

118TH CONGRESS  
2D SESSION

**S.** \_\_\_\_\_

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.

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IN THE SENATE OF THE UNITED STATES

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Mr. CORNYN introduced the following bill; which was read twice and referred to the Committee on \_\_\_\_\_

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**A BILL**

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.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLES.**

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

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

4 Section 302 of the Homeland Security Act of 2002  
5 (6 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 research, development, test-  
12 ing, evaluation, and cost-benefit analyses to improve  
13 the safety, effectiveness, and efficiency of equipment  
14 and reference libraries for use by Federal, State,  
15 local, and Tribal law enforcement agencies for the  
16 accurate detection of drugs or the disruption of drug  
17 trafficking for drugs such as fentanyl and xylazine,  
18 including, but not limited to—

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

22 “(B) equipment that can separate complex  
23 mixtures containing low concentrations of drugs  
24 and high concentrations of cutting agents into  
25 their component parts to enable signature ex-

1 traction for field identification and detection;  
2 and

3 “(C) technologies that use machine learn-  
4 ing or artificial intelligence (as defined in sec-  
5 tion 5002 of the National Artificial Intelligence  
6 Initiative Act of 2020 (15 U.S.C. 9401)) and  
7 other techniques to predict whether the sub-  
8 stances in a sample are controlled substance  
9 analogues or other new psychoactive substances  
10 not yet included in available reference librar-  
11 ies.”.

12 **SEC. 3. REQUIREMENTS.**

13 In carrying out section 302(15) of the Homeland Se-  
14 curity Act of 2002, as added by section 2, the Under Sec-  
15 retary for Science and Technology shall—

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

21 (2) establish the Directorate of Science and  
22 Technology’s research, development, testing, evalua-  
23 tion, and cost-benefit analysis priorities under such  
24 section 302(15) based on the latest available infor-  
25 mation, including the latest State and Territory Re-

1 port on Enduring and Emerging Threats published  
2 by the Drug Enforcement Administration or any  
3 successor document.