

## THE HISTORY OF COOPERATIVE THREAT REDUCTION (CTR)

CTR, also known as ‘the Nunn-Lugar program,’ was devised as an emergency response to a collapsed Soviet Empire possessing 30,000 nuclear weapons, an estimated 40,000 tons of chemical weapons (CW), and a robust biological capability spread over what would rapidly evolve into 15 sovereign states spanning 12 time zones. Based on legislation authored by former senators Richard Lugar and Sam Nunn in 1991, the program provided U.S. funding and expertise to: 1) consolidate and secure WMD in a limited number of secure sites; 2) inventory and account for these weapons; 3) provide safe handling and safe disposition of these weapons as called for by arms control agreements; and 4) offer assistance in finding gainful employment for thousands of former Soviet scientists with expert knowledge of WMD or their delivery systems. The early momentum created by this effort laid the foundation for a broad array of related programs in other United States (U.S.) agencies and, in some cases, pursued multilaterally by U.S. allies.

Legislative action expanded and enhanced CTR’s threat reduction activities in 1997. Then, in Fiscal Year (FY) 2004, Congress authorized CTR activities to extend beyond the territory of the former Soviet Union (FSU) on an exceptional basis. Finally, in FY 2008, Congress provided authorization for a normalized expansion of CTR activities outside the FSU. Over more than 25 years, these efforts can lay claim to the following achievements:

- ▶ Destroyed 2,531 missiles—intercontinental ballistic missile (ICBM), submarine-launched ballistic missile (SLBM), and air-to-surface missile (ASM)—thereby deactivating up to 7,616 associated warheads, including all the missiles and warheads located in the former Soviet republics of Belarus, Kazakhstan, and Ukraine
- ▶ Decommissioned more than 1,300 delivery systems (silos, mobile launchers, submarines, and strategic bombers)
- ▶ Upgraded security at 24 nuclear weapons storage sites
- ▶ Securely shipped over 600 shipments of nuclear warheads from less secure storage to more secure storage or destruction
- ▶ Upgraded nuclear weapons inventory systems from paper records to real-time electronic inventory
- ▶ Secured 10 chemical weapons sites
- ▶ Destroyed over 4,700 tons of chemical weapons agent originating in Albania, Libya, Russia, and Syria
- ▶ Engaged more than 30 countries on three continents in biological threat reduction efforts. These efforts include facilitating the construction or renovation of more than 100 laboratory and storage facilities and coordinating more than 300 cooperative research projects aimed at safely studying, detecting, and diagnosing especially dangerous pathogens
- ▶ Provided civilian employment for over 22,000 former WMD scientists

The primary objectives of the original CTR Program were to “consolidate, secure, and eliminate” materials and infrastructure in the FSU. CTR began to expand and adapt its toolkit at a more rapid pace in 2008 when Congress removed the geographic limitations of the program. At the same time, between 2008 and 2014, CTR’s efforts to secure nuclear weapons and destroy WMD and WMD infrastructure in the FSU largely drew to a close.

Between 2012 and 2017, the Biological Threat Reduction Program completed most of its major infrastructure projects in the FSU and initiated a number of smaller-scale biological safety, security, and surveillance projects focused on WMD-type pathogens in the FSU, Africa, Southeast Asia, the Middle East, and elsewhere—expanding from activities in seven FSU countries in 2008 to more than 30 countries in most regions of the world. Meanwhile, the Proliferation Prevention Program (PPP) began transitioning its substantial border security and maritime patrol upgrades along the major proliferation pathways in the FSU to partner government sustainment and started providing similar upgrades along potential proliferation pathways in Southeast Asia. PPP also began supporting major upgrades to Jordan’s and Lebanon’s abilities to detect and interdict WMD along their borders with Syria. Lastly, the Chemical Weapons Destruction (CWD) program responded to new emerging threats by cooperatively destroying the most dangerous portions of Libya’s and Syria’s chemical weapons arsenals and by developing cooperative projects to secure agents, precursors, and toxic industrial chemicals, which could be used to make an improvised chemical weapon.

Throughout its history, CTR has participated in a mix of elimination-type activities (SOAE, CWD, and demilitarization of biological facilities) and capacity building activities (nuclear weapons security; biological safety, security, and surveillance; and border detection/interdiction). In recent years, this mix has shifted more toward capacity building, implemented mostly through BTRP and PPP, but punctuated by “one off” elimination projects, such as destroying Libya’s and Syria’s CW. The program remains poised for future security and elimination projects.

