

**Testimony in Support of SB 536  
Presented to the Senate Education, Energy and the Environment Committee  
February 27, 2025  
By Kathleen Conlee, Vice President, Animal Research Issues  
Humane World for Animals**

Dear Chair Feldman, Vice-Chair Kagan, and members of the Senate Education, Energy and the Environment Committee,

I appreciate the opportunity to submit this written testimony on behalf of Humane World for Animals, formerly called the Humane Society of the United States, and our Maryland members and supporters urging a favorable report of SB 536. This important legislation creates a requirement that product testing facilities utilize available non-animal methods instead of traditional animal tests when they are available and provides protections for dogs and cats used in private animal research facilities in the state of Maryland.

Specifically, SB 536:

- Mandates the use of 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, cosmetics, vaccines and chemical substances.
- Prohibits the use of dogs or cats to assess the safety of products like pesticides and food additives when not federally required. Also requires drug developers to request a meeting with the Food and Drug Administration (FDA) prior to conducting a dog test.
- Bans certain cruel research practices such as devocalization and obtaining dogs and cats from shelters as well as mandating humane euthanasia.
- Requires all private facilities using animals in research and testing to annually report the number of animals used, 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.

**Alternatives Mandate**

SB 536 requires product testing facilities to use test methods that replace animal testing when they are available and provide information of equivalent or better scientific quality and relevance. It also requires reporting on the use of traditional animal methods and alternatives. This provision applies to products such as cosmetics, 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.

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.<sup>1</sup> 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.<sup>2</sup>

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.<sup>3</sup>

Last session, Maryland became the first state in the nation to prioritize the development of human-relevant research by establishing a dedicated fund to provide grants to scientists in the state developing these non-animal technologies. SB 536 will ensure that private companies in Maryland are utilizing these new non-animal testing strategies as soon as they are approved for use, thus ensuring increased impact of Maryland’s existing laws.

#### **Additional protection for dogs and cats**

According to the United States Department of Agriculture, an average of nearly 300 dogs per year were used in a private Maryland research facility over the most recent three years of available data. SB 536 contains several provisions to provide additional protection for dogs and cats used in research and testing including prohibiting the use of dogs and cats in certain toxicity testing, preventing devocalization, requiring humane euthanasia and clarifying that pound seizure (the taking of dogs/cats from shelters) is prohibited in the state. It also requires private research facilities to proactively work to reduce and replace the use of these animals.

Dog tests do not ensure human safety and have scientific limitations that will never improve. Comprehensive scientific analysis reveals that dogs are “highly inconsistent predictors of toxic responses in humans” and suggests that predictions of toxicity based on canine data are little better than those obtained through tossing a coin. The study concludes that “the preclinical testing of pharmaceuticals in dogs cannot currently be justified on scientific or ethical grounds.”<sup>4</sup> The lack of scientific justification for toxicity testing on dogs to predict human impacts deems such tests unnecessary. SB 536 prohibits the use of dogs for toxicity testing that are not specifically required by federal law including for chemicals and food additives. It also requires drug companies to ensure that conducting tests on dogs is deemed necessary by the FDA before using them.

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 nerve damage, infection, chronic coughing and aspiration pneumonia. Aside from such physical problems, devocalized dogs

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<sup>1</sup> 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>

<sup>2</sup> 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

<sup>3</sup> National Center for Advancing Translational Sciences. Meet Chip. (2022, March 18). Retrieved from: <https://ncats.nih.gov/tissuechip/chip>

<sup>4</sup> Bailey et al., “An Analysis of the Use of Dogs in Predicting Human Toxicology and Drug Safety.” (2013).

and cats have a decreased ability to communicate, creating psychological harm.<sup>5</sup> SB 536 prohibits private research facilities from performing devocalization surgery on dogs and cats or using a dog or cat that has received these procedures.

SB 536 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 cats<sup>6</sup> and is considered the preferred method for companion dogs and cats according to the American Veterinary Medical Association.<sup>7</sup>

In addition, SB 536 provides clarification that dogs and cats from random sources (of unknown origin, such as flea markets, auctions or animal shelters) should never be used for research and testing in private Maryland facilities. In 2013, the National Institutes of Health released a policy that it will no longer fund research that involves dogs from random source Class B dealers.<sup>8</sup> A similar policy regarding cats was adopted in 2012.<sup>9</sup> From a scientific research point of view, random source dogs and cats used for experimentation have not had standardized care and upbringing, and consequently have an uncertain medical history and temperament for living in an institutional setting. These circumstances make them particularly poor candidates for experiments.

### **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, which represent the vast majority of animals used in research and testing (up to 99%), meaning that research facilities are not required to report how many of these animals are being used. SB 536 will give a more complete picture of how many animals are actually being used in Maryland by requiring private research facilities to report annually on their use of all animals. It also requires reporting on the number of alternative test methods used and the number of dogs and cats that were released for adoption into loving homes.

### **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 trials<sup>10</sup> after having

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<sup>5</sup> Humane Society Veterinary Medical Association. Devocalization Fact Sheet. (n.d.) Retrieved from: <https://www.hsvma.org/assets/pdfs/devocalization-facts.pdf>

<sup>6</sup> 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](https://caninerabiesblueprint.org/IMG/pdf/Link72_Euthanasia_WSPA.pdf)

<sup>7</sup> 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>

<sup>8</sup> National Institutes of Health. Notice Regarding NIH Plan to Transition from Use of USDA Class B Dogs to Other Legal Sources. NOT-OD-14-034. (2013, December 17). Retrieved from: <https://grants.nih.gov/grants/guide/notice-files/not-od-14-034.html>

<sup>9</sup> National Institutes of Health. Notice Regarding NIH plan to Transition from use of USDA Class B Cats to Other Legal Sources. NOT-OD-12-049. (2012, February 8). Retrieved from: <https://grants.nih.gov/grants/guide/notice-files/NOT-OD-12-049.html>

<sup>10</sup> National Center for Advancing Translational Sciences. About New Therapeutic Uses. (2022, March 23). Retrieved from: <https://ncats.nih.gov/ntu/about>

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 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 536 encourages private research facilities to move away from outdated animal testing and instead use more human-relevant non-animal methods.

**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.

- 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.
- Finally, voters strongly support holding animal research institutions accountable, with 82 percent supporting a proposal to bar institutions with a record of repeated violations of animal welfare laws from receiving state funds for continued research.

Humane World for Animals urges a favorable report on SB 536.

Thank you,



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