

## FIGHTING THE OPIOID THREAT

Through Executive Order 13784, the Commission on Combating Drug Addiction and the Opioid Crisis was established to counter the public health crisis responsible for 47,600 overdose deaths in 2017. In direct response, the Department of Homeland Security (DHS) Science and Technology Directorate (S&T) has established a program in collaboration with U.S. Customs and Border Protection (CBP) to deliver improved drug detection capabilities within 12-18 months.

## PROGRAM OVERVIEW

The Opioid/Fentanyl Detection Project will identify and develop capabilities to better detect and interdict synthetic opioids like fentanyl entering the United States through international mail and parcel shipments. This program will provide advanced detection technologies and analytics that increase screening capacity at international mail facilities, without unduly impacting the flow of legitimate trade. This program aims to increase the number of interdictions of illicit drugs, reducing the overall supply entering the United States.

## TECHNICAL APPROACH FOR RAPID INNOVATION

To accelerate technology development and delivery of solutions, S&T is leveraging innovative business tools like the Silicon Valley Innovation Program, Long Range Broad Agency Announcement and Small Business Innovation Research programs to engage industry partners. S&T and CBP have also partnered with the Office of National Drug Control Policy and U.S. Postal Inspection Service (USPIS) to execute a \$1.55 million prize competition, challenging innovators to develop novel, high-throughput screening capabilities. S&T's Transportation Security Laboratory is evaluating how equipment currently used by the Transportation Security Administration for explosives detection performs when used for synthetic opioid detection and is beginning work with industry partners to expand existing threat libraries and develop detection algorithms for those technologies.



## SUPPLY CHAIN DISRUPTION USING DATA ANALYTICS

In partnership with CBP, Immigration and Customs Enforcement, and USPIS, S&T is working to develop technical methods for exposing illegal mail transfers of opioid materials from foreign countries for distribution in the United States. S&T is focused on examining data related to international mail to understand the networks of production and consumption. These data-driven capabilities will help the government work with its partners to increase barriers to illicit opioid trafficking.

## ILLICIT DRUG DETECTION WORKING GROUP

S&T is also leading the interagency Illicit Drug Detection Working Group to coordinate communications between various government stakeholders, including DHS Components, Department of Defense, Drug Enforcement Agency and Department of Justice, on synthetic opioid seizure, profile data approaches and standards for detection and best practices for safe handling.

## CURRENT PROGRAM ACTIVITIES

- Capabilities & Requirements Analysis Working Group
- Tech Scouting and Market Research
- Detection Standards Development
- Developmental Test and Evaluation
- Opioid Detection Prize Competition
- Opioid Supply Chain and Research Analytics