

One Hundred Eighteenth Congress
of the
United States of America

AT THE SECOND SESSION

*Begun and held at the City of Washington on Wednesday,
the third day of January, two thousand and twenty-four*

An Act

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.

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.

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.

Speaker of the House of Representatives.

*Vice President of the United States and
President of the Senate.*