not travel to the area to complete the activity.	IDDS continues to monitor the security situation in Ituri and hopes to conduct the mapping activity there if the security situation improves. If not, IDDS will develop the final report covering only the three provinces mapped.	In progress
Some members of the IDDS team are based in Goma. Due to the Nyirangongo volcano eruption in Goma on May 22, the team evacuated, and this delayed implementation of some activities.	Goma-based staff were evacuated and relocated to Kinshasa, where they stayed until it was safe to return. IDDS also participated in a webinar on security conducted by the USAID Mission for implementers in Eastern DRC, during which the team learned how to mitigate various types of security issues.	Addressed

## Lessons Learned

- Working in an environment characterized by frequent security, health, and natural, or environmental issues such as Eastern DRC requires close and regular collaboration and consultation with the government, partners on the ground, and the USAID Mission, to ensure quick and adequate mitigation of any encountered risks for the safety of the staff.
- It is important to develop a resilience or mitigation plan that is integrated into the work plan when activities are being implemented in areas fraught with security, health, and natural, or environmental challenges.

## FY 2021 Q3 Output Results



# GUINEA

## Quarterly Highlights

- IDDS submitted the third version of the FY 2021 work plan to USAID on April 22 and received approval on May 7.

### Diagnostic Highlights:

- IDDS procured and distributed bacteriology equipment, reagents, and supplies to the three IDDS-supported regional laboratories, as part of the decentralization of bacteriology and AMR activities. The equipment, reagents, and supplies will allow the laboratories to conduct bacteriology culture and AST on routine basis and to be enrolled in national AMR surveillance.

Breakdown of items procured and delivered

Type	Total commodities delivered
Equipment	6
Reagents	28,889
Supplies	18,304
<b>Total</b>	<b>47,199</b>

- IDDS organized training visits on microbiology testing for laboratory technicians at a laboratory in Faranah, from June 11 to 25, and at a laboratory in Mamou, from June 14 to 25. A total of nine laboratory technicians from regional and prefectural laboratories attended the trainings. Topics covered during the trainings included the following: media preparation and quality control; specimen processing; gram staining; culture reading and interpretation; bacterial identification; AST; proficiency testing; and data management and analysis, including recording and reporting of laboratory confirmation of priority diseases and AST results.

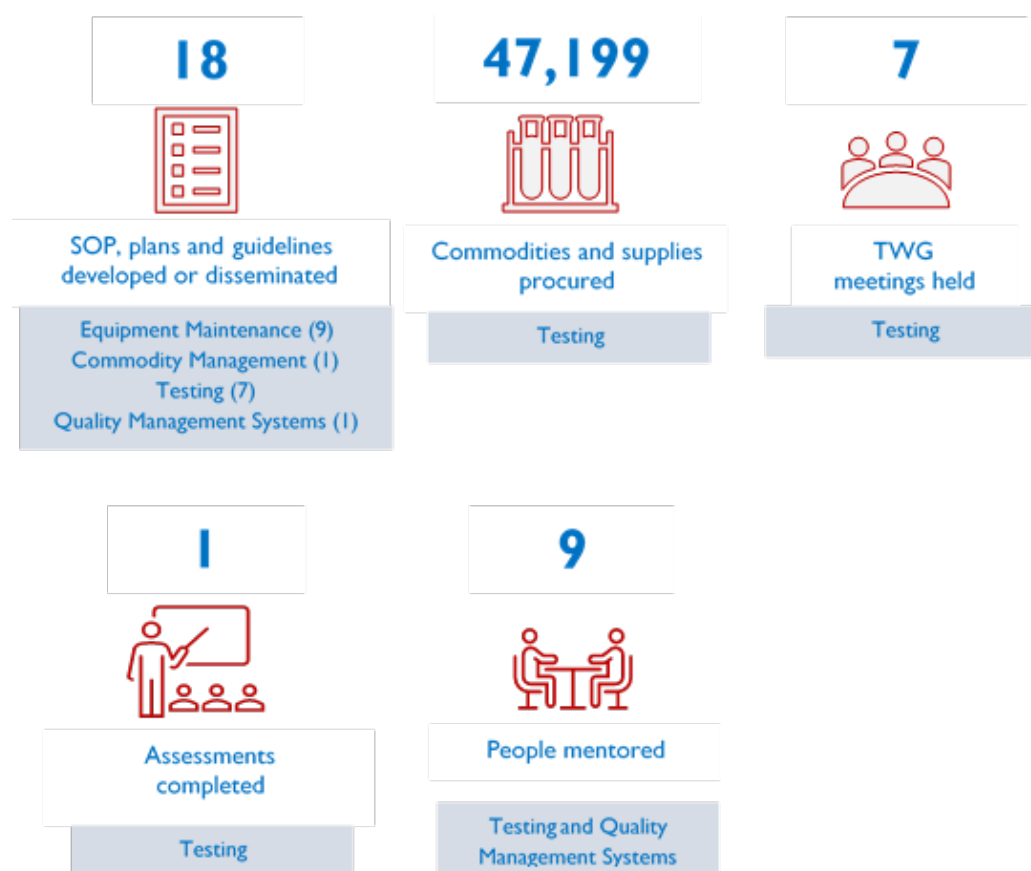
## Problems Encountered and Solutions

Problem	Resolution	Status
Implementation of the decentralization activity was delayed due to (1) logistical difficulties related to COVID-19, (2) reprogrammed funding to support COVID-19 response activities, and (3) refocusing of efforts to respond to the EVD outbreak in the country. When IDDS was able to resume the activity, the necessary equipment (incubator, autoclave) identified during the baseline assessment were no longer available or functioning.	To begin implementing this activity, IDDS coordinated sharing of equipment between laboratories to address gaps in available equipment. IDDS plans to procure new equipment for supported laboratories to keep them functioning properly as originally planned.	In progress

## Lessons Learned

- IDDS's contributions to laboratory strengthening in Guinea are highly appreciated and acknowledged by national stakeholders, including the MoH and the laboratory network. This appreciation has helped the IDDS team build a close and respected relationship with national stakeholders, which in turn has facilitated implementation of the delayed decentralization activity.

## FY 2021 Q3 Output Results



# INDONESIA

## Quarterly Highlights

### Diagnostic Highlights:

- The One Health Laboratory Network Sub-Working Group identified and determined the steps required to upgrade the map of the serogroup/*Leptospira* serovars and harmonized the microscopic agglutination test serovars panel to be used by laboratories. A harmonized *Leptospira* serovars panel will improve accuracy of leptospirosis detection and surveillance in Indonesia.

### Surveillance Highlights:

- IDDS led the development of the Gap Analysis SIZE document, which informed the development of SIZE 3.0 and its Roadmap by the Indonesian Agency for the Assessment and Application of Technology. IDDS provided technical and facilitation support to develop the SIZE Roadmap with a broad range of stakeholders. Part of this process was to support the Ministry of Agriculture in developing a budget plan for SIZE implementation and to plan for its scale-up.
- IDDS collaborated with the Coordinating Ministry for Human Development and Cultural Affairs to finalize and disseminate the Cross-Sectoral Zoonosis/EIDs Detection and Surveillance Policy Brief on April 22, which will act as the strategic plan on this topic for the country.
- IDDS provided technical support and facilitated a meeting on May 7, with the aim to coordinate and map out support from implementing partners for the development of the national SIZE Roadmap. As part of this effort, IDDS helped define the Five Strategic Priority Zoonoses/EIDs for National SIZE Development. These priority diseases are also becoming the reference in developing 4-Way Linking Guideline Revitalization and National Surveillance Guidelines for Priority Zoonoses/EIDs across sectors.

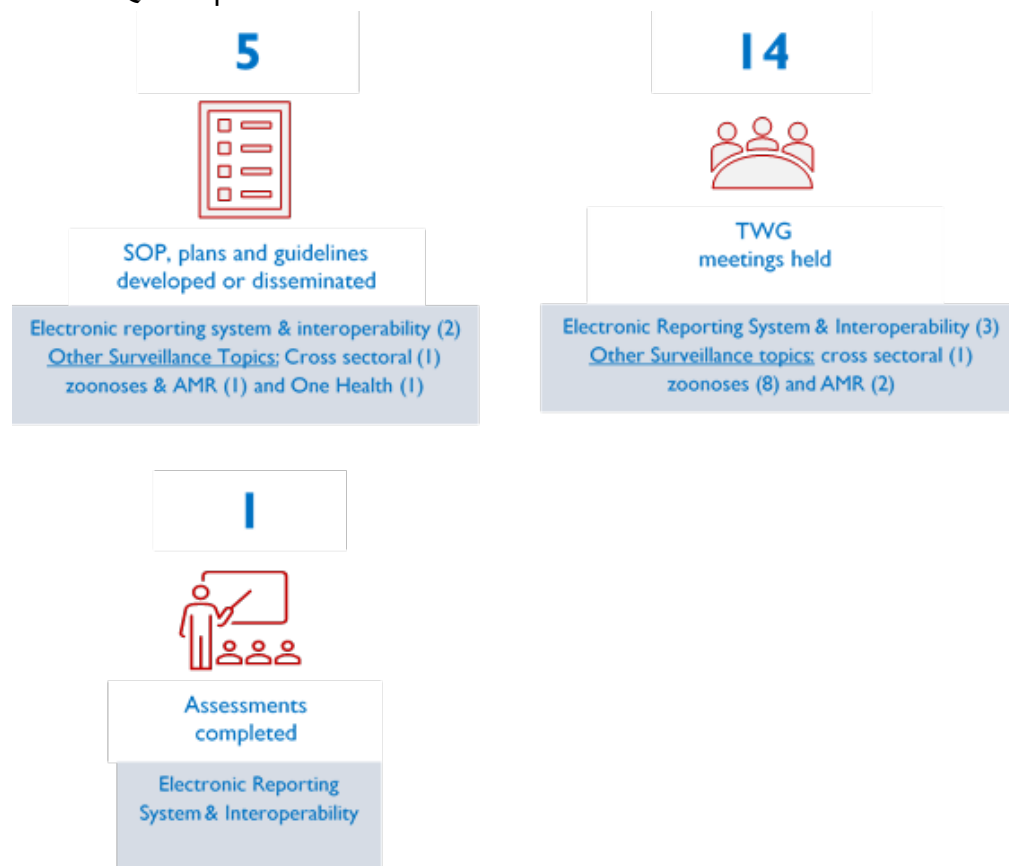
## Problems Encountered and Solutions

Problem	Resolution	Status
There was a delay in recruiting technical consultants for SIZE, 4-Way Linking, and integrated surveillance because no candidates met the criteria.	IDDS re-opened the vacancy announcement.	Addressed
Some activities in June were delayed due to overlapping priorities in related ministries.	IDDS rescheduled the activities.	Addressed
Signing of the Coordinating Ministry PMK's Decree for Working Group of Cross-Sectoral Coordination on Prevention, Detection and Response to Zoonoses/EIDs and AMR was delayed.	The decree will be signed by the deputy level under the Coordinating Ministry PMK.	In progress

## Lessons Learned

- None

### FY 2021 Q3 Output Results



# KENYA

## Quarterly Highlights

### Success Story:

**Kenya's Murang'a County Referral Hospital Laboratory Receives International Accreditation of Bacteriology Tests** (See Annex B for full story)



### Diagnostic Highlights:

- IDDS, in collaboration with NASIC and the USAID-funded University of Nairobi Health IT project, supported the development of AMR surveillance training materials for the MoH e-learning academy. The e-learning materials were finalized by the University of Nairobi Health IT project and IDDS, vetted by the MoH Division of Health Information System, and uploaded onto the e-learning academy platform. The e-learning platform will allow the training to be accessible more broadly and affordably to laboratory technologists, clinicians, pharmacists, and veterinary practitioners.
- IDDS procured various commodities to help strengthen detection of priority surveillance AMR pathogens across five IDDS-supported sites.

Type	Total commodities delivered
Equipment	1
Reagents	48
Supplies	5,985
<b>Total</b>	<b>6,034</b>

### Surveillance Highlights:

- IDDS initiated the development of a technical guide on technical specifications and interoperability requirements for an HIS and a laboratory information system to guide the Murang'a County Referral Hospital Laboratory to procure these systems. This guide can serve any AMR surveillance site, including those not supported by IDDS, to procure information systems that support the collection of AMR surveillance data and are interoperable with other national data collection systems. The draft guidance has been shared with the NPHL informatics team and will be finalized and shared



with relevant sites in FY 2021 Q4. IDDS is also working with the NPHL informatics team to develop an Excel-based data collection tool that links to Kenya's Central Data Warehouse (the national data collection platform) to allow direct transmission of data from Murang'a County Referral Hospital Laboratory in the meantime.

- IDDS completed the *National AMR Surveillance Information Systems Interoperability Roadmap*, developed using the MEASURE Evaluation interoperability maturity framework. The roadmap lays out a path to information systems interoperability in AMR surveillance data collection and reporting systems. Each step and milestone are anchored on domains outlined by the maturity framework as key aspects of systems' maturity within the AMR surveillance field (leadership and governance, human resources, and technology). When implemented, this guide will ensure that interoperability is entrenched within the HIS policies and structures in Kenya. Ultimately, a fully interoperable HIS means faster, more accurate results for patients and better-quality data for clinicians and policy makers to guide decision-making. This document is in the final stages of finalization.

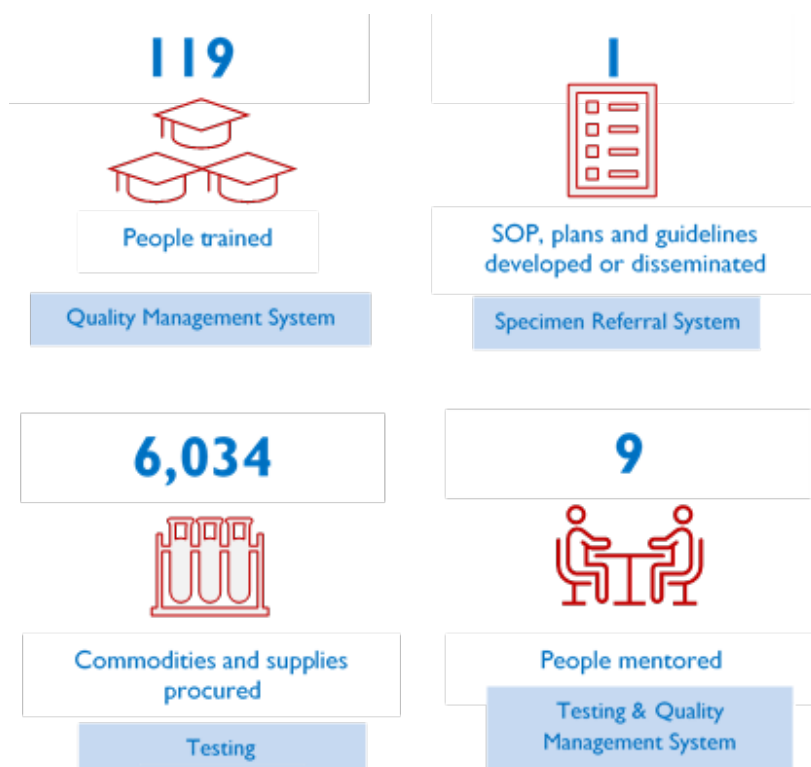
## Problems Encountered and Solutions

Problem	Resolution	Status
The local county government has not yet committed financial resources toward the fee for Malindi Sub-County Hospital Laboratory's accreditation assessment.	IDDS has held discussions with the county leadership and continues to advocate for commitment of funds.	In progress
Unavailable government officials due to competing priorities delayed implementation of some planned activities, such as the AMR surveillance TWG meeting. IDDS is still waiting for confirmation from the NASIC secretariat for a date for an AMR surveillance TWG meeting, which has been postponed for two quarters.	IDDS continues to engage government counterparts to move activities forward through visits to their offices. IDDS will continue to actively engage with the NASIC secretariat about rescheduling the TWG and other delayed activities. If NASIC is unable to find a suitable TWG meeting date for all stakeholders, IDDS may adapt the activity to move key agenda items and activities forward, such as through a series of one-hour virtual meetings.	In progress

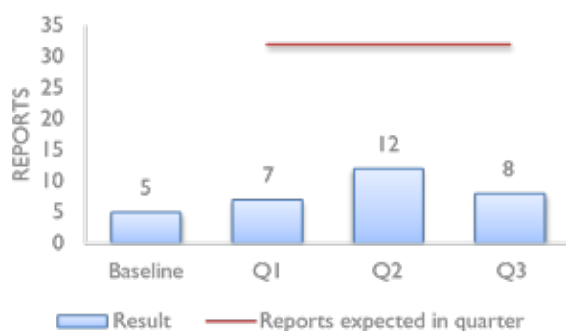
## Lessons Learned

- IDDS planned to host the AMR surveillance training materials on the MoH e-learning academy as part of the FY 2021 work plan; however, this has taken longer and required more resources than expected. Collaborating with the USAID-funded Health IT project has been key overcoming these challenges. Health IT has also been supporting the MoH to develop the e-learning academy and partnering with the project has provided IDDS access to knowledge and resources that have improved the quality of the training. For example, with Health IT's help, IDDS recorded video and audio clips to enhance learning in a digital environment. IDDS has applied this learning to a strategic collaboration with the Fleming Fund to implement WHONET in Kenya.

## FY 2021 Q3 Output Results

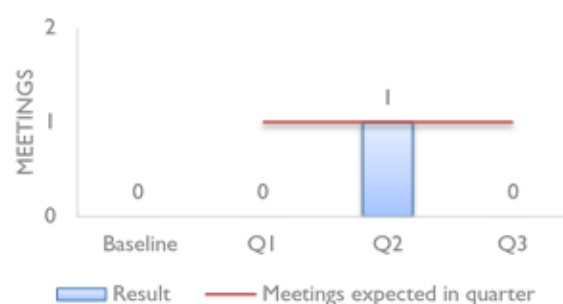


Number of expected surveillance reports produced on time (Kenya)



\*CDW connectivity issues, and internet access in 3 sites have affected reporting.

Number of meetings at which priority pathogen and/or AMR surveillance data are reviewed (Kenya)



\*IDDS set a target of 2 data review meetings in FY 2021.

# LIBERIA

## Quarterly Highlights

- IDDS submitted the FY 2021 work plan for Q3 and Q4 to USAID on May 5 and received approval on May 25.

### Diagnostic Highlights:

- An IDDS diagnostic specialist provided QMS mentorship visits to nine district hospital laboratories enrolled in the SLMTA program. These included four hospital laboratories (Tellewoyan, Kolahun, Curran, and Foya Borma) in Lofa, two hospital laboratories (G.W. Harley and Ganta United Methodist Hospitals) in Nimba, and three hospital laboratories (Phebe, C.B. Dunbar, and Bong Mines Hospitals) in Bong. Significant accomplishments can be achieved when dedicated technical mentorship for QMS implementation is provided, leading to the provision of quality laboratory services.
- IDDS distributed and handed over bacteriology laboratory supplies that included petri dishes, specimen collection (urine and stool) containers, glassware, inoculation loops and slides, and other supplies to Tellewoyan and G.W. Harley Hospital laboratories. These will be used in strengthening the bacteriology sections in the identification of priority pathogens.

Type	Total commodities delivered
Equipment	20
Reagents	0
Supplies	10,439
<b>Total</b>	<b>10,459</b>

## Problems Encountered and Solutions

Problem	Resolution	Status
IDDS was not able to start implementation of Q3 activities until the Q3 and Q4 revised work plan was approved.	The work plan was approved on May 25.	Addressed
IDDS had planned to initiate bacteriology in Tellewoyan Hospital laboratory in Lofa but had to postpone procuring the required commodities until the revised work plan was approved.	Procurement has been initiated, and suppliers have been selected.	In progress

## Lessons Learned

- Proper planning for procurement of commodities is important so that when external factors such as a delayed workplan are resolved, procurement can be initiated quickly.
- If implementation is delayed due to external factors, it is important to regularly provide the MoH with status updates and jointly strategize on how to expedite implementation when approval to resume is granted.

## FY 2021 Q3 Output Results



# MADAGASCAR

## Quarterly Highlights

### Diagnostic Highlights:

- IDDS provided financial support for a training workshop on June 23 in Mahajanga Region to improve the knowledge and practice of 35 local laboratory staff at secondary hospitals and selected health facilities. The workshop trained participants on correct sampling methods for COVID-19 and other priority pathogens, as well as on safe handling, storage, and transport of specimens to testing laboratories.
- IDDS handed over and installed the PCR equipment procured in Q2 at the PZaGa University Hospital Center in Mahajanga. The PCR equipment will greatly expand infectious disease testing in the Mahajanga area and is a needed resource to control the COVID-19 pandemic.

### Surveillance Highlights:

- IDDS provided technical and financial support to develop and produce three-monthly surveillance bulletins (#31, #32, and #33) and disseminated them to stakeholders through e-mail. Continuous support of this activity contributes to the functionality of the government's surveillance system and its ability to identify potential events of concern for public health and global health security.

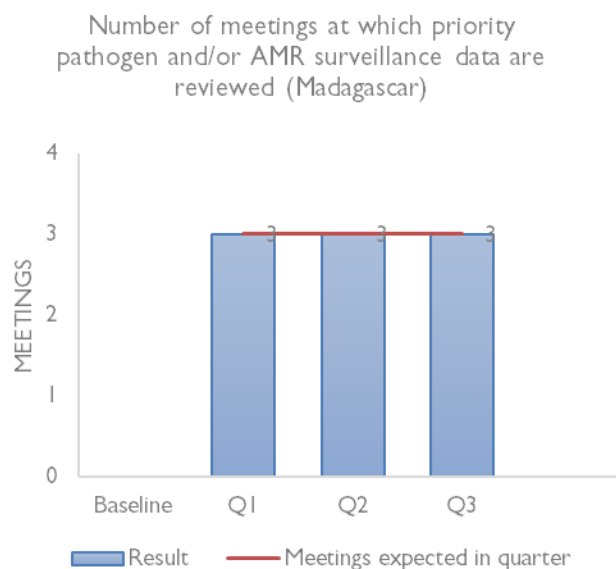
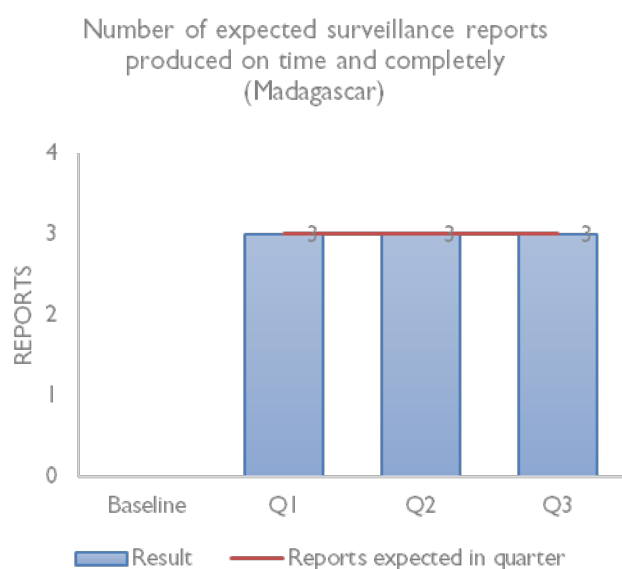
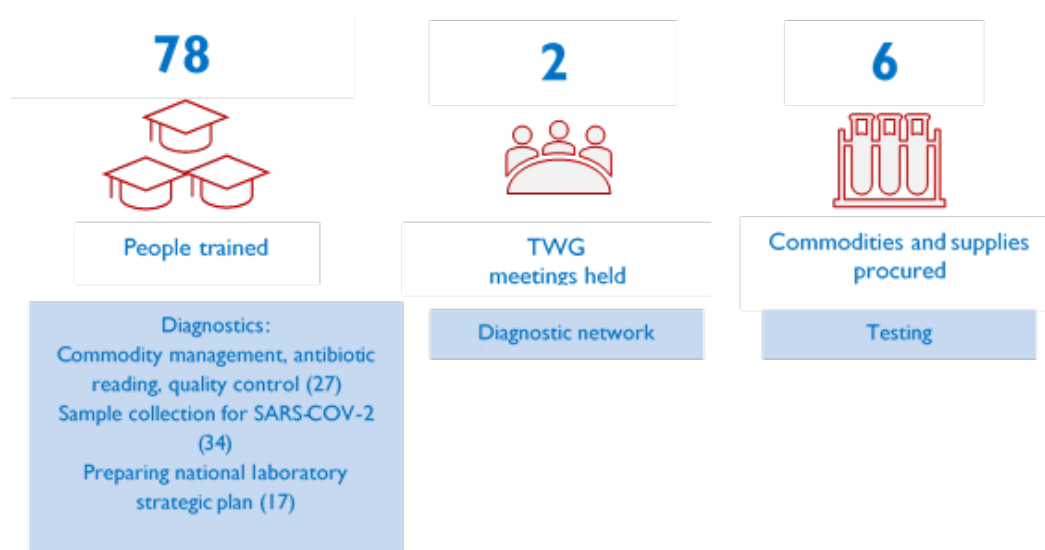
## Problems Encountered and Solutions

Problem	Resolution	Status
A biocentric technician from France was scheduled to come in country on May 28 <sup>t</sup> to install the PCR equipment at the PZaGa University Hospital Center in Mahajanga and provide training on the use and maintenance of the equipment. His trip was delayed due to COVID-19 travel restrictions. Installation of the urgently needed equipment and training were delayed as a result.	IDDS reached out to the MoH to request permission on behalf of the biocentric technician to allow him to travel to Madagascar to install the PCR equipment and provide training on its use. The technician was able to arrive on June 23.	Addressed

## Lessons Learned

- None

## FY 2021 Q3 Output Results



# MALI

## Quarterly Highlights

### Success Stories:

**Strengthening Biosafety and Biosecurity in Mali** (See Annex B for full story)



**A First Map of Mali's Laboratories: Human, Animal, and Agricultural** (See Annex B for full story)

### Diagnostic Highlights:

- IDDS provided technical and financial support to the national multisectoral committee for laboratory system strengthening to conduct the first round of biannual follow-up supervision visits to the three regional diagnostic facilities in Sikasso, Ségou, and Mopti regions. This first round of biannual supervision visits allowed the national trainers, trained by IDDS in FY 2020, to evaluate progress made by the regional staff, provide short onsite refresher trainings, and discuss findings and recommendations with the hospitals' management staff to improve the hospitals' equipment maintenance systems.

### Surveillance Highlights:

- IDDS provided technical and financial support to produce a CBS expansion plan to cover the entire country, following the success of the pilot implementation of the national CBS manual and tools in Kadiolo Health District. The expansion plan completes the set of CBS documents that IDDS has produced and will be used as a reference by both the government and partners for CBS implementation in the country.
- IDDS printed 150 copies of the Annual Surveillance Bulletin and sent them to the DGSHP to disseminate at different levels of the health system. Printed copies of the Annual Surveillance Bulletin provide another channel for to share data on surveillance and contribute to increasing awareness of decision-making using data generated through DHIS2, compared to data from the MADDO Excel sheets. The IDDS team is working to improve the quality of data reported aligned to the national guidelines and supporting the rollout of DHIS2 in country using data from these bulletins to highlight gaps in reporting quality.
- IDDS provided technical and financial support for the first round of quarterly IDSR data reviews for eight health districts in the Ségou region. IDSR data reported through DHIS2 are of poor quality, compared to the data reported through the MADDO Excel sheets. The reviews brought together all



personnel involved in the reporting of surveillance data to compare all data reported through the different sources and to correct data reported through DHIS2. This data review process encourages data collectors to share surveillance data through DHIS2 instead of using only the MADO Excel sheets.

## Problems Encountered and Solutions

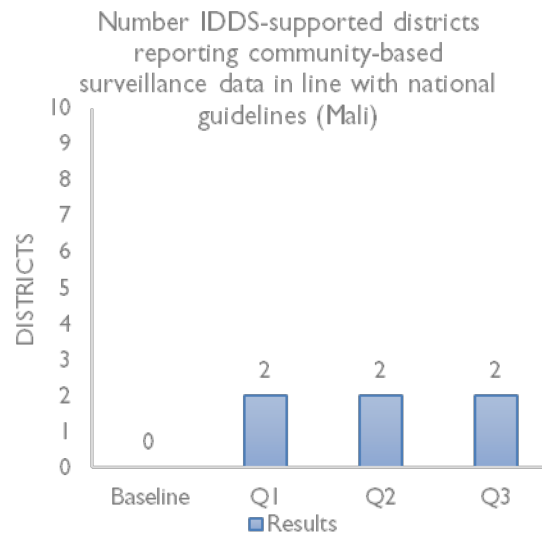
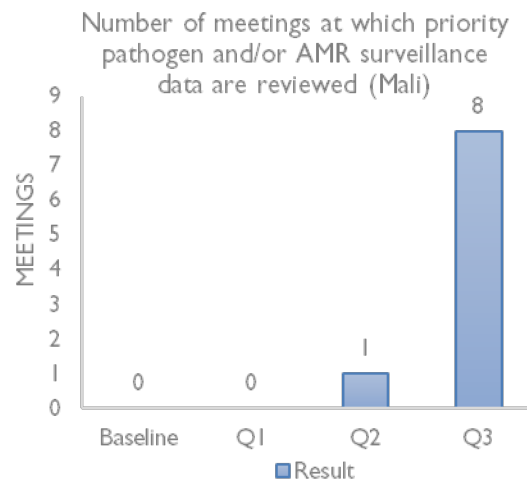
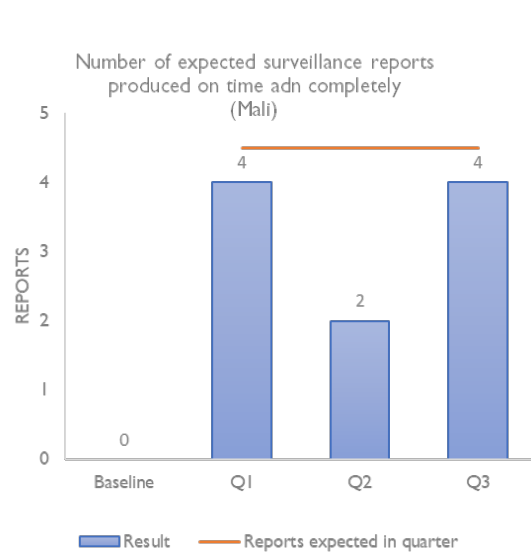
Problem	Resolution	Status
Implementation of QMS activities continued to be delayed due to INSP staff's competing priorities related to conducting COVID-19 activities.	IDDS and the Mali Mission GHS advisor met with the INSP director to discuss completion of QMS activities. The draft of INSP manual was shared with the members of the multisectoral committee for laboratory system strengthening for feedback in June. This was one of the activities that had originally been delayed, but IDDS was able to move it forward.	In progress

## Lessons Learned

- Co-funding activities with other projects in country helps save cost and time during implementation. The development of the CBS expansion plan was co-funded with the Tackling Deadly Disease in Africa Program.

## FY 2021 Q3 Output Results





# SENEGAL

## Quarterly Highlights

### Success Story:

**IDDS Increases the Number of Laboratories Capable of Performing Antimicrobial Resistance Detection and Surveillance in Senegal** (See Annex B for full story)



### Diagnostic Highlights:

- IDDS provided technical assistance to the Directorate of Laboratories at the MoH to develop and validate national SOPs for AMR detection and surveillance for level 1 diagnostic facilities. IDDS developed and disseminated 12 SOPs on AST guidance and AMR data collection, entry, and reporting this quarter.
- IIDDS collaborated with the Directorate of Laboratories to conduct a five-day training on AMR detection and surveillance at the NPHL in the Thies region for seven supported diagnostic facilities.

### Surveillance Highlights:

- IDDS supported four of seven IDDS-supported AMR sentinel laboratories to begin AST and initiate AMR reporting as per national guidelines and use data from DHIS2. In some cases, with IDDS support, laboratories submitted retrospective reports for as far back as January.
- IDDS developed AMR data collection tools that have been validated by the Directorate of Laboratories. These AMR data tools are for all level 1 facilities in Senegal and were used during joint supportive supervision visits to laboratories on DHIS2 reporting of AMR. They serve also as an internal checklist for laboratories to assess their own capacity.

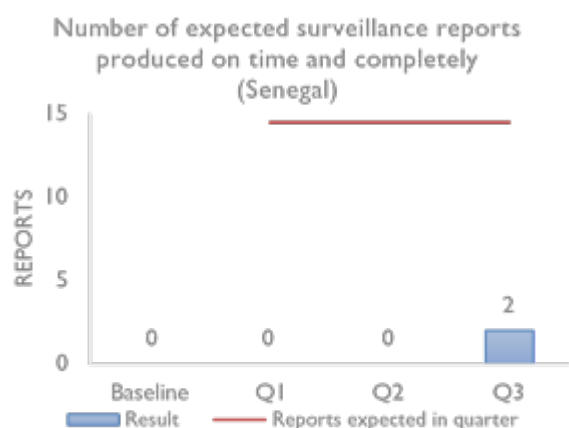
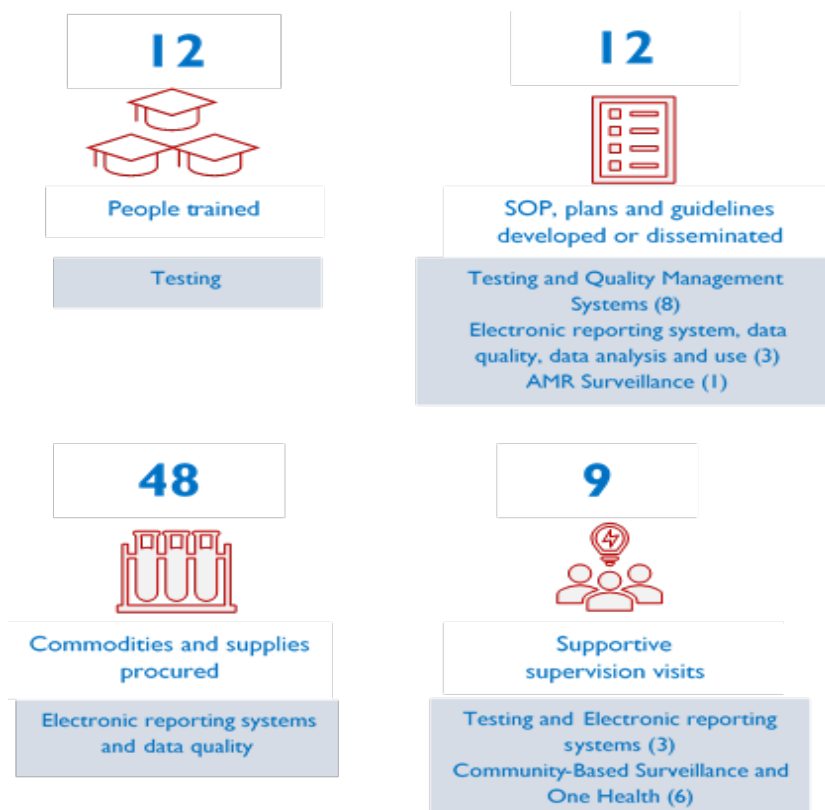
## Problems Encountered and Solutions

Problem	Resolution	Status
It was not feasible to provide the five-day trainings on AMR detection and surveillance to the diagnostic facilities individually due to the number of trainers needed, time needed to carry out the training individually, and the initial delay in beginning implementation.	IDDS organized the training at the NPHL in the Thies region because there was ample room to simultaneously train staff from all seven facilities. This allowed IDDS to save time and resources in completing the activity.	Addressed
Delays persist in submitting timely and complete AMR reports.	IDDS is working closely with facilities to improve submission times for reports and will continue supervision visits in Q4 to support laboratory staff in reporting and submitting complete and timely reports.	In progress

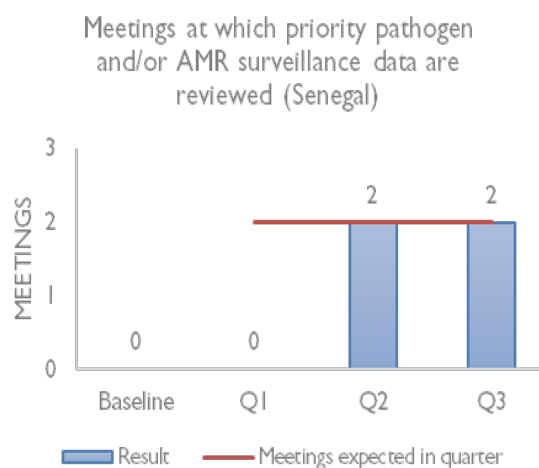
## Lessons Learned

- Working closely with the MoH and other in-country stakeholders helped quickly modify field plans and activities to successfully implement activities. For example, drafting terms of reference for activities prior to implementation and obtaining feedback and validation for activity plans from the MoH, diagnostic facilities, or health districts helped ensure smooth initiation and progression of activities.

## FY 2021 Q3 Output Results



\*4 of 7 IDDS sites began AMR reporting in Q3, and 2 of their reports were on time and complete. The MoH approved the sites to begin reporting in April, 2021





# TANZANIA

## Quarterly Highlights

### Diagnostic Highlights:

- IDDS trained 18 key laboratory and pharmacy personnel onsite on the redesigned electronic logistics management information system. Participants included laboratory managers, laboratory storekeepers, heads of section in microbiology units, and hospital pharmacists from four facilities—Morogoro Regional Referral Hospital (RRH), Temeke RRH, Maweni RRH, and Benjamin Mkapa Hospital. The training helped participants to: (1) report monthly stock status in a timely manner and improve visibility of data across stakeholders, (2) guide facilities on how to order bimonthly commodities instead of quarterly, (3) enable facilities to pool funds for one order (previously not possible), and (4) reduce loss of expired commodities through stock redistribution. The training built on recommendations on microbiology commodity inventory practices made during IDDS supportive supervision visits in Q2. Expected outcomes include timely reporting of stock status and improved data visibility across stakeholders for decision-making to strengthen overall supply chain management and service delivery.

### Surveillance Highlights:

- IDDS collaborated with the NPHL to conduct three-day quarterly data quality review meetings at supported sentinel sites—Morogoro RRH, Temeke RRH, Maweni RRH, and Benjamin Mkapa Hospital. The review meetings involved 101 participants, including hospital management and laboratory staff, pharmacists, and clinicians. IDDS used a standard data reporting template it had developed to support the data review process and anticipates that the resulting data quality improvement plans will lead to increased sensitization on the importance of AMR surveillance and improvements in data quality, reporting, and use. Timely, accurate, and complete data are critical to combating AMR. At the patient level, physicians rely on accurate data to identify appropriate treatments. At the national and global level, quality AMR surveillance data are key for informing policies used to monitor, address, and ultimately reduce the threat of AMR.

## Problems Encountered and Solutions

Problem	Resolution	Status
High staff turnover at IDDS-supported laboratory sites has led to a high workload for available staff. Laboratory staff are also not always sufficiently trained to carry out their duties. This threatens the quality of AMR data generated at sites.	IDDS partnered with the NPHL to provide regular supportive supervision visits, mentorship, and data quality reviews. These initiatives enabled laboratory staff to be trained and allowed for the mentors from the NPHL to observe challenges first-hand to develop action plans.	In progress

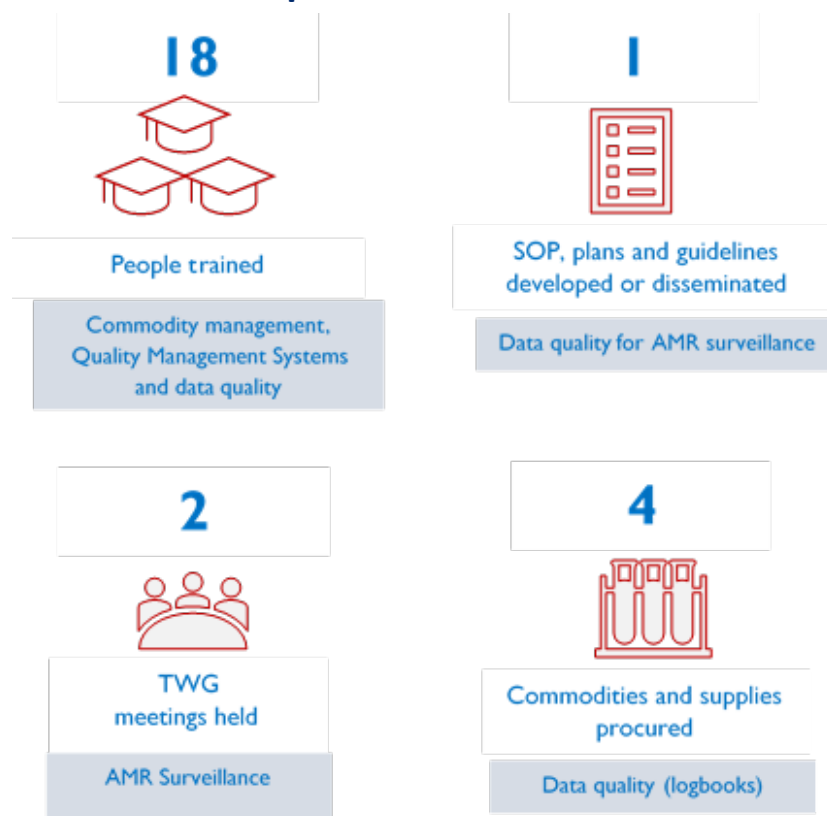


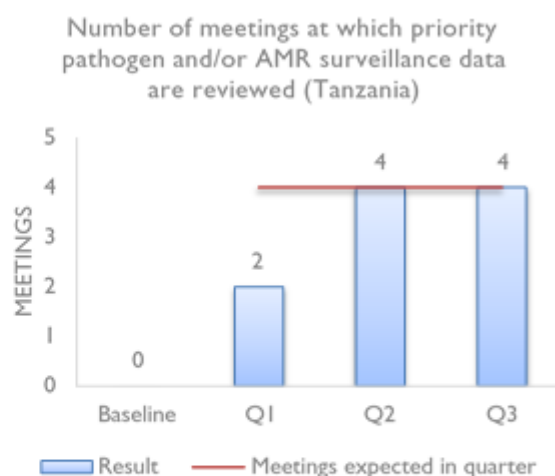
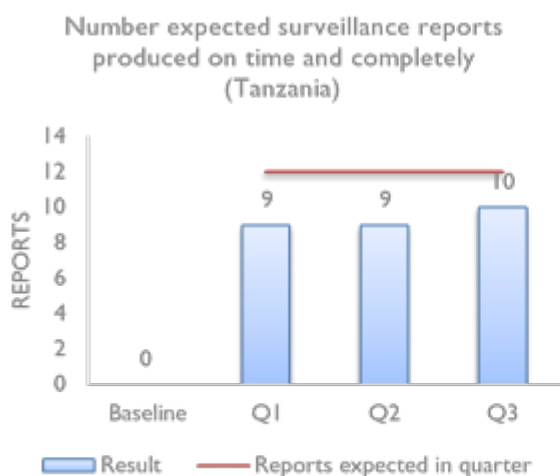
Problem	Resolution	Status
IDDS-supported laboratories are experiencing stockouts of reagents and commodities, which could result in interruptions to the continuity of AST.	IDDS has been monitoring stock availability and redistributing reagents and commodities that are nearing expiry. IDDS is also assessing the possibility of executing an emergency procurement using redistributed funds from other activities to cover gaps that may interrupt testing.	In progress

## Lessons Learned

- A multidisciplinary or multi-level approach is beneficial to data reviews. IDDS carried out quarterly data review meetings at supported sites by bringing together hospital management and laboratory staff, pharmacists, clinicians, IDDS technical specialists, and staff from the NPHL. This approach enhanced linkages between stakeholders and led to harmonization of AMR-related interventions, such as antimicrobial stewardship and infection prevention and control.

## FY 2021 Q3 Output Results





\*All 12 expected AMR reports were submitted but only 10 were on time and complete; the other 2 reports from 2 sites were submitted 2 days late.

# THAILAND

## Quarterly Highlights

- IDDS submitted the first draft of the FY 2021 Q3 and Q4 work plan on April 15 and the second draft on April 20, for which USAID provided contingent approval on May 17. IDDS submitted the third and final version of the work plan on June 11.

### Diagnostic Highlights:

- IDDS continued to enhance the visibility of the RPHL Network beyond the Association of Southeast Asian Nations region, through a series video conferences this quarter in which member countries shared experiences and scientific knowledge to better prepare and coordinate between laboratory systems to respond to emerging threats. The increased visibility of the RPHL Network expanded opportunities for cross-regional collaboration, benefited more countries and regions, and increased potential donor interest to invest in the RPHL Network. This was demonstrated through the participation in a recent video conference by the Caribbean Public Health Agency. IDDS supported video conferences through coordination, facilitation, and technical support, which included the following:
  - A video conference to share important information on the SARS-COV-2 variant tracking techniques and methodology on May 11, a topic that was discussed by many public health laboratory managers, scientists, public health experts, and program managers across the Association of Southeast Asian Nations region as a means of building local capacity for variant identification. Thirty-two participants joined this video conference.
  - A video conference for RPHL experts who were updated on the latest WHO guidelines and biosafety level requirements in accordance with potential threats on June 18, with 109 participants attending. The technical session helped member countries enhance biosafety and biosecurity measures in their laboratories, which will help increase their Joint External Evaluation scores.

## Problems Encountered and Solutions

Problem	Resolution	Status
The recent surge in COVID-19 cases across the region and travel restrictions continue to postpone the hands-on workshops on Waste Management and International Air Transport Association certification training for specimen packaging and transportation for RPHL Network member countries.	Training and workshops have been postponed to the end of the year. Virtual trainings are being explored with the secretariat and stakeholders.	In progress

## Lessons Learned

- Regular virtual meetings with the RPHL Network member countries have proven to be a strong medium to stay connected with member countries, share information, and keep abreast of developments related to the COVID-19 pandemic and other issues.

## FY 2021 Q3 Output Results



# UGANDA

## Quarterly Highlights

- IDDS submitted the revised FY 2021 work plan on June 29.

### Success Stories:

**To Contain Disease Outbreaks, IDDS Improves the Quality Assessment of Animal Health Data in Uganda** (See Annex B for full story)

**Improving the Detection of Infectious Diseases in Uganda's Animal Health Laboratories** (See Annex B for full story)



### Diagnostic Highlights:

- IDDS facilitated the rollout of QMS trainings using a TOT model. From March 29 to April 1, IDDS facilitated training in which previously trained trainers from the national pool provided instruction on QMS implementation based on ISO 17025. Participants included 15 laboratory and quality managers from animal veterinary diagnostic sites at the National Animal Disease Diagnostics and Epidemiology Center; Mbale, Moroto, Gulu, and Mbarara Regional Animal Disease Diagnostics and Epidemiology Centers; the National Livestock Resources Research Institute; and the Makerere University College of Veterinary Medicine, Animal Resources and BioSecurity. Participants in the second-tier training were tasked with implementing QMS at their sites following completion of the training.

### Surveillance Highlights:

- IDDS copyedited and finalized the *National Strategy for Coordinated Surveillance of Priority Zoonotic Diseases in Uganda 2021–2025*, which provides a roadmap to a comprehensive surveillance system for outbreak preparedness, detection, and response for seven priority zoonotic diseases. Implementation of the national strategy will be carried out by the National One Health Platform, which will coordinate the relevant ministries, departments, stakeholders, and implementing partners in the human, animal, and environmental health sectors. This document is a milestone because it fills a gap identified during the 2017 Joint External Evaluation (i.e., lack of a coordinated

surveillance system for animal and human health for zoonotic diseases). Having a coordinated and integrated strategy will improve the effectiveness and efficiency of surveillance of priority zoonotic diseases across sectors. The document was submitted to USAID Washington in Q3 and is now with the government for endorsement.

## Problems Encountered and Solutions

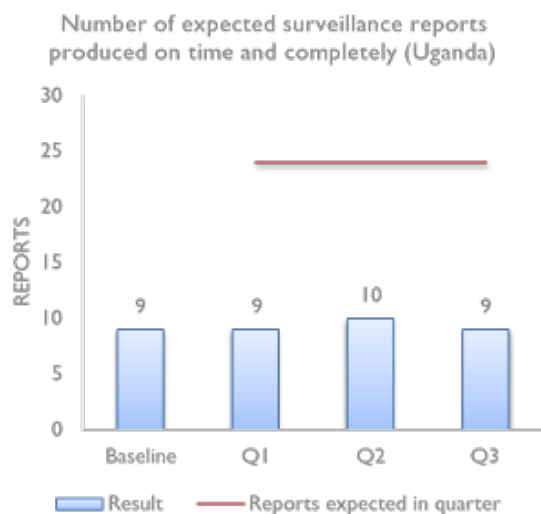
Problem	Resolution	Status
Uganda experienced a second wave of COVID-19 infections, which resulted in the government reinstating strict public health measures, including a lockdown that prevented IDDS staff from traveling to the IDDS office or the field.	IDDS has been working to engage supported sites and stakeholders virtually wherever possible to move implementation forward. Some activities that require in-person engagements remain on hold until government restrictions on internal movements and gathering are lifted.	In progress

## Lessons Learned

- None

## FY 2021 Q3 Output Results





\*IDDS support for these activities is pending approval of work plan submitted on June 29.



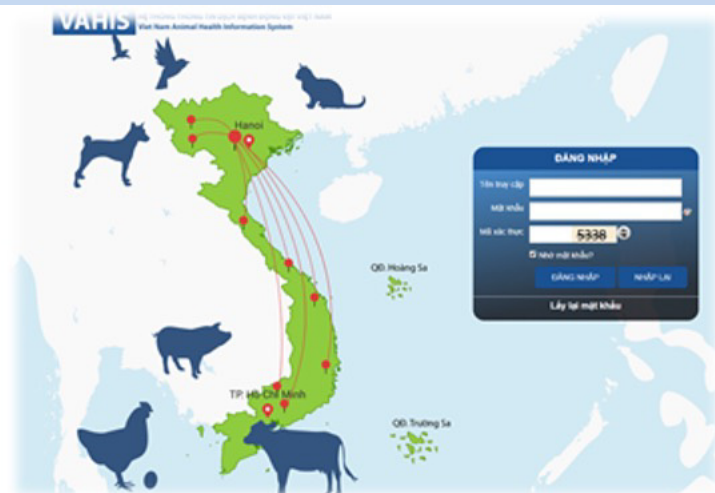
# VIETNAM

## Quarterly Highlights

- IDDS submitted the third draft of the FY 2021 work plan to USAID on May 6.

### Success Story:

**Five Provinces Report into Vietnam's Animal Health Information System for the First Time, Leading Disease Reporting Rates in Their Regions** (See Annex B for full story)



### Diagnostic Highlights:

- IDDS developed the draft *National Technical Guidelines on Specimen Collection, Packing and Transportation*. As part of the process, IDDS conducted two technical meetings to validate the guidelines with key government stakeholders including RAHOs and the DAH's National Centre for Veterinary Diagnosis. The guidelines were last updated 10 years ago, and this update will enable laboratory staff to be re-oriented and trained on the most current guidelines impacting quality, timeliness, and safety. Implementing the new national guidelines will enhance the performance of the entire diagnostic system.

### Surveillance Highlights:

- IDDS initiated One Health EBS data collection and reporting in all 21 districts of Dong Thap and Thai Nguyen provinces. To make this possible, IDDS provided provincial, district, and commune-level training and job aids (posters and key chains) to human health and animal staff. Community-based EBS data collection and reporting was also part of this initiative, with community health workers and community collaborators receiving user-friendly job aids to guide their surveillance response. EBS enhances the capacity of the community, district, province, region, and national levels to respond to disease outbreaks and public health events of concern in real time.

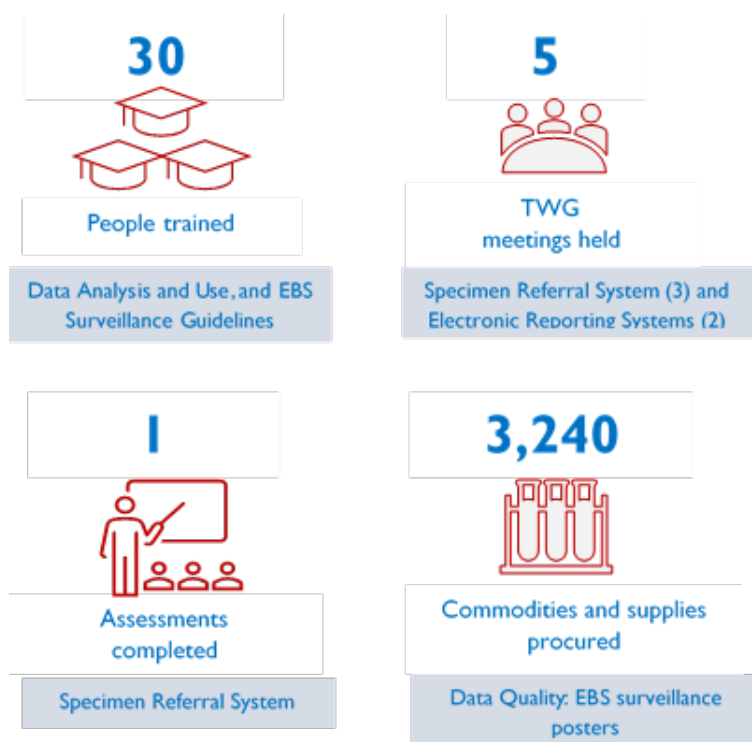
## Problems Encountered and Solutions

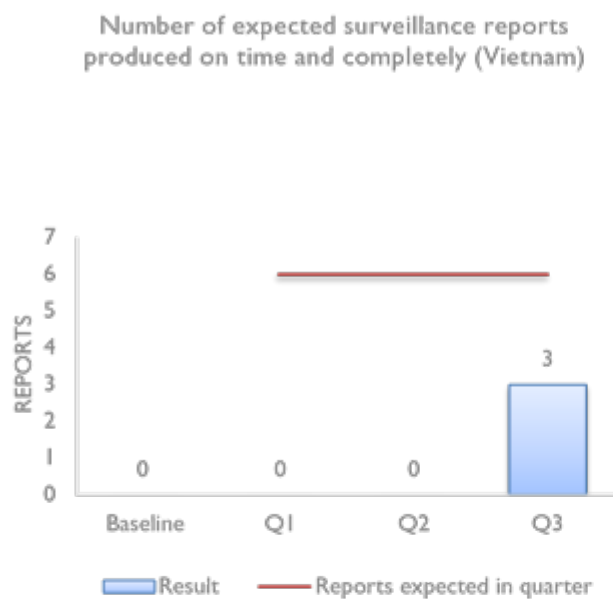
Problem	Resolution	Status
Restrictions on travel and in-person events in Hanoi and IDDS-supported provinces lasted during all of Q3 due to the fourth wave of COVID-19 and extremely low vaccination coverage. This impacted scheduled in-person events, including training and technical assistance. It also delayed meetings with government officials because staff have been occupied with the pandemic response.	IDDS evaluated which activities could be pivoted to a virtual format and which should be rescheduled for when in-person events are allowed. Several training events, supportive supervision, and technical assistance activities were conducted online. Meetings with government partners were conducted virtually.	In progress

## Lessons Learned

- Training across a large province or geographical area requires considerable time to implement. To enhance implementation, IDDS began phasing in activities. When a district/sub-district team completed its training in an area, subsequent activities and follow-on support were immediately initiated. For example, with EBS data collection and reporting, the approach was to train staff and then initiate data collection with supportive supervision and follow-up immediately after training was complete. Phasing in allowed teams to begin applying newly learned skills rather than wait to start until after all geographical areas had completed training.
- Significant time and effort should be allocated for engaging high-level officials in activities that have the potential of high impact for the national healthcare system. For example, with the development of the first-ever integrated SRS involving both the preventive sector (public health agencies) and curative sector (hospitals and clinics), conducting assessments, and reviewing the results together allowed key stakeholders to identify gaps and opportunities. Proposed draft system protocols and funding mechanisms also require multiple rounds of input and extensive dialogue with key stakeholders, which can take time.

## FY 2021 Q3 Output Results

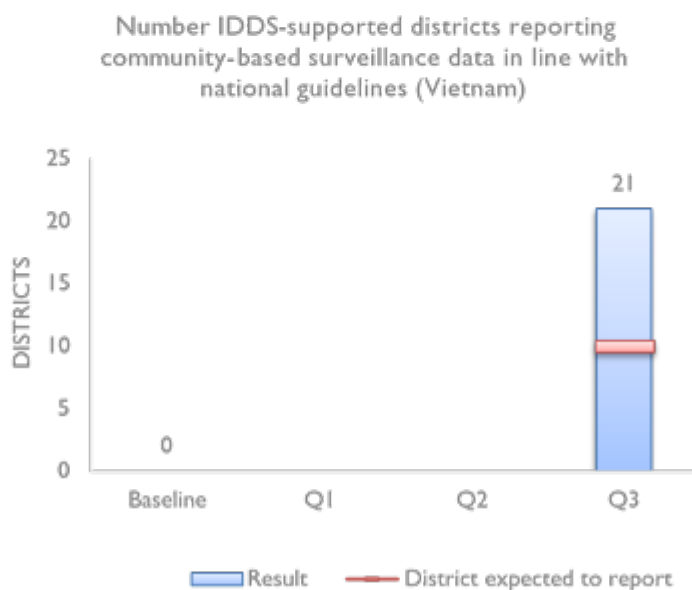




\*Reporting started in April following Q2 trainings



\*Implementation started in April. Meetings delayed due to COVID-19 outbreak and local vaccination efforts.



\*Reporting started in April following Q2 trainings

## COVID-19 FY 2021 Q3 Achievements

### PHILIPPINES

#### Quarterly Highlights

- IDDS contributed to the COVID-19 response by providing support for specimen transportation, training and technical assistance, and procurement.

#### Specimen Transportation:

- IDDS hired a central coordinator, field coordinators, and an assistant coordinator to manage and oversee transport activities in Manila. IDDS also contracted four vehicles for specimen transportation to support transport activities in the three provinces (Bulacan, Palawan, and Rizal) and in Manila. A team of one field coordinator, one driver, and one vehicle was deployed to each province and Manila.
- IDDS worked with the LGU of Palawan to finalize the specimen referral mechanism and the agreement with Shell Philippines to airlift specimens from Bulacan and Palawan provinces to Manila for testing. The transportation of specimens started in April. IDDS transported specimens from three laboratories in Bulacan province in April and collection sites in both Bulacan and Palawan province in May and June for genome sequencing to the Philippine Genome Center in Manila.
- IDDS held a series of coordination meetings with the LGU in Rizal province, through which IDDS finalized the list of collection unit locations and frequency of specimen pick-up. The transportation of specimens in all three provinces is ongoing.

#### Training and Technical Assistance:

- IDDS worked with the LGUs in Bulacan, Palawan, and Rizal provinces to plan for trainings on safe specimen collection, packaging, and transportation.
- IDDS provided the two trainings for healthcare workers in Bulacan province on June 1 and 4. For Palawan province, IDDS held a virtual training on June 29. IDDS has set the date of the first training session in Rizal province for July 6 and the second session for July 9 because the total number of participants is too high for a single training.

#### Procurement:

- IDDS was asked by the mission to procure PCR kits and swabs, and initiated procurement. IDDS also submitted a list of PCR extraction reagents and is awaiting feedback from the mission.
- IDDS ordered specimen transport boxes for Bulacan, Palawan, and Rizal provinces. IDDS handed over the specimen transport boxes to Bulacan province on May 24 and to Rizal province on June 16. IDDS is in the process of scheduling the handover of specimen transport boxes to Palawan province.

## Problems Encountered and Solutions

Problem	Resolution	Status
Scheduling trainings with the LGUs was challenging due to continuous travel restrictions.	IDDS continues to work with the LGUs to find suitable options to conduct the trainings, which could include limited participation per training to allow for them to conduct the trainings onsite.	In progress
The specimen transport driver in Rizal province tested positive for COVID-19.	To maintain operations, IDDS assigned the IDDS National Capital Region (Manila) team to take over specimen transport in neighboring Rizal province, which ensured continuity of the activity	Addressed
IDDS was not able to carry out specimen transportation in late June in Bulacan province because staff at specimen collection sites were occupied with the COVID-19 vaccination campaign.	IDDS requested the Provincial Health Office of Bulacan to identify additional staff who IDDS can train on specimen collection to maintain IDDS support.	In progress

## Lessons Learned

- None

## FY 2021 Q3 Results

Indicators	FY 2021 Q3 Results
<b>Specimen collection and transport</b>	
Number of specimens transported	3,178
Number of specimens transported in ≤24 hours	2,966
Number of specimens transported in 25 to ≤48 hours	212
Number of unique sites specimens are collected from	28
Number of specimens transported for genome sequencing	761
Number of unique sites specimens are collected from for genome sequencing	5
<b>Trainings</b>	
Number of specimen collection/transport trainings conducted	3
Total number of specimen collection/transport training participants	184
Number of female specimen collection/transport training participants	153
Number of specimen collection/transport training participants who passed the training (80% or higher)	164
<b>Procurement</b>	
Number of specimen transport boxes ordered	80
Number of specimen transport boxes delivered	60

# American Rescue Plan FY 2021 Q3 Achievements

## INDIA

### Quarterly Highlights

- The work plan was approved by USAID on June 22.
- Activities in the work plan contribute to the COVID-19 response by providing support for procurement, training, and technical assistance, and EQA for GX and Truenat COVID-19 testing.

#### Procurement:

- IDDS finalized the number of GX Xpress SARS-CoV-2 cartridges and Truenat tests to be procured working with USAID/Washington and the mission. IDDS developed and shared purchase orders for 67,000 GX cartridges and 106,500 Truenat tests with vendors. IDDS also initiated discussions with the mission and India's Ministry of Health and Family Welfare about the sites to be supported and the quantities of tests to be delivered to each site.

#### Training and Technical Assistance:

- IDDS identified two consultants, a senior diagnostic specialist, and a COVID-19 project coordinator, to support COVID-19 activities in India (the development or adaptation of SOPs and training materials, the training and mentorship of laboratory staff, and EQA activities). IDDS anticipates that these consultants will start in July.

#### External Quality Assurance:

- Implementation of activities has not yet started.

### Problems Encountered and Solutions

- None.

### Lessons Learned

- None.

### FY 2021 Q3 Results

- No FY 2021 Q3 data to report



# GHS Funding for Ebola Virus Disease FY 2021 Q3 Achievements

## DEMOCRATIC REPUBLIC OF THE CONGO

### Quarterly Highlights

- Contributed to the EVD response and preparedness by providing support for laboratory strengthening.

#### Technical Assistance:

- IDDS onboarded a diagnostic specialist consultant to provide part-time support for EVD activities.
- IDDS collaborated with the mission, the *Institut National pour la Recherche Biomedicale* (INRB, or National Institute for Biomedical Research), the *Division Provinciale de la Santé* (Provincial Health Division), and other implementing partners to plan for support of the rollout of RDT in DRC.

#### Procurement:

- IDDS discussed a list of priority laboratory reagents and commodities to procure with the Provincial Health Division, the INRB, and the mission.
- IDDS placed an order of 1,000 GX cartridges from Cepheid. However, limited availability meant that only 500 cartridges were available and sent to DRC at this time. The cartridges arrived in Kinshasa on June 9. A civil servants' strike at the MoH prevented IDDS from clearing the cartridges through customs. IDDS worked with the customs agent to verify that the cartridges were stored at appropriate temperatures. IDDS also arranged for secure storage for the cartridges when IDDS gains possession of them and before the handover to the INRB. A formal handover is being planned with the mission and the INRB.

### Problems Encountered and Solutions

Problem	Resolution	Status
IDDS personnel based in Goma were evacuated to Kinshasa due to the eruption of Mount Nyiragongo on May 22. Activities in Goma were on hold until the team returned safely.	When the situation was deemed safe, IDDS staff and consultants returned to Goma to continue implementation of EVD activities.	Addressed

Problem	Resolution	Status
IDDS encountered challenges clearing the cartridges from customs due to an incorrect address on the airway bill and a civil servants' strike at the MoH, which prevented IDDS from getting the documentation needed to retrieve the cartridges from customs.	IDDS consulted with the mission and other implementing partners on how to expedite the customs clearance process. IDDS also stayed in daily contact with the customs agent and even visited the customs storage facility to ensure that the cartridges were being stored in a temperature-controlled room.	In progress

## Lessons Learned

- Through experience trying to clear cartridges this quarter and through discussions with other implementing partners who frequently import commodities, IDDS has learned that it is important to get shipping documentation from vendors as soon as possible to prepare for customs clearance before the commodities even arrive in country.

## FY 2021 Q3 Results

Indicators	FY 2021 Q2 Results	FY 2021 Q3 Results	FY 2021 Cumulative
Distribution of Ministry of Health Commodities			
Number of GeneXpert Ebola cartridges transported	300	0	300
Number of used GeneXpert cartridges for Ebola transported for incineration	1,909	0	1,909
Number of nasopharyngeal swabs transported	2,000	0	2,000
Number of viral transport media transported	700	0	700
Number of EVD specimen collection containers transported	300	0	300
Number of pairs of gloves transported	3,000	0	3,000
Number of Cryoboxes transported	100	0	100
Number of Cryotubes transported	2,500	0	2,500
Procurement			
Number of GeneXpert cartridges ordered	0	1,000	1,000
Number of GeneXpert cartridges delivered	0	0	0

# GUINEA

## Quarterly Highlights

- IDDS contributed to the EVD response and preparedness by providing support for laboratory strengthening.

### Specimen Transport Tracking System:

- IDDS printed SOPs related to specimen transport and archiving and developed a handover letter to the *Direction Nationale des Laboratoires* (National Directorate of Laboratories).

### Diagnostic Training and Technical Assistance:

- IDDS organized and held three sets of trainings on contact tracing and case definition in Nzérékoré.
- IDDS supported the rollout and trainings on RDT for cadaveric surveillance and began providing technical assistance to the RDT TWG this quarter. As part of the preparation, IDDS printed the recently updated (after the 2014 EVD outbreak) national RDT training materials and developed SOPs. IDDS also procured training materials, such as laboratory and specimen collection consumables, for the practical sessions.
- IDDS focused its RDT use training in Nzérékoré, where the greatest EVD mortality had been observed and the deceased were tested for EVD. IDDS worked with government stakeholders from the MoH, the *Agence Nationale de Sécurité Sanitaire* (ANSS, or National Health Security Agency), the National Directorate of Laboratories, and other stakeholders to plan the training. IDDS trained 55 healthcare workers and Red Cross volunteers in Nzérékoré from June 7 to June 12. Participants practiced using the RDTs and demonstrated competency by testing known specimens at the conclusion of the training. A total of 206 RDTs were used during the training. Following the training, IDDS received reports that training participants at hospitals, health districts, and Red Cross health checkpoints were successfully using the RDTs on cadavers. IDDS continued to provide technical assistance to monitor and provide onsite mentorship for specimen collection, internal quality control, and laboratory result management.
- IDDS transported 1,200 RDT kits from Conakry to Nzérékoré by road and handed over the kits to the *Direction Régionale de la Santé* (Regional Health Directorate). IDDS distributed 800 RDTs to 18 health areas and the regional hospital in Nzérékoré. Each health area received a supply that would cover a 90-day enhanced surveillance period. A total of 194 RDTs were retained at the regional laboratory.
- IDDS presented to USAID on June 23 the details of the roll out and use of the RDT trainings in Guinea. Participants at the session included representatives from the USAID GHS team, USAID Ebola TWG members, including those from the Bureau for Humanitarian Assistance, GHS advisors from USAID missions, and the IDDS Guinea and HQ teams.

### Xpert Ebola Assay Quality Assurance:

- IDDS held initial discussions with the laboratory in Nzérékoré and began development of the Xpert Ebola assay quality assurance plan.

**Information Management Systems:**

- IDDS hired a consultant who configured an integration of key laboratory variables and indicators for EVD data into the existing health management information system.

**Procurement:**

- IDDS planned to procure 1,000 GX cartridges from Cepheid, although limited availability of GX EVD cartridges meant that Cepheid shipped only 500 cartridges. These arrived in Conakry on June 16. IDDS cleared the cartridges from customs and is working with the ANSS for an official handover in Q4.
- IDDS handed over 50 cooler boxes to the ANSS.

**Laboratory Mapping Assessment:**

- No updates this quarter.

**Problems Encountered and Solutions**

- None

**Lessons Learned**

- None

**FY 2021 Q3 Results**

Indicators	FY 2021 Q2 Results	FY 2021 Q3 Results	FY 2021 Cumulative
<b>Trainings</b>			
Number of EVD biosafety and biosecurity trainings conducted	5	-	5
Total number of EVD biosafety and biosecurity training participants	40	-	40
Number of <i>female</i> EVD biosafety and biosecurity training participants	10	-	10
Number of EVD biosafety and biosecurity training participants who passed the training (80% or higher)	19	-	19
Number of EVD surveillance focusing on contact tracing trainings conducted	-	3	3
Number of EVD surveillance focusing on contact tracing training participants	-	53	53
Number of female EVD surveillance focusing on contact tracing training	-	18	18
Number of RDT trainings conducted	-	3	3
Total number of RDT training participants	-	55	55
Number of <i>female</i> RDT training participants	-	10	10

Indicators	FY 2021 Q2 Results	FY 2021 Q3 Results	FY 2021 Cumulative
Number of RDT training participants who passed the training (80% or higher)	-	53	53*
Number of SOPs, job aids, or other training materials created	-	4	4
Procurement			
Number of tablets ordered	20	-	20
Number of tablets delivered	20	-	20
Number of computers ordered	7	-	7
Number of computers delivered	7	-	7
Number of packaging materials-cooler boxes ordered	50	-	50
Number of packaging materials-cooler boxes delivered	-	50	50
Number of GeneXpert cartridges ordered	-	1,000	1,000
Number of GeneXpert cartridges delivered	-	-	-

# LIBERIA

## Quarterly Highlights

- IDDS contributed to the EVD response and preparedness by providing support for laboratory strengthening.
- IDDS submitted the revised EVD work plan on May 5. USAID approved it on May 25.

### Technical Assistance:

- Although IDDS's work plan was approved on May 25, IDDS supported the development and dissemination of Ebola specimen collection guidelines, EVD training materials, and EVD laboratory testing capacity assessment checklist for the NPHRL through participation in the laboratory TWG in March.
- The IDDS diagnostic network advisor advised the NPHRL on an assessment of its Ebola testing capacity using the EVD laboratory testing capacity assessment checklist. The assessment covered infrastructure, equipment and supplies, biosafety and biosecurity, human resources, quality assurance, data management, and communication of results.

### Procurement:

- IDDS worked with the MoH NDD and the NPHRL to finalize lists of laboratory reagents and commodities to procure.
- IDDS assessed the power requirements to maintain the laboratory at Tellewoyan Memorial Hospital in Lofa County. The assessment indicated that the current system is insufficient for the current needs; IDDS will be procuring upgraded equipment and coordinating its installation.

## Problems Encountered and Solutions

- None

## Lessons Learned

- None

## FY 2021 Q3 Results

Indicators	FY 2021 Q2 Results	FY 2021 Q3 Results	FY 2021 Cumulative
<b>Trainings</b>			
Number of trainings conducted	0	0	0
Total number of training participants	0	0	0
Number of <i>female</i> training participants	0	0	0
Number of training participants who passed the training (80% or higher)	0	0	0
Number of SOPs, job aids, or other training materials created	0	3	3

# MALI

## Quarterly Highlights

- IDDS contributed to the EVD response and preparedness by providing support for laboratory strengthening and surveillance and contact tracing.

### Training and Technical Assistance for Laboratory Strengthening:

- IDDS convened a workshop from June 28 to July 2 with the INSP to produce modules for the different diagnostic trainings, including modules on the following:
  - Safe specimen collection, packaging, and transport
  - EVD molecular testing
  - EVD RDT utilization

### Procurement for Laboratory Strengthening:

- IDDS consulted with the INSP and the USAID Mission to plan for and finalize the list of laboratory reagents and consumables that IDDS will procure. IDDS has begun to collect quotes from vendors.

### Training and Technical Assistance for Surveillance and Contact Tracing:

- IDDS developed a country-level Gantt chart outlining the steps for EVD preparedness and response activities with key partners and the DGSHP.
- IDDS developed terms of reference and updated training materials for an upcoming training on EVD early detection, contact tracing, case investigation, surveillance reporting, protocols, SOPs, and management of suspect cases for health professionals in Kayes, Sikasso, and Koulikoro regions and Bamako International Airport. The trainings will take place in Q4.
- IDDS planned for CBS trainings for community health center staff and community health workers in Kangaba, which included printing the CBS guide and tools for the training. The two training sessions were held between June 22 and June 27. The training sessions covered detection of 24 diseases and events under surveillance, including EVD, and reporting through SMS (i.e., text message) on the Frontline SMS platform. IDDS also procured CBS-related communication equipment, including a laptop, cellphones, a smartphone, and an external hard drive, all of which were handed over to the Regional Health Director of Koulikoro on June 21.

## Problems Encountered and Solutions

Problem	Resolution	Status
A civil servant's strike within the government caused delays, and IDDS was unable to engage with government officials.	IDDS moved forward the activities it could without input from government stakeholders. Other activities were postponed and rescheduled.	Addressed

## Lessons Learned

- None

## FY 2021 Q3 Results

Indicators	FY 2021 Q2 Results	FY 2021 Q3 Results	FY 2021 Cumulative
Trainings			
Number of trainings conducted	0	2	2
Total number of training participants	0	78	78
Number of <i>female</i> training participants	0	35	35
Number of training participants who passed the training (80% or higher)	0	0	0
Number of SOPs, job aids, or other training materials created	0	N/A*	0
Number of communication equipment for CBS ordered	0	81	81
Number of communication equipment for CBS delivered	0	73	73



# SENEGAL

## Quarterly Highlights

- IDDS contributed to the EVD response and preparedness by providing support for surveillance and contact tracing.

### Training and Technical Assistance:

- IDDS has been evaluating the potential to use funds allocated for EVD surveillance tools and materials review and validation workshops at national and district levels to support broader and more sustainable GHS-related surveillance activities upon request from the General Directorate of Health, given the decreasing threat of EVD.

### Information Systems:

- IDDS has been working with the MoH Directorate of Prevention and the Division of Health Information Systems to develop an EVD tracker in DHIS2 that will allow following and contract tracing of suspected EVD cases, rather than aggregating cases as is currently done in the routine surveillance system. However, this activity is currently on hold pending a request from the MoH to financially and technically support incorporation of EVD into the existing SMS-based early warning surveillance system.
- IDDS is in discussion with USAID about providing this support to the SMS-based early warning surveillance system, which would complement IDDS's support to the CBS program in Senegal.

## Problems Encountered and Solutions

Problem	Resolution	Status
IDDS had planned to support EVD preparedness; however, changing government priorities postponed implementation. In the interim, the EVD outbreak in Guinea ended, leading to decreased prioritization of EVD preparedness activities in all EVD work plan countries, including Senegal.	IDDS, in consultation with the MoH and USAID Washington, is determining what, if any, EVD preparedness activities to support or if these funds should be redirected to support broader GHS-related surveillance activities, given the decreasing threat of EVD.	In progress

## Lessons Learned

- None

## FY 2021 Q3 Results

No FY 2021 Q3 results to report

## Integrated Disease Surveillance and Response FY 2021 Q3 Achievements

Through collaboration with the World Health Organization African Regional Office, IDDS provided support for IDSR in two countries—Cameroon and Senegal.

### Quarterly Highlights for Cameroon

- IDDS provided technical and operational assistance for the IDSR TOT, which was held in Yaoundé from June 7 to June 11, with 34 participants from the central level, including the heads of the regional health information office. The training supported rollout of the third edition of the IDSR guidelines in Cameroon. The TOT was co-financed by the Centers for Disease Control and Prevention Global Health Security Agenda and IDDS.

### Quarterly Highlights for Senegal

- IDDS worked with WHO and the Ministry of Health to prepare for the rollout of the third edition of the IDSR guidelines. The district-level TOT training for this activity in Tambacounda and St. Louis will occur in Q4.

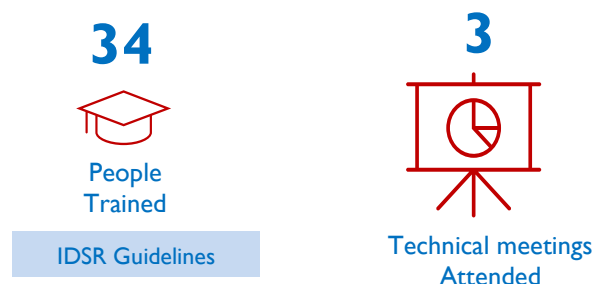
### Problems Encountered and Solutions

Problem	Resolution	Status
Senegal: IDSR rollout was deprioritized by the MoH this quarter because due to critical focus on outbreak response activities to both COVID-19 and EVD.	The IDDS team has worked to advocate for prioritizing the rollout during Q4 now that the EVD outbreak is under control. This advocacy resulted in government changes to the rollout process to prioritize the two IDDS-supported regions for initial district-level rollout in Q4.	In progress

### Lessons Learned

- None

### FY 2021 Q3 Output Results



## TB FY 2021 Q3 Achievements

### CORE TB

#### Quarterly Highlights

- IDDS submitted the second draft of the FY 2021 work plan to USAID on April 18. USAID approved the work plan on May 13.

#### Diagnostic Highlights:

- IDDS engaged Tanzania's National TB and Leprosy Program (NTLP), along with other local partners, and held the NTLP staff training session on the DNA process. The NTLP completed the self-assessment after the training. This was an opportunity for the NTLP to review the diagnostic network and score each core capacity against the pre-determined "stages." IDDS also contracted, deployed, and trained local and regional TB diagnostic consultants for verification visits and stakeholder interviews.

#### Problems Encountered and Solutions

Problem	Resolution	Status
Human resource availability for the laboratory network analyses has been limited, reducing capacity to undertake the assessment.	IDDS reached out to additional personnel in the consortium and among networks of independent consultants to identify and secure additional human resources.	Addressed

#### Lessons Learned

- With weekly monitoring calls and frequent (weekly or more frequent) mentoring check-ins, domestic consultants with familiarity and experience in the national TB program, who are supported remotely by subject matter experts, can complete the verification activities of a DNA in about the same amount of time as required to complete these activities in person.

#### FY 2021 Q3 Output Results

- FY 2021 Q3 data pending

# BANGLADESH

## Quarterly Highlights

- IDDS submitted the first draft of the revised Year 2 work plan on April 16 and the second draft on June 4.

### Diagnostic Highlights:

- IDDS organized and delivered two onsite trainings on the preventive maintenance of TB equipment. This is the first time this type of training has been implemented in a systematic way. The training covered preventive maintenance of GX, culture equipment, and LPA equipment and is expected to improve the efficiency and lifespan of critical TB equipment, which is a significant need in Bangladesh.

## Problems Encountered and Solutions

Problem	Resolution	Status
The COVID-19 pandemic resulted in an ongoing nationwide lockdown and travel restrictions. As a result, delivery of procured equipment and materials to Rajshahi and Shyamoli was delayed.	IDDS staff worked remotely. Project staff seconded to the NTP laboratories continued onsite work to minimize interruption to diagnostic services. Installation of materials and equipment restarted this quarter with support from IDDS team leadership.	In progress
Data collection for laboratory mapping analysis and performance reporting is challenging because the NTP does not want to share data beyond what are readily available.	IDDS continued to build a relationship with the NTP and line director through in-person meetings (despite COVID-19 restrictions), and the improved relationship has slightly improved access to and use of data to meet project needs.	In progress

## Lessons Learned

- Frequent in-person interactions with the NTP, even during the pandemic situation, is the preferred and perhaps only way to gain the NTP's support for implementation of the project activities. This includes engaging the NTP in planning project activities.

## FY 2021 Q3 Output Results

- FY 2021 Q3 data pending

## BURMA

- IDDS submitted the second draft of the revised Year 2 work plan on June 18.

### Quarterly Highlights

#### Diagnostic Highlights:

- IDDS provided training on acid-fast bacillus staining reagent preparation to laboratory technicians from six international nongovernmental organization laboratories in Yangon, in collaboration with WHO and the USAID-funded Global Health Supply Chain Program–Procurement and Supply Management. Ten staff, ranging from laboratory managers to technicians, participated in the training. The training enhanced the skills of laboratory staff on how to prepare high-quality Ziehl–Neelsen staining solutions. This is an interim solution during the political crisis to help resume the sputum smear microscopy services and increase case detection in the private sector.
- IDDS provided advanced training to GX users for technicians from nine international nongovernmental organization laboratories in Yangon, in collaboration with WHO. A total of 28 laboratory technicians participated in the training. The training will reinforce laboratory technicians' knowledge on the proper use of GX and reduce the high rate of user errors. In addition, it will build technicians' skills in correct instrument setup, maintenance, and troubleshooting, thus reducing instrument downtime. The skills learned can be used to mentor junior staff to correctly use GX and provide GX services.

### Problems Encountered and Solutions

Problem	Resolution	Status
With the ongoing COVID-19 pandemic and the coup d'état that started on February 1, government facilities and staff and most TB services continue to be suspended. Internet communications continue to be restricted.	IDDS country staff have been working from home since the COVID-19 pandemic hit the country but continued to respond to communications and perform remote work as connections allowed. With many challenges caused by the dual crises, IDDS assessed how resources could be effectively used to continue support for access to TB diagnostic services. One solution implemented was to switch resources to supporting TB diagnostic services in the private sector and leveraging virtual platforms to continue trainings. IDDS developed and submitted a work plan amendment to include these changes.	In progress

### Lessons Learned

- None

### FY 2021 Q3 Output Results

- Due to the political situation, IDDS has not been able to collect data for Q3.

# CAMBODIA

## Quarterly Highlights

### Diagnostic Highlights:

- IDDS hired and onboarded the diagnostic specialist and the TB coordinator (whose role is equivalent to country team lead). These two full-time staff are leading implementation of diagnostic activities by facilitating coordination with local stakeholders, such as CENAT and COMMIT, arranging delivery and installation of diagnostic instruments, adapting training materials to the local context, and developing deliverables.
- Using Core TB Funds, IDDS procured and delivered supportive commodities (printer, uninterrupted power supplies, and voltage stabilizer) to increase GX functionality at sites through CENAT. With these commodities delivered and installed, GX machines at the nine GX sites are now operational for TB and rifampicin resistance testing.

## Problems Encountered and Solutions

Problem	Resolution	Status
IDDS faced challenges identifying local experts who could perform highly technical and focused scopes of work.	IDDS expanded recruitment to include international experts, which enabled IDDS to find consultants with the expertise needed.	Addressed
Obtaining CENAT's buy-in for TB-diabetes-mellitus work took a long time because CENAT had limited availability due to competing priorities.	IDDS acted proactively and persistently to coordinate a meeting with CENAT. IDDS has a virtual meeting scheduled with CENAT in July to obtain agreement on the scope of work for the IDDS consultant. This meeting will provide IDDS useful insights on the next steps.	In progress

## Lessons Learned

- It is best to keep highly technical consultancies open to local and international candidates from the beginning to ensure timely recruitment and onboarding.

## FY 2021 Q3 Output Results

- FY 2021 Q3 data pending

# INDIA

## Quarterly Highlights

- IDDS submitted the third draft of the work plan to USAID on April 22.

### Diagnostic Highlights:

- IDDS successfully discussed a one-stop diagnostic model for private sector laboratories and engagement with the NTEP during one-on-one meetings with key stakeholders. This consultation process was appreciated and considered timely by stakeholders and the CTD. The resulting exchange of ideas will enhance the feasibility of implementing and finalizing the model, selecting sites, and preparing for implementation in the next quarter.
- IDDS successfully submitted the research proposal on Truenat DNA utilization for LPA testing to the CTD for comments, incorporating inputs from USAID and the National Institute for Research in Tuberculosis in Chennai. Use of Truenat DNA for first-line and second-line LPA testing, if found feasible in the field settings in the study, can potentially reduce turnaround time for LPA testing.

## Problems Encountered and Solutions

Problem	Resolution	Status
Due to the surge in COVID-19 cases in the country, planned in-person meetings with stakeholders had to be postponed for NTW-1 and NTW-2 related activities.	Virtual meetings were conducted for NTW-2 activities with stakeholders wherever possible and according to their availability.	In progress

## Lessons Learned

- Resilient strategies and approaches should be adopted to mitigate the impact of COVID-19 on planned IDDS activities. For example, IDDS had originally planned a joint consultative meeting with key stakeholders and private laboratories to exchange ideas on the conceptualized private sector laboratory engagement model. However, in view of the grave COVID-19 situation during the second wave, IDDS conducted one-to-one consultation meetings with seven private laboratories and four key stakeholders supporting the NTEP in private sector engagement. IDDS was able to develop the private sector laboratory engagement model based on inputs received through these deliberations.

## FY 2021 Q3 Output Results

- FY 2021 Q3 data pending

# TANZANIA

## Quarterly Highlights

### Diagnostic Highlights:

- IDDS carried out a baseline assessment in four zonal TB laboratories to identify gaps in TB testing quality, outline steps to expanding the scope of accreditation at facilities and enhance decentralization of TB testing. IDDS collaborated with the NPHL and the CTRL to adapt a TB laboratory QMS checklist for the assessment. IDDS, CTRL, and NPHL staff jointly conducted assessments at the following laboratories:
  - Mbeya Zonal TB Laboratory in the Southern Highlands Zone
  - Dodoma Zonal TB Laboratory in the Central Zone
  - Bugando Zonal TB Laboratory in the Lake Zone
  - Kibong'oto Zonal TB Laboratory in the Northern Zone

Findings showed that TB culture reporting was compliant with 50 percent of ISO 15189 requirements and that each site had insufficient staff for the workload and number of sections in the laboratory. However, the laboratory test equipment for smear microscopy, GX MTB/RIF, and TB culture was available and functional in all four sites, and LPA equipment was available and functional in two sites. Specific findings of the assessment will be submitted to USAID as a deliverable in Q4 and used to develop specific improvement and operational plans.

- IDDS resumed the TB DNA, which had initially started in March 2020 but was on hold due to COVID-19-related travel restrictions. USAID and IDDS revised the TB DNA process to enable a team of local and regional TB consultants to conduct the assessment. IDDS trained and provided technical assistance to the NTLP for the self-assessment, and to the team of consultants to assess the diagnostic network during site visits. During these visits, IDDS piloted a pediatric TB diagnosis checklist and a mobile version of the site checklist using tablets and laptops in the field. Findings from site visits will be used to verify results of the self-assessment and to generate evidence-based recommendations for improving the TB diagnostic network.

## Problems Encountered and Solutions

Problem	Resolution	Status
IDDS experienced delays in getting timely authorization from the NTLP for work plan activities.	IDDS enhanced engagement with government stakeholders and implementing partners using an increased number of e-mails and phone calls to move activities forward.	In progress

## Lessons Learned

- Government-led coordination of partners is key to streamlining resource allocation, increasing efficiency in the implementation of activities, and avoiding duplication of efforts.



## FY 2021 Q3 Output Results

- FY 2021 Q3 data pending

# VIETNAM

## Quarterly Highlights

- The revised Year 2 budget and monitoring and evaluation plan were approved by USAID on April 9 (the work plan was approved earlier on February 9).

### Diagnostic Highlights:

- IDDS supported expansion of GX testing of stool specimens as part of the pediatric diagnostic algorithm. Support included the following: virtual online training in three provinces (Dong Thap, Tay Ninh, and Tien Giang) for 38 laboratory technicians and 135 healthcare workers at the provincial lung hospitals and district health centers on X-ray film reading, childhood TB screening, diagnosis, laboratory techniques for stool GX, and treatment and management; and follow-on virtual biweekly technical assistance for the implementation of stool GX testing for pediatric diagnosis. This well-received activity is significant because it expands the reach and capabilities for TB pediatric diagnosis in vulnerable areas.
- IDDS completed a baseline assessment of the specimen referral network in five provinces. Results are being discussed with the NTP and will support action planning. The expected outcome is the development of an electronic integrated SRS that can accommodate specimens for multiple diseases.
- After multiple meetings and draft plans, IDDS received government approval to establish a TWG for next generation sequencing. The first meeting will take place in Q4 and will bring together key stakeholders who will work together to upgrade policies and standards and promote quality implementation and coverage for next generation sequencing, leading to improved TB treatment and control.

## Problems Encountered and Solutions

Problem	Resolution	Status
Due to COVID-19 resurging for a fourth time and the resulting lockdowns, training that is highly interactive and includes procedural techniques had to be adapted into a virtual format.	All training events were converted to be virtual. This required exploring online training software that would allow trainers to demonstrate, observe, and provide feedback on trainees' techniques for conducting laboratory tests. The virtual training and technical assistance are being successfully conducted with good participation and engagement. A larger number of geographical locations are also being reached as a result of the format. Other activities, such as the review of IDDS draft reports by the NTP and National Research Laboratory, are delayed due to government staff's increased responsibilities related to the COVID-19 outbreak.	In process

## Lessons Learned

- Virtual training software that allows for interactive engagement, especially observation of practitioners and trainees implementing the techniques, have been well received. The online format has enabled IDDS to reach a greater number of participants across multiple geographical locations and provide quality training and follow-up supportive supervision.
- Evidence-based action planning provides a strong foundation for collaborating with partners on the best use of resources that can address identified gaps and needs. For example, the current action plan being explored in collaboration with the NTP for the specimen referral network is based on the findings of the IDDS SRS assessment that was completed across the five target provinces.

## FY 2021 Q3 Output Results

- FY 2021 Q3 data pending

# ZIMBABWE

## Quarterly Highlights

- IDDS submitted the first draft of the Year 2 work plan to USAID on April 9.

### Diagnostic Highlights:

- IDDS trained national and provincial TB diagnostic network supervisors on the revised National TB Diagnostic Supportive and Supervision Checklist, which includes a scoring system to monitor the performance of laboratories in subsequent assessments. The trained officers will use the skills and knowledge they gained to conduct supportive and supervision visits more effectively.
- IDDS trained NTP technical officers, provincial laboratory scientists, and managers on the national TB/MDR-TB diagnostic algorithm. The trained officers will cascade the training in their respective provinces to healthcare workers on the use and interpretation of the algorithm in the diagnosis and management of TB patients.
- IDDS conducted supportive and supervision visits in all 10 provinces in the country using the revised National TB Diagnostic Supportive and Supervision Checklist. Laboratory staff were mentored on TB testing methods, documentation, quality assurance, and biosafety topics. These efforts are in support of decentralized TB services in the country and to train staff on the revised diagnostic algorithm.

## Problems Encountered and Solutions

Problem	Resolution	Status
The external consultant who had been engaged to support revision of the Public-Private Partnerships framework could not travel to Zimbabwe due to COVID-19 travel restrictions. This delayed the activity.	IDDS is in the process of engaging a local consultant to work remotely with the international consultant.	In progress
ICF is not registered in Zimbabwe, and the project has had challenges with timely disbursement of funds and organizing logistics for activity implementation sometimes resulting in delays or postponements.	IDDS is exploring all options to expedite ICF's registration and in the meantime is engaging a logistics and finance coordinator with 50% LOE on a consortium member staffing to alleviate bottlenecks.	In progress

## Lessons Learned

- IDDS collaborated with different partners in the implementation of activities in Q3, lending importance to having diverse partners and also partnering with accredited institutions. For example, supportive and supervision visits in Harare were conducted in collaboration with the Beatrice Road Infectious Disease Hospital, which is an accredited laboratory. This hospital is a subsidiary of the City of Harare, which has the mandate to supervise laboratories in the city.
- Use of virtual platforms to conduct activities is an effective alternative way to ensure that implementation of activities continues to move forward during travel restrictions. This is especially true for activities related to building capacity or coordinating. For example, IDDS successfully used virtual platforms to review the Public-Private Partnerships situational analysis tools with the international consultant who is leading the activity.

## FY 2021 Q3 Output Results

- FY 2021 Q3 data pending

## Annex A: Activity Implementation Progress

## Annex B: Success/Highlight Stories

## Annex C: Country Monitoring and Evaluation Tables for GHS and TB

TB tables for FY 2021 Q3 pending