

**Testimony in Support of HB 1448
Presented to the House Health and Government Operations Committee
March 10, 2025
By Kathleen Conlee, Vice President, Animal Research Issues
Humane World for Animals**

Dear Chair Pena-Melnyk, Vice-Chair Cullison and members of the House Health and Government Operations 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 HB 1448. This important legislation creates a requirement that product testing facilities in Maryland utilize available non-animal methods instead of traditional animal tests when they are accepted by regulatory agencies.

Specifically, HB 1448:

- Requires 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, 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.
- Requires annual reporting of the number of animals, non-animal alternatives and waivers used by Maryland facilities that test products.

Alternatives Mandate

HB 1448 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 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.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

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.³

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. HB 1448 will ensure that Maryland facilities 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.

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. HB 1448 will give a more complete picture of how many animals are actually being used in Maryland by requiring facilities testing products on animals to report annually on their use of animals, alternative test methods and waivers used. This reporting will 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 trials⁴ 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 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

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

⁴ National Center for Advancing Translational Sciences. About New Therapeutic Uses. (2022, March 23). Retrieved from: <https://ncats.nih.gov/ntu/about>

treating human diseases. HB 1448 requires 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.

Humane World for Animals urges a favorable report on HB 1448.

Thank you,

A handwritten signature in cursive script, appearing to read "Kathleen Conlee".

Kathleen Conlee
Vice President, Animal Research Issues
Humane World for Animals