

# Toxicity Testing on Dogs Exposed

An undercover investigation by the Humane Society of the United States

## Overview

For almost 100 days the Humane Society of the United States conducted an undercover investigation into one of the world's largest contract research organizations – an animal testing laboratory where thousands of dogs are killed every year in toxicity and other tests.

What the HSUS investigator found will shock those who are unaware of what happens in these labs. Beagles and hounds from two massive dog breeding companies (Marshall BioResources and Covance) were used to test a variety of substances. Some of the dogs were killed within days of arriving at the laboratory. Others were still confined to their lonely stainless-steel cages when our investigator left, such as dogs used in a year-long pesticide test that is universally considered scientifically unnecessary.

More than 60,000 dogs are used each year for toxicity testing and research at approximately 350 private, public and federal facilities in the United States. Most of the dogs come from massive breeding facilities licensed by the U.S. Department of Agriculture – Marshall BioResources is the largest, housing more than 22,000 dogs for commercial sale to laboratories.

The HSUS investigation looked into a common use of dogs in private laboratories – that is, their use in pesticide and drug testing for toxicity (safety) purposes.

## Thirty-six beagles force-fed fungicide for one year - still alive and still suffering

Fungicides are considered pesticides and are regulated by the Environmental Protection Agency. There are approximately 38 testing requirements and for each new active ingredient in a pesticide, more than 10,000 animals are killed at facilities like the one we investigated. At one time, the EPA required that dogs be force-fed pesticides for a full year but eliminated this requirement 10 years ago when scientists realized that the test did not add valuable scientific information.

It was a shock to learn that Dow, a maker of pesticides and other products, contracted the laboratory to use 36 beagles in a one-year pesticide test for its [new fungicide](#) (Adavelt®), which was developed by Dow AgroSciences under its Corteva Agriscience division. **In July 2019 all of the dogs will be killed and their organs will be assessed for damage done by the fungicide.**

Some of the dogs at the lab we investigated may die before July 2019 when the study is scheduled to be concluded – eight beagles in the high-dose group--so it is conceivable that the doses may be deadly before the study officially ends.



Dow beagles - trapped in a cage for one year and force-fed fungicide.

The method of force-feeding the fungicide to the dogs does not mimic how it might be ingested by humans. Workers at the lab use gelatin capsules, fill them with the prescribed amount of fungicide and then force the capsules down the beagles' throats sometimes using up to four capsules per dog depending on the dose. Certain dogs in the study looked and acted sicker than others when our investigator visited them through the first two months of the study. These were quite likely the dogs receiving the highest doses of fungicide.

The HSUS and Humane Society International corresponded with Dow, urging an immediate end to the test and release of the dogs. When asked why it was carrying out this dog test, the company responded that it was fulfilling a Brazilian regulatory requirement. Although the one-year dog test is still technically 'on the books' in Brazil, the country's pesticide authority, ANVISA provided us with confirmation via email that it is readily granting waiver requests from companies to forego the one-year dog test. At Dow's urging, we also sent a joint letter to ANVISA requesting a more formal, written communication of this policy, which the agency supplied within days to the entire Brazilian pesticide industry. However, Dow's regulatory affairs division decided that they still need additional confirmation on their specific product from the agency.

**We can no longer delay and are calling on Dow to end the test, release the dogs and work with us to place them in loving homes before it's too late.**

## **The life and death of Harvey the beagle - "He was a good boy"**

Harvey was at least five-months-old when he and 22 other male beagles arrived at the laboratory for use in an experiment sponsored by a Manchester, New Hampshire, start-up-company called Paredox Therapeutics, LLC, which is financially supported by the University of Vermont.

As one lab employee observed, the day Harvey was killed was "the best life he knew" simply because he was allowed out of his sterile cage to run around on the floor for a minute prior to being carried down the laboratory hallway to the necropsy department for euthanasia. The employee sat Harvey in her lap and asked if he wanted some "last minute snuggles" before handing him over to be euthanized. When our investigator asked another employee why Harvey was the only dog in the experiment who had been named by staff, the employee said, "He was the dog that stood out the most in the whole study." Then he pronounced Harvey a "good boy." But Harvey was no different from the other 22 beagles killed in this experiment. He loved attention from humans and he showed it.



Harvey gives high-fives

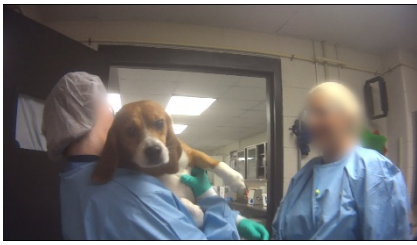


Harvey recovering after surgery



Harvey- a "good boy"

In what is billed as an "innovation" by the University of Vermont and Paredox, the dogs' chests were surgically opened and two commonly-used substances (thiostrepton and gentian violet) were flooded into the area to see how the administration of the two substances was tolerated in that location. This crude method of drug delivery would likely never be used in humans, according to an expert with whom the HSUS consulted. It is clear from the video captured after the procedure that Harvey was suffering.



Harvey's last minutes before euthanasia

The University of Vermont refuses to share any documents associated with the Paredox tests and although the public's tax dollars are at play in this study, Vermont's Public Records Act allows the information to be withheld. UVM Innovations also stated that it could be 15 years before the Paredox work could lead to use in human medicine. This means that more dogs are likely to die in more crudely designed tests. The university confirmed to HSUS that its financial support of Paredox is for patent protection only and that the university will gain 50 percent of any profits earned if the outcome is a marketable, patented procedure. The university gave Paredox more than \$1.3 million for the project.

## Sorry Buddy, “we’re about to betray your trust:” hounds killed in experiments

The arrival of six large hound dogs for a research study at this laboratory was chaotic. Some of the dogs were so nervous and shy that they had to be carried off the truck and covered in large rolling carts while others jumped up on the sides of the carts to happily greet the workers. One said, “Hi there Buddy. I’m sorry for what’s about to happen - we’re about to betray your trust.”



The hounds arrive at the laboratory.

The experiment involving the hound dogs, which was commissioned by Above and Beyond NB, LLC, was two weeks long and it was severe. Prior to invasive surgery, in which a large pump mechanism was put into their bodies for drug delivery, the dogs were pair-housed, providing some comfort in the strange sterile environment. After surgery, the dogs woke up alone in their own stainless-steel enclosures. Two weeks later, the dogs were killed, even including those who were “control animals” (who had nothing done to them) The amyotrophic



Post-surgery ALS hound with implant were killed after two weeks.

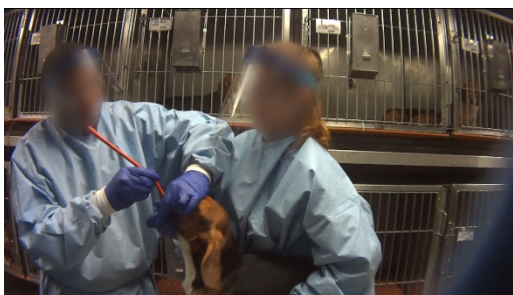
lateral sclerosis study our investigator witnessed on the dogs had also been carried out in pigs.

The drug being studied in these hounds was Riluzole. The oral form of Riluzole was FDA-approved in 1995 and is one of two drugs on the market for use by patients diagnosed with ALS. In just the last 10 years, more than \$700 million has been spent on research into ALS – largely funded by the ALS Association and the National Institutes

of Health. Following promising results in animal models, [11 human clinical trials were carried out between 2006 and 2016 for new ALS drugs and all 11 failed.](#)<sup>1</sup> A 100 percent failure rate speaks loudly about the lack of usefulness of the animal studies and clearly points to the necessity of a new paradigm.

## Other investigation findings

Maximum Tolerated Dose studies, which determine the highest dose of a substance that can be given without adverse effects, are being conducted on dogs at the laboratory we investigated despite the fact that international guidance documents have questioned the utility of these studies. Dogs are infused with high enough doses of a drug that they could die spontaneously or over an agonizing several days from organ or tissue damage.



Oral gavage: A plastic tube is forced down a beagle's throat to deliver a substance directly into his stomach.



Two beagles used in a Maximum Tolerated Dose study for a migraine drug.

Accidents involving cage flooring were also common. The HSUS investigator was called in to assist a coworker with a beagle whose pads on her toes had been caught in the small opening of her cage floor. The beagle screamed in pain as her swollen foot was removed from the grating. Coworkers told our investigator that this happens all the time.

The jaws of 72 beagles were surgically broken and repaired with a device being tested for toxicity in a study done for nanoMAG. At the time of our investigation the dogs had already been at the lab for one year and the study was extended into 2019.

## The US Government's Role

The US government plays a role in most of the research and testing carried out on dogs in the United States. The Food and Drug Administration, through its approval processes for drugs, devices and other products, often requests that companies provide numerous animal tests, including on dogs. One pharmaceutical company recently [filed a complaint](#) in district court because the FDA insists that the company carry out a 9-month terminal test on dogs in order to get regulatory approval for one of its products. The company refused, citing that the test is completely unnecessary and unethical.

Various other government agencies are involved in dog testing as well. For example, while the US no longer requires a one-year pesticide test on dogs, a 90-day test is required in order to obtain pesticide approval. Finally, the National Institutes of Health, Department of Veterans Affairs, Centers for Disease Control and Prevention,

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<sup>1</sup> A look into the future of ALS research; Drug Discovery Today; Volume 21, Number 6 – June 2016, Clerc, Lipnick and Willett <http://csmres.co.uk/cs.public.upd/article-downloads/A-look-into-the-future-of-ALS-research.pdf>

the Department of Defense and other agencies either carry out research on dogs or provide funding for experiments to be carried out at other facilities, such as universities.

## **Time for a change**

The suffering and death of dogs found during this investigation is likely shocking to the public but not limited to this one facility. This is the reality of what happens at for-profit testing and other laboratories throughout the United States. What do these animals suffer for? Is their use necessary for human benefit? It is estimated that more than [95 percent of the drugs](#), including those tested on dogs as we found during this investigation, fail in human clinical trials<sup>2</sup>. This failure rate is unacceptable; it is time for a change. We must bring science into the 21<sup>st</sup> century for the benefit of humans who desperately need treatment and for the dogs whose lives deserve to be spared.

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<sup>2</sup> Collins, F.S. (2011, Jul 6) Reengineering Translational Science: The Time is Right. *Science Translational Medicine* online at <http://stm.sciencemag.org/content/3/90/90cm17>