This is an overview of the USAID/Ukraine FY 2022 Tuberculosis (TB) Roadmap, implemented with FY 2021 budget. It was developed in consultation with the National TB Program (NTP) and with the participation of national and international partners involved in TB prevention and care in the country.

Among the high multidrug-resistant TB (MDR-TB) burden countries, Ukraine is ranked ninth.\(^1\) In 2020, the estimated TB incidence in Ukraine was 73 cases per 100,000.\(^2\) Furthermore, in 2020, 17,533 TB cases were diagnosed and notified to the NTP, of which two percent were children.\(^3\) The estimated proportion of MDR-TB and rifampicin-resistant TB (RR-TB) cases among new and previously treated TB cases was 27 percent and 43 percent, respectively.\(^4\) Additionally, the treatment success rate (TSR) for people with MDR-TB/RR-TB and extensively drug-resistant TB (XDR-TB) who started treatment in 2018 was 50 percent and 34 percent, respectively.\(^5\)

In 2019, Ukraine adopted a National Strategy for HIV/AIDS, TB, and Viral Hepatitis, which runs through 2030. In this strategy, TB incidence and mortality reduction is a key goal. To achieve this, the Government of Ukraine will need to improve the system of organization and provision of TB care, ensure effective detection of new cases and prevention of progression of existing cases to drug-resistant TB (DR-TB), and improve the quality and effectiveness of TB treatment. Additionally, the NTP, within the Center for Public Health (CPH) in the Ministry of Health (MOH), also implements the State Strategy for the Development of Anti-TB Care for Population (adopted in 2019). The goal of this strategy is to develop and implement a new model of TB prevention, early diagnosis, and provision of care that effectively meets the needs of people with TB. This TB-specific strategy will focus on the implementation of approaches in the provision of TB care; effective TB preventive measures; and in improving TB detection, diagnostics, and treatment; optimization of laboratory networks; building capacity of human resources; improving information systems; and implementation of a new financing model. The Cabinet of Ministers approved the 2020-2023 action plan for this strategy in November 2020.

The COVID-19 pandemic has had far-reaching effects on the global TB response, threatening to erase years of progress. As a result of COVID-19 and associated measures to control it, one million fewer people in the 23 countries where USAID focuses TB programming had access to TB care through 2020.

\(^3\) Ibid.  
\(^4\) Ibid.  
\(^5\) Ibid.
diagnosis and treatment in 2020, compared to 2019—representing a more than 20 percent decline. In Ukraine, there was a 31 percent decline in TB case notifications and a 45 percent decline in DR-TB case notifications in 2020, compared to 2019. Continuous quarantine measures, coupled with the fears surrounding COVID-19, significantly affected both care-seeking behaviors and the provision of healthcare services in general, including TB services in Ukraine. This led to people only seeking care once symptoms were in advanced stages. The COVID-19 pandemic also led to shortages of healthcare providers, increased workloads of providers, and limited access to TB diagnostics. To address these case detection declines and resource redirection, USAID, in collaboration with partner governments and the Global Fund to Fight AIDS, Tuberculosis and Malaria (Global Fund), developed urgent TB program recovery plans in seven of the hardest hit, high-burden TB countries, including Ukraine. The Ukraine TB Recovery Plan supports the NTP’s larger efforts to mitigate the impacts of COVID-19 on countries’ TB responses. As outlined in this Roadmap, USAID continues to work with in-country partners and stakeholders to monitor and mitigate the impact of subsequent waves of COVID-19 resurgences on TB programming in real time, and to build more resilient TB programming.

The proposed FY 2021 USAID TB budget for Ukraine is about $8.5 million. With this level of funding, USAID will support the following technical areas:

**REACH**

*TB diagnosis*

Ukraine continues to prioritize the use of rapid molecular diagnostics and providing laboratory networks with the necessary equipment and supplies to perform diagnostics for all forms of TB. USAID has significantly improved the diagnosis of DR-TB cases by revising the national molecular diagnostic strategy to use line probe assay (LPA) technology to assist in internal laboratory quality control; installing and training users of the Xpert® MTB/RIF (GeneXpert) alert system; and embedding maintenance practices for the automated BD BACTEC™ MGIT™ system (liquid culture testing).

Moving forward, USAID will scale-up access to rapid, high-quality diagnostics for all people with presumptive TB by building the capacity of laboratory networks and helping to accelerate the implementation of new diagnostics through mentoring visits, on-the-job training, and online training. More specifically, FY 2021 funds will support technical assistance (TA) to the NTP to help optimize the use of GeneXpert instruments, scale up detection among children by introducing stool testing using GeneXpert to simplify procedure and ultimately increase detection among this
group, maximize the use of LPAs, and introduce whole genome sequencing. Further, as part of the TB Recovery Plan, USAID expanded the use of mobile diagnostic units equipped with chest X-ray (CXR) machines for TB screening; an activity that will continue to receive USAID support. Additionally, to address the drop in DR-TB case detection, USAID will continue to provide TA to scale-up the use of molecular diagnostics and develop appropriate diagnostic algorithms and corresponding training.

**Engaging all care providers**

In Ukraine, TB case finding activities were traditionally more passive, and largely facility-based, in nature. However, with the roll-out of healthcare reform, it was recognized that primary care providers should play a bigger role in active case finding (ACF). With FY 2021 funds, USAID will help build primary healthcare capacity through motivational training sessions, as well as virtual training and mentoring sessions for doctors and nurses implementing new diagnostic approaches. Moving forward, USAID will work to ensure that healthcare providers receive regular training and mentoring sessions on new diagnostics, including through virtual or digital platforms, as necessary. Additionally, USAID will continue to improve the capacity of non-governmental organizations (NGOs) to provide counseling and implement contact investigation in community settings through training and mentorship.

**Community TB care delivery**

Building on existing ACF algorithms, USAID collaborated with NGOs and other partners to develop joint approaches in providing gender-sensitive patient counseling and community-based ACF and contact tracing. These community-based ACF, contact investigation, and TB care activities were first implemented through the TB Recovery Plan and will continue to be implemented with FY 2021 funding. Further, based on previous successful engagement, USAID will continue to support the OneImpact digital platform to encourage people to use a self-screening tool and guide them to the closest available facility for TB diagnostics.

Stigma and discrimination toward people with TB continue to present barriers for promoting health-seeking behaviors. USAID has worked with the NTP to mainstream gender equity into the national TB policy framework; however, there is more work to do to operationalize and ensure concepts of gender equity and stigma reduction are considered and incorporated into all activities and high-level discussions.
CURE

Drug-susceptible TB (DS-TB) treatment

In the context of COVID-19-related limitations, scaling-up digital technologies for treatment support became a critical component of TB care. USAID supported the scale up of video directly observed therapy (VDOT) and smart pillboxes. Additionally, to limit the risk of treatment interruption, USAID supported the transportation systems for both sputum samples and TB drugs. With FY 2021 funds, USAID will continue to support these and other innovative, people-centered TB care approaches. USAID will also support the revision of national and regional policy documents and develop training curriculums for any new treatment guidelines.

Multidrug-resistant TB (MDR-TB) treatment

Continuing to improve the successful treatment of individuals with MDR-TB is an important priority for the NTP. To accomplish this, the Government of Ukraine will need to ensure access to new TB drugs and novel shorter treatment regimens, through the implementation of operational research and the procurement of those new drugs. With FY 2021 funds, USAID will continue to work with the NTP and other partners to scale up access to new and safer treatment regimens, including all-oral, shorter treatment regimens. USAID will also support the revision and roll-out of updated country guidelines to further educate healthcare providers and ensure rapid uptake of treatment regimens. Additionally, USAID will help build the capacity of the existing pharmacovigilance system by training healthcare providers to help manage people with DR-TB and accurately report adverse drug reactions, and by providing TA to the National TB Reference Laboratory (NTRL) to ensure second-line drug susceptibility testing.

PREVENT

Prevention

Implementation of TB prevention activities remains a challenge in Ukraine. Lack of access to new TB preventive treatment (TPT) options continues to present a barrier to scale up of TPT. USAID supported the development of guidelines for TPT among people living with HIV (PLHIV) and operational research for interferon-gamma release assay (IGRA) testing for TB infection (TBI) screening among health facility staff.

In light of low TB case notification rates, contact investigation among children and adult contacts is a primary goal of Ukraine’s 2021-2023 national operation plan. To support this, USAID will continue to support ACF and contact investigation activities by engaging with primary healthcare staff and NGOs, including at pediatric hospitals. Additionally, USAID will continue to support
activities aimed at improvement of TBI screening among health facility staff and pilot the introduction of new TPT regimens. To ensure timely and accurate data analysis of TB prevention efforts, as well as evidence-based decision making, USAID will continue work with the NTP to develop and roll out an electronic data entry platform.

**SUSTAINABLE SYSTEMS**

*Commitment and sustainability*

On November 27, 2019, the Cabinet of Ministers of Ukraine approved the Strategy for HIV/AIDS, TB and Viral Hepatitis until 2030 and the 2020-2023 State Strategy for Development of Anti-Tuberculosis Care for the Population. These key strategic documents demonstrate the Government of Ukraine’s continued commitment to improving and scaling-up TB control in Ukraine. USAID is similarly committed to helping the Government of Ukraine achieve its TB goals and, in March 2021, USAID and the MOH signed a partnership statement committing to work together to achieve the United Nations High-Level Meeting (UNHLM) on TB targets. With the Government of Ukraine’s firm commitment to end TB, USAID will continue working with local decision makers and government officials to discuss and address funding gaps, particularly in light of the strains placed on TB domestic resources by the COVID-19 pandemic. At the regional level, USAID will continue to support roundtables with local decision makers and government officials to review program results, discuss any existing funding gaps, and strengthen collaboration with the government and partners.

*Capacity and functioning systems*

To strengthen the supporting systems needed for effective TB care and prevention, Ukraine is focused on reorganizing TB facilities, implementing new mechanisms to finance TB interventions, strengthening the TB workforce, and ensuring equal rights for people with TB by helping address and reduce stigma and discrimination. To this end, USAID will continue to provide TA to ensure continuous access to high-quality TB commodities, particularly as the country transitions to the newly established Central Procurement Agency (CPA). Additionally, capitalizing on past successes, USAID, through an embedded advisor, will continue to support the MOH to strengthen monitoring and evaluation (M&E) skills and capabilities, including improving the routine electronic data collections systems. To address the gaps in TB human resources for health, USAID will continue to build the capacity of health providers to ensure workplace safety.