

One Hundred Eighteenth Congress  
of the  
United States of America

AT THE FIRST SESSION

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

An Act

To require coordinated National Institute of Standards and Technology science and research activities regarding illicit drugs containing xylazine, novel synthetic opioids, and other substances of concern, and for other purposes.

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

**SECTION 1. SHORT TITLE.**

This Act may be cited as the “Testing, Rapid Analysis, and Narcotic Quality Research Act of 2023” or the “TRANQ Research Act of 2023”.

**SEC. 2. XYLAZINE DETECTION AND ANALYSIS.**

(a) DEFINITIONS.—In this section:

(1) DIRECTOR.—The term “Director” means the Director of the National Institute of Standards and Technology.

(2) FEDERAL LABORATORY.—The term “Federal laboratory” has the meaning given such term in section 4 of the Stevenson-Wydler Technology Innovation Act of 1980 (15 U.S.C. 3703).

(3) INSTITUTE.—The term “Institute” means the National Institute of Standards and Technology.

(4) INSTITUTION OF HIGHER EDUCATION.—The term “institution of higher education” has the meaning given such term in section 101 of the Higher Education Act of 1965 (19 U.S.C. 1001).

(5) NONPROFIT ORGANIZATION.—The term “nonprofit organization” means an organization described in section 501(c)(3) of the Internal Revenue Code of 1986 and exempt from tax under section 501(a) of such code.

(6) XYLAZINE.—The term “xylazine” means the nonopioid tranquilizer methyl benzene compound frequently used in veterinary medicine as an emetic and sedative with analgesic and muscle relaxant properties.

(b) IN GENERAL.—The Director shall—

(1) support intramural basic measurement science and research of the Institute to advance—

(A) analytical methods to identify, understand, differentiate, and categorize substances containing xylazine, novel synthetic opioids, or other new psychoactive substances;

(B) measurement technologies to shorten analysis timelines and enhance narcotic and opioid detection and analysis capabilities;

(C) new data tools, techniques, and processes to identify and publicly disclose relevant information concerning

substances containing xylazine, novel synthetic opioids, or other new psychoactive substances; and

(D) such other areas as the Director determines to be critical to the development and deployment of technologies to measure and analyze the presence of xylazine, novel synthetic opioids, and other new psychoactive substances;

(2) support activities to inform and expand the development of near-real time spectrometry capabilities regarding xylazine, novel synthetic opioids, and other new psychoactive substances;

(3) convene and consult with organizations engaged in the analysis of new psychoactive substances to develop coordinated strategies and voluntary best practices for the safe handling, transport, data-sharing, and analysis of substances containing xylazine, novel synthetic opioids, or other new psychoactive substances, including—

- (A) the Drug Enforcement Administration;
- (B) the Centers for Disease Control and Prevention;
- (C) the National Institute on Drug Abuse;
- (D) Federal laboratories;
- (E) States and territories;
- (F) State fusion centers;
- (G) the private sector;
- (H) intergovernmental organizations;
- (I) institutions of higher education, and
- (J) nonprofit organizations;

(4) establish or expand collaborative partnerships or consortia with other government agencies and persons engaged in related research and development, such as institutions of higher education, Federal laboratories, public health agencies, intergovernmental organizations, and the private sector, to enhance narcotic and opioid detection and analysis capabilities regarding xylazine, novel synthetic opioids, and other new psychoactive substances; and

(5) encourage graduate and post-graduate research to include detection and identification of xylazine and other new psychoactive substances in relevant course studies when practicable.

(c) CONTROLS.—In carrying out activities under this section, the Director shall ensure proper security controls are implemented to protect sensitive information, as the Director considers appropriate and consistent with applicable provisions of law.

(d) REPORT.—Not later than 1 year after the date of the enactment of this Act, the Director shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report on the implementation of this section. Such report may include recommendations for legislative action to improve the ability of the Director to carry out this section.

**SEC. 3. STUDY ON UNITED STATES GOVERNMENT TECHNOLOGIES AND ANALYTICAL METHODS TO DETECT AND IDENTIFY NEW PSYCHOACTIVE SUBSTANCES.**

(a) STUDY.—

(1) IN GENERAL.—The Comptroller General of the United States shall conduct a study of the capabilities of the Federal

Government to respond to the threats of new psychoactive substances such as xylazine.

(2) MATTERS EVALUATED.—The study conducted pursuant to paragraph (1) shall include an evaluation of the following:

(A) The capabilities, including technologies and analytical methods, of Federal, State, and local agencies to detect and identify new psychoactive substances such as xylazine.

(B) An analysis of timeframes for identification and development of technologies and methods to identify new psychoactive substances by Federal, State, and local agencies.

(C) Facilities, including laboratories, used by Federal, State, and local agencies for the identification of new psychoactive substances such as xylazine.

(D) Federal grant programs to fund new technology development to detect and identify new psychoactive substances.

(b) REPORT.—Not later than 2 years after the date of the enactment of this Act, the Comptroller General shall submit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Science, Space, and Technology of the House of Representatives a report containing the findings of the Comptroller General with respect to the study conducted pursuant to subsection (a).

*Speaker of the House of Representatives.*

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