

February 17, 2026

**Education, Energy and the Environment Committee
SB423 - Animal Research Modernization and Best Practices Act of 2026
FAVORABLE**

Chair Feldman, Vice-Chair Kagan, and Members of the Committee,

Humane World for Animals, formerly called the Humane Society of the United States, and our Maryland supporters urge a favorable report on SB 423, the Animal Research Modernization and Best Practices Act of 2026. This important legislation builds upon work already passed by the Maryland General Assembly and creates a requirement that product testing facilities in Maryland use available non-animal methods instead of traditional animal tests when already approved by federal agencies as well as provides protections for dogs and cats used in research facilities in the state of Maryland.

Specifically, SB 423:

- Furthers the work completed in 2023 with the establishment of a first of its kind Human-Relevant Research Fund.
- Requires product testing facilities in Maryland to use non-animal methods when they are available and provide equivalent or superior scientific information to assess the safety of products such as household cleaners, drugs, pesticides, vaccines and chemical substances once they are accepted for use by the relevant regulatory agencies.
- Prohibits the use of a traditional animal test when the regulatory agency allows the use of a waiver instead.
- Mandates the use of animal tests that use the smallest number of animals and minimize pain and suffering when there is no non-animal alternative or waiver available.
- Bans devocalization and mandates humane euthanasia for dogs and cats.
- Requires all research facilities to annually report the number of dogs and cats adopted into homes after their time in research has ended and for product testing facilities to provide data on their use of animal methods and non-animal alternatives.

SB 423 is similar to legislation considered by this committee in 2025 (SB 536). That bill's fiscal note reflected that it was "expected to be implemented with existing resources" and that it is "not expected to significantly affect local government finances."

Alternatives Mandate

SB 423 requires product testing facilities to use test methods that replace animal testing when they are available, provide information of equivalent or better scientific quality and relevance, and approved by the relevant federal agencies. It also requires reporting on the use of traditional animal

methods and alternatives. This provision applies to products such as household cleaners, drugs, pesticides and industrial chemicals. The provision does not prohibit the use of animal tests to comply with specific requirements of state or federal agencies and provides a phase-in period so companies have time to adjust their testing strategies as new non-animal alternatives are approved for use.

While animal testing will always have limitations, non-animal testing strategies can more closely mimic how the human body responds to drugs and chemical substances. The National Toxicology Program Interagency Center for the Evaluation of Alternative Toxicological Methods provides a list of more than 100 methods or guidance documents that completely replace or reduce animal use that are accepted by U.S. agencies on its website.¹ As just one example from this list, comprehensive studies have shown that non-animal approaches to test chemicals for the likelihood of causing skin allergies are more reliable predictors of human outcomes than the typical animal test methods.² Late last year, the U.S. Food and Drug Administration's Center for Drug Evaluation and Research also published their own list of accepted alternative methods that could be used to evaluate new drugs.³ This list makes it clear to pharmaceutical companies when non-animal methods can be used.

Unlike traditional animal test methods, sophisticated non-animal approaches to toxicity testing will only continue to improve. The future of non-animal science includes "organs-on-chips," which are tiny 3D chips created from human cells that look and function like miniature human organs. Organs-on-chips are used to determine how human systems respond to different drugs or chemicals and to find out exactly what happens during infection or disease. Several organs, representing heart, liver, lungs or kidneys, for example, can be linked together through a "microfluidic" circulatory system to create an integrated "human-on-a-chip" model that lets researchers assess multi-organ responses.⁴

Maryland should be a scientific and technological leader in non-animal alternatives.

In 2023, Maryland became the first state in the nation to prioritize human-relevant research by establishing a dedicated fund to provide grants to scientists in the state developing these non-animal technologies. SB 423 will ensure that companies in Maryland are taking advantage of these new testing strategies as soon as they are approved for use and attract additional investment from the biotech industry.

Additional protection for dogs and cats

According to 2024 data from the United States Department of Agriculture, approximately 90 dogs and 300 cats were used in Maryland research facilities covered by the provisions of this bill. SB 423 requires reporting on compliance with the 2018 Beagle Bill, prohibits devocalization, and requires humane euthanasia for dogs and cats used in Maryland laboratories.

¹ NTP Interagency Center for the Evaluation of Alternative Toxicological Methods (NICEATM) Alternative Methods Accepted by U.S. Agencies. (2023, Feb 23). Retrieved from: <https://ntp.niehs.nih.gov/whatwestudy/niceatm/accept-methods/index.html>

² Kleinstreuer NC et al., Non-animal methods to predict skin sensitization (II): an assessment of defined approaches. 2018 Critical Reviews in Toxicology, 48:5, 359-374, doi: 10.1080/10408444.2018.1429386

³ U.S. FDA. (2025, December). CDER/Office of New Drugs Streamlined Nonclinical Studies and Acceptable New Approach Methodologies (NAMs). Retrieved from: <https://www.fda.gov/about-fda/center-drug-evaluation-and-research-cder/cderoffice-new-drugs-streamlined-nonclinical-studies-and-acceptable-new-approach-methodologies-nams>

⁴ National Center for Advancing Translational Sciences. Meet Chip. (2022, March 18). Retrieved from: <https://ncats.nih.gov/tissuechip/chip>

In 2018, the Maryland legislature unanimously passed the Beagle Bill, which required all animal research facilities to offer dogs and cats that are no longer needed for research or testing purposes to animal rescue organizations or facilitate the adoption of these animals via a private, internal adoption program.⁵ SB 423 ensures that facilities are complying with the Beagle Bill by requiring annual reporting on the numbers of dogs and cats used and adopted. It also requires the Department of Agriculture to create an aggregate report on this information for the public.

Devocalization, or ventriculocordectomy, is the surgical removal of part or most of an animal's vocal cords. When performed on dogs or cats it prevents them from barking or meowing. Dogs and cats can suffer physical consequences as a result of devocalization including infection, chronic coughing and aspiration pneumonia.⁶ Aside from such physical problems, devocalized dogs and cats have a decreased ability to communicate, creating potential psychological harm. SB 423 prohibits research facilities from performing devocalization surgery on dogs and cats or using a dog or cat that has received these procedures.

SB 423 also requires that dogs and cats in private research facilities only be euthanized through the injection of sodium pentobarbital by, or under the supervision of, a licensed veterinarian. Sodium pentobarbital is considered the most humane method for euthanasia of dogs and cats⁷ and is considered the preferred method for companion dogs and cats according to the American Veterinary Medical Association.⁸

Transparency

In the United States, the federal Animal Welfare Act (AWA) requires research facilities to annually report the number of warm-blooded animals used in research and testing. Unfortunately, the AWA specifically excludes birds, rats and mice bred for use in research as well as commonly used cold-blooded species such as fish. These species represent the vast majority of animals used in research and testing (up to 99%) and research facilities are not required to report how many of these animals are being used. SB 423 will give a more complete picture of how many animals are actually being used in Maryland by requiring product testing facilities to report annually on their use of animals, alternative test methods and waivers used. This reporting will also ensure that the law is effectively implemented.

Scientific limitations of animal testing

The continued use of animal models for human disease or to assess the possible impact of substances on the human body carries serious scientific limitations. Different species can respond differently when exposed to the same drugs or chemicals. Consequently, results from animal tests may not be relevant to humans, under- or over-estimating real world health hazards. It should not be surprising, therefore, that more than 90% of human drugs fail during clinical trials⁹ after having completed extensive animal studies. These failures are due to unexpected toxicity in human patients or lack of efficacy (whether it is safe and/or effective). In addition, animals do not always

⁵ Md. Code Ann., Agriculture § 15-101 (2018).

⁶ American Veterinary Medical Association. (2023). Literature review on the welfare implications of canine devocalization. Retrieved from: <https://www.avma.org/sites/default/files/2023-08/avma-lit-review-canine-devocalization-0323.pdf>

⁷ World Society for the Protection of Animals. Methods for the euthanasia of dogs and cats: comparison and recommendations. (n.d.) Retrieved from: https://caninerabiesblueprint.org/IMG/pdf/Link72_Euthanasia_WSPA.pdf

⁸ American Veterinary Medical Association. AVMA Guidelines for the Euthanasia of Animals: 2020 Edition. (2020). Retrieved from: <https://www.avma.org/sites/default/files/2020-02/Guidelines-on-Euthanasia-2020.pdf>

⁹ National Center for Advancing Translational Sciences. About New Therapeutic Uses. (2022, March 23). Retrieved from: <https://ncats.nih.gov/ntu/about>

develop the same diseases as humans, or the impact of the disease varies greatly by species. Often treatments that seem incredibly promising in animal models turn out to not be effective in treating human diseases. SB 423 requires research facilities to move away from outdated animal testing and instead use more human-relevant non-animal methods.

Government bodies and regulatory agencies are embracing non-animal science

Passage of SB 423 would bring Maryland in line with four other states that have already passed similar laws to require the use of available alternatives (Virginia, New Jersey, New York and California). Similar bills are also under consideration in Massachusetts and Illinois.

Federal agencies are also pushing for the development and use of modern human-based technology. In 2016, Congress revised the Toxic Substances Control Act, which included a provision directing the Environmental Protection Agency to reduce and replace the use of animals in chemical testing. More recently, announcements from the Food and Drug Administration and the National Institutes of Health demonstrate the ongoing commitment from federal agencies to shifting research from animal-based methods to those based on human biology. In its Roadmap to Reducing Animal Testing in Preclinical Safety Studies, FDA, which does not legally require animal testing for drug approval, declared its intention to “make animal studies the exception rather than the norm for pre-clinical safety/toxicity testing.”¹⁰

Strong public support

A YouGov Blue poll conducted in 2023 demonstrates that Maryland voters strongly support efforts to limit animal use in research and testing, the development of non-animal methods and increased transparency (see enclosure).

- Seventy-nine percent of Maryland voters support state investment in research and development techniques that don’t require animal testing, with only 13 percent opposed.
- Sixty-nine percent support prohibiting animal testing for non-medical reasons, with 21 percent opposed.
- Seventy-two percent support banning animal testing to determine product toxicity, with 22 percent opposed.
- Eighty percent of Maryland voters support requiring the disclosure of the number of animals used in animal testing and the purpose of the testing, a proposal only 12 percent of voters oppose.

Humane World for Animals urges a favorable report on SB 423.

Thank you,

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¹⁰ U.S. FDA (2025). Roadmap to reducing animal testing in preclinical safety studies. Retrieved from: https://www.fda.gov/files/newsroom/published/roadmap_to_reducing_animal_testing_in_preclinical_safety_studies.pdf