

***In the Senate of the United States,***

*December 12, 2024.*

*Resolved*, That the bill from the House of Representatives (H.R. 8663) entitled “An Act to require the Science and Technology Directorate in the Department of Homeland Security to develop greater capacity to detect, identify, and disrupt illicit substances in very low concentrations.”, do pass with the following

**AMENDMENTS:**

Strike all after the enacting clause and insert the following:

1 ***SECTION 1. SHORT TITLES.***

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

1 **SEC. 2. ENHANCING THE CAPACITY TO DETECT AND IDEN-**  
2 **TIFY DRUGS SUCH AS FENTANYL AND**  
3 **XYLAZINE.**

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

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

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

10 *(3) by adding at the end the following:*

11 *“(15) carrying out, in coordination with the*  
12 *Drug Enforcement Administration, research, develop-*  
13 *ment, testing, evaluation, and cost-benefit analyses to*  
14 *improve the safety, effectiveness, and efficiency of*  
15 *equipment and the effectiveness and efficiency of ref-*  
16 *erence libraries for use by Federal, State, local, Trib-*  
17 *al, and territorial law enforcement agencies for the*  
18 *accurate detection of drugs, such as fentanyl and*  
19 *xylazine, including—*

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

23 *“(B) equipment that can separate complex*  
24 *mixtures containing low concentrations of drugs*  
25 *and high concentrations of cutting agents into*

1           *their component parts to enable signature extrac-*  
2           *tion for field identification and detection; and*

3           “(C) *technologies that use machine learning*  
4           *or artificial intelligence (as defined in section*  
5           *5002 of the National Artificial Intelligence Ini-*  
6           *tiative Act of 2020 (15 U.S.C. 9401)) and other*  
7           *techniques to predict whether the substances in a*  
8           *sample are controlled substance analogues or*  
9           *other new psychoactive substances not yet in-*  
10          *cluded in available reference libraries.”.*

11 **SEC. 3. REQUIREMENTS.**

12           *In carrying out section 302(15) of the Homeland Secu-*  
13          *rity Act of 2002, as added by section 2, the Under Secretary*  
14          *for Science and Technology shall—*

15           (1) *follow the recommendations, guidelines, and*  
16          *best practices described in the Artificial Intelligence*  
17          *Risk Management Framework (NIST AI 100–1) or*  
18          *any successor document published by the National In-*  
19          *stitute of Standards and Technology; and*

20           (2) *establish the Directorate of Science and Tech-*  
21          *nology’s research, development, testing, evaluation,*  
22          *and cost-benefit analysis priorities under such section*  
23          *302(15) based on the latest available information, in-*  
24          *cluding specific drugs identified as threats in—*

1                   (A) the latest *Homeland Threat Assessment*  
2                   published by the *Department of Homeland Secu-*  
3                   *rity*;

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

7                   (C) any successor documents.

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

9                   *Nothing in this Act may be construed to limit the au-*  
10 *thority of agencies currently managing, overseeing, or other-*  
11 *wise involved in drug equipment and reference libraries.*

Amend the title so as to read: “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.”.

Attest:

*Secretary.*



118<sup>TH</sup> CONGRESS  
2<sup>D</sup> SESSION

**H.R. 8663**

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**AMENDMENTS**