

# Medical research that uses animals

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Rats, Mice, Rabbits, and a whole slew of other animals are forced to endure massive quantities of testing substances or endure pain by having harmful chemicals applied to their bodies, even though the testing may have nothing to do with anything relatable for human use. My purpose for this subject is to let people think twice about buying a product, or hopefully helping put this inhuman testing to an end. When did animal testing originate? The history of animal testing goes back to the writings of the Greeks in the 4th and 3rd centuries CE. Aristotle (384-322 BC) and Erasistratus (304-250 BC) were among the first group of people to perform experiments on living animals. A physician in 2nd-century Rome, dissected pigs and goats and is known as the “father of vivisection”, when his real name is Galen.

Avicenna, whom is also a physician but of Arabic, also practiced dissection in 12th- century Moorish Spain, and introduced animal testing as an acceptable experimental method of testing surgical procedures before applying them to human patients. (Cohen & Lowe, 2013) What is animal testing? Animal testing, a phrase that most people unsure Of exactly what is involved but have heard it before. There are many names, animal testing, animal experimentation or animal research, it all refers to the experimentation carried out on animals. Its main purpose in why it is used, is to assess the safety and effectiveness of everything from medication to cosmetics. We also use it to help find a better understanding of how the human body works. Supporters believe it is a necessary practice and obliteration to animals for our bettering and the deaths of the animals are well worth the cause. Then there are those opposed to animal testing because they believe it involves the torture and suffering of innocent animals (Ian Marathson BBS (hon.),

2011) Who does animal testing affect? Animal testing affects everyone in the modern world today.

It is primarily used to help save lives. The testing is performed so that there is a better understanding of what reactions drugs may have, so that we can figure out which drugs help which diseases, as well as observe how certain drugs affect conditions such as pregnancy and other side effects they may cause like cancer. Another part of animal testing is to help promote a product or to understand the effects of those products and the percentile of which those effects may cause. This might include testing makeup, lotions, or food rodents. Animal testing main support is from those people that believe the animals in our world today, are a close link to humans, and therefore allow them to be tested to see what effects drugs, products, or foods have on our society.

A second opinion humans have, is that animal testing is a cruel and inhumane, torturous act, and should not be done to anyone or anything, no matter what the benefit might be to the human species (Contributor, 2012).  
Animal Testing Funds The United States government spends up to the sum of \$14.5 billion in a year in any research involving experimentation on animals. These experiments will often lead to death or unwarranted consequences for the animals involved. Some projects are funded for decades by the siphoning of the US taxpayers dollars and resulting in cruel treatment and deaths of an unfathomable number of animals. About 47% of research grants have an animal research- based component according to NIH, National Institutes of Health, and documents. The number has been very consistent over the last

decade (Newcomer, 2013). Where do companies get money for testing?

Many companies today get their funding for research from the NIH.

Other companies also receiving money from the NIH are numerous colleges around the U. S. A.

Homo are primarily receiving grants to experiment on animals. The NIH is a biomedical research facility located in Bethesda, Maryland. They are part of the United States department of Health and Human Services. These agencies are primarily used to do biomedical and health-related research.

NIH uses the Intramural Research Program to conduct scientific research through. 80% of the NIH funding, is used as research grants to outside researchers. They give approximately 500, 000 grants to an approximate 325, 000 researchers that consists of more than 3000 institutions.

In 2010 alone, NIH spent around \$10. 7 billion on just clinical research. On top of that, they also spent \$7. 4 billion on genetics-related research, \$6. 0 billion on prevention research, \$5. 8 billion on cancer research, and \$5. 7 billion on biotechnology research which almost all include the torture of other species on Earth (Health, 2013).

How much does it cost? Each year in the United States, there are approximately 100 million animals that are tormented and killed in experiments conducted to better humans. Much of this cruelty is highly supported by the National Institutes of Health, ND the United State government, since the NIH is a department of the government. The NIH allocates a minimum of 40% of its annual research budget just towards

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animal experimentation. Based on the Knish's 2010 budget, this accounts for more the \$16 billion in US taxpayer money alone (PETA, 2013). Substitutes for Animal -resting There are nearly 50 different alternative methods and testing strategies that have been developed, validated and/or accepted by international regulatory authorities. These non-animal methods usually take less time to complete then using the crude, archaic methods animal testing that they meant to place.

In addition, these methods cost Only a fraction Of what animal experiments burn through, cash wise, and are not affected by a species differences from humans that make applying test results to humans difficult or impossible (PETA, Alternatives to Animal Testing, 2013). Corrosives Testing Corrosives is a non-animal alternative toxicology test. Although this is not a classical “ in vitro” style test, Corrosives uses a synthetic membrane-based detection system to determine the CINE packing group classification of chemicals, consumer products, or other hazardous materials. The results, expressed as a break-through time, correlate well with rabbit dermal corrosively tests. In the Corrosives testing system, a glass Vial filled with a chemical detection fluid and is capped by a proprietary' bio-barrier membrane. This membrane is designed to mimic the effect of corrosives on living skin.

Corrosives measures the time required for a test article to pass through a hydrated collagen matrix and supporting filter membrane (Corrosives, 2010). Technological Advancements The NIH has recognized that animal models do not always accurately predict a drug efficacy in people, and they are starting to support the generation of ore reliable and predictive models. The use of

different human cell types, in series of combinations, will help generate micro-sized physiological systems which can “ talk to each other” and better address the biological complexities of whole living organisms. This “ human body chip” technology would start to allow scientists to look for specific profiles in cells and would help identify human safe compounds to allow testing on people. This technology represents significant advantages over animal models because it relies on human cells which is more like what they are going to be applied to than the SE of a completely different species, and is more likely to be predictive of what happens in people in the product or drugs current form (Society, n.

D. ). What happens during testing? The government describes an animal experiment as a “ procedure” that is ‘ likely to cause pain, suffering, distress or lasting harm. ‘ Many experiments cause extreme suffering, often to the point of the animal’s death. Even when they are not being experimented on, animals suffer stress in laboratories where they are typically kept in barren containers or kennels, often in solitary confinement. After the animals have been used in experiments, they are usually killed to prevent being released and causing an evolutionary process in the wild that was created in the lab (Aid, 2013). Killings & Injuries According the U.

S. Department of Agriculture, in 2006 there were about 670, 000 animals that were used in procedures which did not include more than a momentary pain or distress. About 420, 000 were used in procedures in which pain or distress was relieved by anesthesia, while there were 84, 000 which were used in studies that would cause pain or distress that would not be relieved.

In the K, research projects are classified as mild, moderate, and substantial which is measured in terms of the suffering that they, the researchers conducting the study, say they may cause.

There is also a fourth category of “ unclassified”, which means the animal was anesthetized and killed without recovering consciousness, according to researchers (Ryder, 2013). Subjected to horrible unsafe procedures Research reveals that only 5% to 25% of the animal tests and human results are agreeable! Most of the drugs passed by animal tests are discarded due to the fact that they are useless to humans. The conditions under which the animals are subjected to these human experimentations, have caused tumors in rodents, while the animal test results were declared to be of little relevance for humans! The only explanation being offered for this declaration, is the mere fact that there are anatomical and physiological differences between animals and humans. It is important to note that even though animals are almost always used in cancer research, they never get the human form of cancer which also affects membranes like the lungs.

With all that research being done that only yield maybe 5% success, almost 9% of the anesthetized animals in the laboratory die. These animals have a better chance of dying than actually helping us develop something successful. Most medical experts agree that data from animal test cannot be extrapolated safely to human patients without any alterations to the drugs (Puzzle, 2013).

Companies using and not using animal testing There are a lot of companies that test on animals that we buy from every day. Some of these companies

are MM, Air Wick, Alma, Band-Aid, Blue Buffalo, Freeze, and the list goes on. There are some companies though that do not test on animals such as Firebombed & Fitch, Absolute Green, Aloe Vera Of America, and more. It seems like all the companies we know and buy from use some form of animal testing for their product, and yet there are others companies that we have not have hardly heard of, don't test on animals. Companies use the warning labels saying " animal tested" Animal testing by manufacturers seeking to market new products may be used to establish product safety. In some cases, after considering available alternatives, companies determine that animal testing is necessary to assure the safety of their product or ingredient.

FDA supports and adheres the revisions of applicable laws regulations, and policies the governing animal testing. FDA supports the developments and uses of alternatives to whole- animal testing, as well as adherence to the most humane methods available with the limits of scientific capabilities when animals are used for testing the safety of cosmetic products (FDA, 2006).

Types of animals being tested on, and what is tested on them Researchers use many different types of animals, mice, rabbits, dogs, ferrets, and fish to name a few. The type of animal selected for study often depends solely depends on a combination of factors; previous research involving that animal type, scientific relevance, accessibility, and practical aspects of implementation of the product or item being tested. Government agencies also require that any drugs used in humans needs to be tested in at least two different types of animals, one of which is not able to be a rodent. The reason is that a drug can have very different effects on different species of



animals (Nordic, 2009). All the animals used in testing/studies Right now, millions of mice, rats, rabbits, primates, cats, dogs, and other animals are locked inside cold, barren cages in an unfathomable number of purgatories across the country and even the world.

Exact numbers are not available because mice, rats, birds, and cold-blooded animals- who make up over 95% of creatures used in experiments, are not covered by even the minimal protections of the Animal Welfare Act and therefore go uncounted (PETA Animal Testing 101, 2013). Types of products used on animals during testing Mice and rats are forced to inhale toxic fumes, dogs are force-fed pesticides, and rabbits have corrosive chemicals rubbed onto their skin and eyes. Many of these tests are not even required by law, and have often produced inaccurate or misleading results that were pointless towards the end affect when the results had to be tossed and started over for being inaccurate towards the desired end result. Even if a product harms animals, it can still be marketed to consumers. Cruel and deadly toxicity tests are also conducted as a part of the massive regulatory testing programs that often funded by USA taxpayers' money without them even knowing (PETA Animal Testing 1 01 , 2013).

Conclusion Animal testing should not be something that is taken lightly, where as innocent animals are being tested with harmful products, and it is not fair to hem. With our advancements in technologies every day, why are we still using innocent animals to test our products on which in turn may not even give us the results needed or give us false results which makes the tests of those animals useless and obsolete?