USAID Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program

Improved Access. Improved Services. Better Health Outcomes.

Cleaner at Hôpital Général Idrissa Pouye. Photo credit: Phototigui

MTaPS COUNTRY SUMMARY REPORT SENEGAL (2018–2024)

About USAID MTaPS

The US Agency for International Development (USAID) Medicines, Technologies, and Pharmaceutical Services (MTaPS) Program

(2018–2025) enables low- and middle-income countries to strengthen their pharmaceutical systems, which are essential to establishing higher-performing health systems and achieving better health outcomes. The program is implemented by a consortium of global and local partners, led by Management Sciences for Health (MSH), a global health nonprofit.

Learn more at https://www.mtapsprogram.org/



INTRODUCTION

The USAID MTaPS program enables low- and middle-income countries to strengthen their pharmaceutical systems, which are critical for ensuring access to and appropriate use of safe, effective, quality-assured, affordable medicines, vaccines, health technologies and products, and related pharmaceutical services to improve health. MTaPS' objectives are to (1) strengthen pharmaceutical sector governance; (2) increase institutional and human resource capacity for pharmaceutical management and services, including regulation of medical products; (3) increase availability and use of pharmaceutical information for decision making and advance the global learning agenda; (4) optimize pharmaceutical sector financing, including resource allocation and use; and (5) improve pharmaceutical services, including product availability and patient-centered care, to achieve desired health outcomes.

MTaPS employs a pharmaceutical system—strengthening approach to identify and implement strategies and actions that achieve coordinated and sustainable improvements of a pharmaceutical system to make it more responsive and resilient for achieving better health outcomes. The MTaPS approach emphasizes locally led development, country ownership, and self-reliance to support countries on the pathway to sustainability.

At the country level, the MTaPS approach is adapted to the specific context, national health system–strengthening strategies, and USAID's vision and support. From 2018 to 2024, MTaPS provided technical assistance to the Government of Senegal (GOS) to strengthen pharmaceutical systems and services to improve antimicrobial resistance (AMR) prevention and containment and preparedness capacity for hemorrhagic fever disease such as Ebola virus disease (EVD) as well as to support Senegal's COVID-19 emergency response.



- Revitalized One Health Platform needed for effective multisectoral coordination (MSC).
- Stronger IPC programs and guidelines required at the national and health facility levels.
- HCAI surveillance programs needed at national and subnational facilities.
- Biomedical waste not always managed properly.
- Inadequate compliance with antibiotic use regulations and guidelines.
- Weak capacity to handle IPC in health emergencies such as EVD and COVID-19.



- Cooperative for Assistance and Relief Everywhere (CARE)
- Food and Agriculture Organization (FAO)
- National Committee for Antibiotic Treatment
- Permanent Secretary High National Health Security Council
- Senegal MOH
- Senegalese Agency for Pharmaceutical Regulations
- UNICEF
- US Centers for Disease Control and Prevention (CDC)
- USAID-Breakthrough ACTION
- USAID Infectious Disease Detection and Surveillance (IDDS)
- USAID Africa One Health University Network (AFROHUN)
- WHO

COUNTRY CONTEXT

As a member of the Global Health Security Agenda (GHSA) partnership, Senegal has committed to following the principles and approaches outlined in the Global Action Plan on AMR and to meet the World Health Organization (WHO) Benchmarks for International Health Regulations (IHR) Capacities. In 2016, a WHO-led Joint External Evaluation (JEE) (using version 1 of the JEE tool) assessed Senegal's efforts to address AMR surveillance and highlighted the lack of coordination between animal and human health sectors, the absence of a national AMR action plan (NAP-AMR), and inadequate human and resource capacity to carry out infection prevention and control (IPC); water, sanitation, and hygiene; and antimicrobial stewardship (AMS) activities at health facilities and farms. In the 2016 JEE evaluation, Senegal scored 3 out of 5 (developed capacity) for IPC and 1 out of 5 (no capacity) for AMS. The version of the IEE tool used for this evaluation did not have an MSC indicator. In 2017, Senegal developed and started implementing a NAP-AMR for 2017–2022 to address these gaps and to improve the country's capacity to respond to disease threats such as avian influenza and EVD and to limit health careassociated infections (HCAIs). In 2020, the COVID-19 pandemic and EVD alert in West Africa challenged Senegal's NAP-AMR advances and its emergency response capacity, yet provided opportunities to fine-tune its IPC strategies in responding to these threats.

STRATEGIC APPROACH

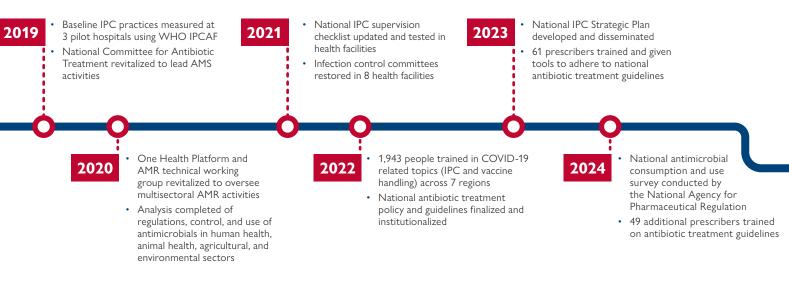
MTaPS supported the GOS ministries, departments, and agencies and its implementing partners to strengthen the country's AMR containment efforts at the national and subnational levels.

To enhance collaboration and synergy in the fight against AMR, MTaPS' support followed the One Health approach, which promotes MSC across the human health, animal health, and environmental sectors. Using the results of a situational analysis that MTaPS conducted in 2018, MTaPS provided technical assistance working through the One Health Platform at the Prime Minister's Office and the IHR focal point at the Ministry of Health (MOH) to implement NAP-AMR priority activities. Support also followed the GHSA's frameworks and guiding principles and WHO's Benchmarks for IHR Capacities for strengthening AMR containment. Specific activities focused on the country's adaptation and adoption of WHO tools, including the Infection Prevention and Control Assessment Tool version 2 (IPCAT2), the Infection Prevention and Control Assessment Framework (IPCAF), and the AMS practical toolkit for low-and middle-income countries, as well as the introduction of a continuous quality improvement (CQI) approach to achieve AMR-related objectives.

Building on its GHSA work, MTaPS collaborated with country partners to improve their capacity to respond to the COVID-19 outbreak; for example, MTaPS worked with the MOH's Health Emergency Operations Center (HEOC) to strengthen COVID-19 treatment centers' IPC practices in selected regions by training staff on the updated IPC standard operating procedures (SOPs) and procuring and supporting the distribution of IPC supplies. Following an EVD outbreak in the neighboring Republic of Guinea, MTaPS collaborated with other MOH HEOC partners, including the CDC, UN agencies, USAID implementing partners, and other GOS ministries to develop and implement the national EVD preparedness and response plan.



KEY MILESTONES



KEY RESULTS

In 2019, during its startup period, MTaPS used the WHO Benchmarks for IHR Capacities tool to conduct a situational analysis that showed that the country had partially or fully addressed 11/17 (65%) benchmark actions in MSC, 14/21 (67%) actions in IPC, and 6/24 (25%) actions in AMS. Over the life of the project, MTaPS collaborated with and provided technical assistance to national counterparts to fully or partially complete benchmark actions as follows (MTaPS estimation as of September 2023):

- On MSC: 75% of actions for capacity level 2, 75% of actions for level 3, 100% for level 4, and 40% for level 5
- On IPC: 60% of actions for capacity level 2, 100% for level 3, 60% for level 4, and 40% for level 5
- On AMS: 75% of actions for capacity level 2 and 50% for level 3

With national stakeholders' ongoing commitment and efforts, complemented by collaboration and support from MTaPS and other implementing partners, Senegal has now moved toward level 3 (developed capacity) in MSC and level 2 (limited capacity) in AMS. Although the country has made great strides in achieving IPC indicators in the JEE versions 1 and 2, the country's 2023 JEE assessment using the version 3 tool looked at a very different set of IPC indicators (many that were unrelated to AMR and not addressed through MTaPS work); as a result, Senegal's 2023 JEE score for IPC is expected to be level 2.

In collaboration with the MOH and other stakeholders, MTaPS supported Senegal in achieving the following key results:



Effective multisectoral coordination on AMR

- National multisectoral AMR Technical Working Group established with clear terms of reference to coordinate and provide stewardship for AMR activities across human health, animal health, agricultural, and environmental sectors.
- Annual multisectoral AMR action plans developed and implemented by MSC partners monitored to track progress.
- NAP-AMR 2017–2022 evaluated for the first time using a JEE-based, locally developed tool, showing 57% action plan activities completed in IPC, 9% in AMS, and 39% in communication, coordination, and research.





MTaPS.

supported health

12 hospitals are

implementing CQI to improve IPC.

assessments.

3 hospitals

facilities in 8 regions in

Senegal have functional IPC committees.

13 facilities in Senegal have

demonstrated **improved performance** in core IPC

components on annual

AMS

trainers and

O Prescribers trained in AMS in

Infection prevention and control

- National IPC program and practical manuals for health facilities revised to align with WHO standards ensuring that health care practices follow globally recognized best practices.
- National IPCAT and facility IPCAF assessments conducted to identify core IPC program improvements and a prioritized action plan developed to strengthen IPC capacity.
- National IPC supportive supervision checklist for health facilities that consistently evaluates IPC gaps, measures, and improvements updated and rolled out in all health facilities nationwide.
- More than 1,000 health care workers trained on revised IPC guidelines to foster improved IPC practices in facilities.
- CQI implemented at 12 MTaPS-supported health facilities to provide facilities a way to identify and address IPC challenges through continuous monitoring using the WHO IPCAF tool and to make sustainable improvements.
- Of 13 facilities supported by MTaPS:
 - O Infection control committees revitalized and made functional. These committees oversee and implement the facility IPC program, which is a critical step in controlling HCAIs.
 - O All showed improvement per the IPCAF assessment, demonstrating their increased, sustained commitment to safer health care. Of these, 2 facilities improved from inadequate to intermediate level; 5 facilities improved from basic level to intermediate level; 2 facilities improved from basic level to advanced level; 3 facilities improved their scores but remained in the basic level; and 1 facility maintained the advanced level and improved its score.
 - O 10 improved adherence to hand hygiene and IPC guidelines, an important step toward reducing HCAI prevalence.

Use of antimicrobial medicines optimized

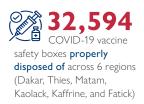
- Rapid situational analysis of the regulations, control, and use of antimicrobials conducted to guide the creation of a national AMS plan to improve antimicrobial use across multiple sectors.
- National antibiotics treatment guidelines updated in collaboration with the National Committee for Antibiotic Treatment to integrate the WHO Access, Watch, and Reserve (AWaRe) categorization of antibiotics to standardize treatment practices; revised guidelines distributed to 14 hospitals and used to train 110 prescribers.
- CQI implemented in 3 health facilities to improve AMS practices.
- 19 trainers trained on AMS to provide ongoing education on antibiotic use and improve antibiotic prescription practices.



COVID-19 and Ebola virus disease

- Capacity of the MOH National Department of Hygiene strengthened to be able to conduct decontamination and disinfection sessions to reduce the spread of disease at health facilities, homes, and morgues, including 859 sites in Dakar, 99 sites in Thiès, and 27 in Diourbel.
- Capacity of the MOH HEOC strengthened, allowing it to implement IPC for COVID-19 containment in 48 treatment centers in the 3 most affected regions—Dakar, Thiès, and Diourbel—and in 8 health facilities in 4 additional regions.





- 13 COVID-19 vaccination microplans created at regional and district levels, which proved to be an efficient tool to help increase vaccine coverage; as a result, the MOH's Expanded Vaccination Program rolled out microplanning nationwide for all vaccines.
- SOPs updated on case management, IPC, surveillance, behavior change, communication, logistics, and vaccination for EVD and other hemorrhagic diseases.
- SOPs developed on psychosocial care of patients, families, and health care workers affected by EVD; 2,000 hard copies of the SOP manual for the control and management of Crimean-Congo viral hemorrhagic fever were given to GOS EVD incident manager.
- Needs assessment conducted at 18 land border entry points to provide EVD incident manager and other stakeholders with information on operating temporary care sites in accordance with EVD and hemorrhagic fever disease SOPs.

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After a year of implementing the IPC action plan . . . in Tivaouane, we have noticed a remarkable improvement in the management of biomedical waste, thanks to the support of MTaPS and the [Directorate for Quality, Security, and Hospital Hygiene] in the training of hospital staff, especially the training that was carried out in the local language to enable frontline workers to master the biomedical waste component."

Dr. Ablaye Sakho President of the medical commission of the Tivaouane hospital



Preventing post-vaccination infections: the importance of proper biomedical waste management

In the face of the COVID-19 pandemic, Senegal swiftly mobilized a comprehensive response plan, established specialized treatment facilities, promoted safety awareness, and launched an extensive vaccination campaign. Recognizing an urgent

need for biomedical waste management, MTaPS focused on training health workers, educating transporters on proper practices, and equipping waste handlers with personal protective equipment. By March 2022, MTaPS had helped Senegal properly dispose of 32,594 safety boxes (containing more than 3.25 million used syringes and needles) in 6 regions, including the capital city, Dakar. The MOH, with MTaPS support, trained 789 health personnel and 694 transporters and waste handlers on how to manage vaccination waste. This collaborative effort underscored the importance of managing biomedical waste in the fight against COVID-19.



COVID-19 vaccination waste management site. Photo credit: Georges Yameogo





<u>e-Learning on Infection Prevention</u> and Control

- Adherence to Infection Prevention and Control Practices in MTaPSsupported Hospitals
- Moving from assessments to implementation: promising practices for strengthening multisectoral antimicrobial resistance containment capacity
- Strengthening multisectoral coordination on antimicrobial resistance: a landscape analysis of efforts in 11 countries

PATHWAY TO SUSTAINABILITY

MTaPS provides technical guidance and supports countries in establishing strategic direction and developing critical capacities to create sustainable and resilient pharmaceutical systems. Through its activities in Senegal, MTaPS strengthened the ability of local governments and organizations (public, private, and civil society) to deliver improved, locally led, and more sustainable pharmaceutical services, as highlighted below:

- The One Health Platform established at the Prime Minister's office and the MOH's IHR focal point jointly led AMR stakeholder collaboration and facilitated synergies to strengthen MSC, which contributes to national and global health security.
- The Regional Governors and Regional Health Directorates began to take full ownership of the planning, implementation, and monitoring of GHSA activities in their regions.
- The Senegalese Agency for Pharmaceutical Regulations is reporting antimicrobial consumption data into WHO's Global Antimicrobial Resistance and Use Surveillance System, which boosts transparency and accountability mechanisms, including quality of health services and medicines, and utilization of antimicrobials.
- The MOH adopted revised IPC guidelines, supervision checklists, and a related training package on the e-Learning platform that institutionalized components needed to sustainably improve the country's IPC capacities and implement the National IPC Strategic Plan.
- Three regional health directorates developed the capacity to oversee the planning, implementation, and monitoring of IPC practices in health facilities.

RECOMMENDATIONS

- The MOH should facilitate official endorsement of technical documents developed with MTaPS support to avoid implementation delays.
- The GOS can reinforce the One Health approach by facilitating joint work planning and activities across sectors that foster collaboration among government counterparts.
- The Directorate for Quality, Security, and Hospital Hygiene should provide ongoing support for facilities' use of CQI by ensuring effective and timely updating of IPC checklists, guidelines, and SOPs and by providing ongoing assessment, feedback, and training to improve adherence to IPC guidelines.
- The MOH should continue to promote awareness of the IPC courses on its e-Learning platform and launch campaigns to increase health workers' use of the platform to help them easily and continuously improve their IPC practices.
- The MOH should engage hospital leadership to prioritize and allocate more resources to help their infection control committees carry out their IPC improvement action plans and gradually achieve the highest IPC capacity levels.
- Donors and implementing partners should take steps to strengthen their collaboration to improve program planning and implementation.



FUTURE CONSIDERATIONS

- Consider introducing performance-based financing or grants to fund the Regional Health Directorates to implement regional health programs, including GHSA, effectively.
- Prioritize investment in human resources involved in IPC at the regional and facility levels to improve accountability, patient outcomes, and safety.
- Strengthen the National Regulatory Agency's capacity to oversee AMS efforts leading to ownership and accountability and better safety and patient outcomes.
- Develop a pharmaceutical-sector gap analysis document in collaboration with stakeholders to identify pharmaceutical challenges and priorities. Organize partners forum on pharmaceutical system strengthening to enable the MOH to secure funding and technical support to ensure a reliable supply of quality health commodities.
- Strengthen the MOH's capacity to outsource supply chain functions to the private sector to ensure a reliable, sustainable supply of quality health commodities, beyond donor assistance.
- Implement actions to improve supply chain performance to maintain an uninterrupted flow of antimicrobials to service delivery points and patients/clients, including during emergencies.

RECOMMENDED CITATION

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