

Public Law 118–186  
118th Congress

An Act

Dec. 23, 2024  
[H.R. 8663]

Detection  
Equipment and  
Technology  
Evaluation to  
Counter the  
Threat of  
Fentanyl and  
Xylazine Act of  
2024.  
6 USC 101 note.

To require the Science and Technology Directorate in the Department of Homeland Security to develop greater capacity to detect and identify illicit substances in very low concentrations.

*Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,*

**SECTION 1. SHORT TITLES.**

This Act may be cited as the “Detection Equipment and Technology Evaluation to Counter the Threat of Fentanyl and Xylazine Act of 2024” or the “DETECT Fentanyl and Xylazine Act of 2024”.

**SEC. 2. ENHANCING THE CAPACITY TO DETECT AND IDENTIFY DRUGS SUCH AS FENTANYL AND XYLAZINE.**

Section 302 of the Homeland Security Act of 2002 (6 U.S.C. 182) is amended—

(1) in paragraph (13), by striking “and” at the end;

(2) in paragraph (14), by striking the period at the end and inserting “; and”; and

(3) by adding at the end the following:

“(15) carrying out, in coordination with the Drug Enforcement Administration, research, development, testing, evaluation, and cost-benefit analyses to improve the safety, effectiveness, and efficiency of equipment and the effectiveness and efficiency of reference libraries for use by Federal, State, local, Tribal, and territorial law enforcement agencies for the accurate detection of drugs, such as fentanyl and xylazine, including—

“(A) portable equipment that can detect and identify drugs with minimal or no handling of the sample;

“(B) equipment that can separate complex mixtures containing low concentrations of drugs and high concentrations of cutting agents into their component parts to enable signature extraction for field identification and detection; and

“(C) technologies that use machine learning or artificial intelligence (as defined in section 5002 of the National Artificial Intelligence Initiative Act of 2020 (15 U.S.C. 9401)) and other techniques to predict whether the substances in a sample are controlled substance analogues or other new psychoactive substances not yet included in available reference libraries.”.

**SEC. 3. REQUIREMENTS.**

6 USC 182 note.

In carrying out section 302(15) of the Homeland Security Act of 2002, as added by section 2, the Under Secretary for Science and Technology shall—

(1) follow the recommendations, guidelines, and best practices described in the Artificial Intelligence Risk Management Framework (NIST AI 100–1) or any successor document published by the National Institute of Standards and Technology; and

(2) establish the Directorate of Science and Technology’s research, development, testing, evaluation, and cost-benefit analysis priorities under such section 302(15) based on the latest available information, including specific drugs identified as threats in—

(A) the latest Homeland Threat Assessment published by the Department of Homeland Security;

(B) the latest State and Territory Report on Enduring and Emerging Threats published by the Drug Enforcement Administration; or

(C) any successor documents.

**SEC. 4. RULE OF CONSTRUCTION.**

6 USC 182 note.

Nothing in this Act may be construed to limit the authority of agencies currently managing, overseeing, or otherwise involved in drug equipment and reference libraries.

Approved December 23, 2024.

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**LEGISLATIVE HISTORY—H.R. 8663 (S. 4419):**

HOUSE REPORTS: No. 118–634 (Comm. on Homeland Security).

SENATE REPORTS: No. 118–253 (Comm. on Homeland Security and Governmental Affairs) accompanying S. 4419.

CONGRESSIONAL RECORD, Vol. 170 (2024):

Sept. 9, considered and passed House.

Dec. 12, considered and passed Senate, amended.

Dec. 18, House concurred in Senate amendment.

