

NASEM Committee: Examining the Long-term Health and Economic Effects of Antimicrobial Resistance in the United States

September 24, 2020

Children read materials about malaria. Photo by: Morgana Wingard



USAID
FROM THE AMERICAN PEOPLE

On behalf of the American people, the U.S. Agency for International Development (USAID) promotes and demonstrates democratic values abroad, and advances a free, peaceful, and prosperous world.

We lead the U.S. Government's international development and disaster assistance through partnerships and investments that save lives, strengthen democratic governance, and help people emerge from humanitarian crises.

We support partners to become self-reliant and capable of leading their own development journeys.

The emergence and spread of AMR undermines past and future progress toward this mission.

Core Strengths

Global, in-country presence and capacity

In-depth knowledge of local context

Bilateral partnerships

Convening power

Multisectoral capabilities

OVERVIEW



Areas of Action

Infection Prevention and Control

Surveillance and Diagnosis

Use and Handling of Antimicrobials

**Science, Technology, Research &
Development**

**Awareness and Risk
Communication**

Presentation Topics

Tuberculosis

Malaria

**Maternal, Child Health and
Nutrition**

Global Health Security

TUBERCULOSIS (TB)

USAID Global Accelerator to End TB; National Action Plan for Combating MDR-TB

Priority Areas of Action

Reduce the development of drug resistant TB

Rapid diagnosis of TB and drug resistant TB; appropriate treatment regimens; strengthened service delivery and patient centered care.

Address the transmission of drug resistant TB

Early diagnosis; implementation of IPC measures; contact investigation and preventive treatment.

Research and Development

Promote development of effective, shorter, and less toxic regimens for drug resistant TB; evaluate TB treatment combinations, clinical trials, and research; gather data and evidence on antibiotic stewardship and improving treatment efficacy.

Key Achievements

in USAID priority countries working together with other partners and each country's National TB Program



330K drug resistant TB cases on treatment



New effective, safe, less toxic, all oral shorter regimens implemented



7 research studies on new treatment regimens funded

Drug-resistant TB undermines efforts to end TB by 2030.



MALARIA

The U.S. President's Malaria Initiative (PMI)

Priority Areas of Action

Infection Prevention and Control (IPC)

Comprehensive malaria interventions in vector control, surveillance, and case management across 27 countries; support for Greater Mekong regional strategy to eliminate drug-resistant malaria.

Stewardship

Strengthening malaria diagnostic testing to reduce misuse/overuse of antimalarial drugs.

Surveillance

Monitoring of antimalarial efficacy and drug resistance.

Research and Development

Investment in Medicines for Malaria Venture, a public-private partnership to accelerate development of novel antimalarials that are effective against drug-resistant malaria.

Drug resistance threatens to reverse major gains made against malaria morbidity and mortality.

Key Achievements



31K health workers
trained in malaria diagnostics
in 2019



>200 drug resistance
monitoring surveys



4 novel antimalarial drugs
in Phase II clinical trials

 PMI Priority
 USAID-Supported

MATERNAL, CHILD HEALTH AND NUTRITION

USAID GHP/MCH: Ending Child & Maternal Deaths; USG Global Water Strategy; Water Directive

Priority Areas of Action

Infection Prevention & Control (IPC)

Vaccines and Immunization: Support the procurement and delivery of vaccines in partnership with Gavi, the Vaccine Alliance.

Water, Sanitation and Hygiene (WASH) in healthcare facilities. Support research in WASH.

Infection Detection & Rational Antimicrobial Use

In 25 priority countries, strengthen coverage and quality of maternal, newborn, and child health platforms to diagnose and appropriately manage infections, including possible severe bacterial infections, diarrhea and pneumonia

Key Achievements



>760M children
immunized since 2001



42M people gained access
to water services (2008-2017)



92.8M treatments
provided to children for
diarrhea and pneumonia

GLOBAL HEALTH SECURITY

Global Health Security Strategy; Global Health Security Agenda

Priority Areas of Action

Multisectoral Coordination on AMR

Develop and implement a multisectoral national action plan on AMR

Surveillance System of AMR

National AMR surveillance systems that integrate surveillance of AMR in pathogens of concern to human and animal health and agriculture.

Infection Prevention and Control (IPC)

Functioning infection prevention and control system for healthcare facilities and farms.

Optimize use of Antimicrobial Medicines in Human and Animal Health and Agriculture

Key Achievements



>10 countries strengthened national One Health AMR action plans



22 IPC assessments across 13 countries (FY19) -- training thousands of health workers



7 countries improved testing capacity for AMR in veterinary laboratories.

CONCLUSION

USAID's approach to AMR

Journey to Self Reliance

- One Health
- Sustainable interventions
- Locally generated solutions
- Data-informed investments
- Partner countries and diverse stakeholders
- Private Sector



Jessica Petrillo, PhD

Senior Advisor for Antimicrobial Resistance and GHSA
Office of Infectious Diseases, Bureau for Global Health,
JPetrillo@USAID.gov

Contractor, STAR mechanism, Public Health Institute



USAID
FROM THE AMERICAN PEOPLE