

Pros to animal experimentation research paper sample

[Environment](#), [Animals](#)



Animal research is a serious subject that has caused great controversy over the years. While some people believe animals should not be tested, so to prevent animals from suffering and maltreatment, others advocate the opposite, and support animal research in order to help save both human and animal lives. It is estimated that more than 20 million animals are used in biomedical research projects, mainly because they share organs similar to humans, as well as other animals, and in most cases, they are prone to the exact same diseases that also affect humans (American Association for Laboratory Animal Science). Ever since 1901 and onwards, a total of 17 Nobel Prizes have been awarded to scientists that had used domestic species, such as chickens, cows, and sheep, as biomedical models, at the course of their studies (Michigan State University). There is a long list of milestones in use of domestic species for biomedical reasons, including immunology, immunobiology, xenotransplantation, reproductive biology, cardiovascular disease, biochemistry, nutrition, metabolic diseases, and other diseases, such as diabetes and osteoporosis (Michigan State University). Animal research has played a significant role in every significant medical advance of the 21st century, for both human and animal health alike (Foundation for Biomedical Research).

Benefits of Animal Research on Humans

Among the numerous examples that demonstrate the benefits of animal research, one could refer to the very first vaccine for smallpox -a once fatal disease- which was developed with the use of domestic species, by Edward Jenner (Michigan State University). Smallpox outbreaks have been noticed thousands of years ago and killed many people; however, the disease is

eradicated in modern times, after the global vaccination program that has been crowned with success (Centers for Disease Control and Prevention). Indicatively, the last case of smallpox in the US was reported in 1949, and the general public's routine vaccination against the disease has now stopped, because prevention is no longer needed (Centers for Disease Control and Prevention). This would not have happened, unless for animal research.

Since the 1900s, public health and medicine have managed to increase the average lifespan in the US alone by a profound 30 years (Foundation for Biomedical Research). It is estimated that infant mortality in the US has dropped from 55 deaths per 1, 000 live births to seven deaths per 1, 000 live births, in 1935 and 2002 respectively (Foundation for Biomedical Research). Much of this progress is believed to have been achieved due to animal research.

Polio is another disease that had killed thousands of people worldwide, during the late 1940s (American Association for Laboratory Animal Science). Its peak is estimated around 1952 in the US, with more than 20, 000 paralytic cases. However, things changed upon the development of a vaccine in late 1950s that saved many human lives and practically eliminated the disease in developed countries (American Association for Laboratory Animal Science). Today, polio is a forgotten disease in most parts of the world, and only a handful of 16 countries globally have polio cases in some limited areas. With the vaccine, children get full and life-long immune from the disease, just as they get vaccinated for diphtheria, typhus and tetanus, which all used to be significantly serious diseases that created huge

health problems to people the world over (Association for Laboratory Animal Science). Therefore, with millions of people free from the possibility to get sick from the aforementioned diseases, one thing is certain: nothing of this could have happened without animal research.

Benefits of Animal Research on Animals

Humans are not the only ones that rip the benefits of animal research.

Animals themselves owe much of their health today to animal research.

According to the National Research Council (1991), “ The same methods that have been developed to prevent and treat diseases in humans have improved the lives of countless animals” (14). Veterinary medicine now uses many approaches that have been developed for humans, via animal research, such as antibiotics, vaccines, and anesthetics, among others.

Animal research has managed to ensure a healthier life for pets, zoo-animals, and livestock. Indicatively, a few decades ago, many animals would die from feline leukemia virus, rabies, and distemper to name just a few.

Modern treatments prevent animals from contracting the diseases, and enhance their health.

Heartworm infestation is a condition that causes severe suffering to dogs. A heartworm is actually what its name says: a (parasitic) worm of the heart. It uses the bloodstream to travel through all arteries of the animal, until it reaches the lungs and heart, within six months, destroying everything in its passage (ASPCA). It is a serious disease that can lead to the animal’s death, if not treated early. However, with current treatments, which have been developed with animal research, animals stand a greater chance of surviving

diseases such as heartworm infestation (National Research Council). Other therapies that have proven life-saving for animals include those for cholera in hogs, and tuberculosis and brucellosis in cattle (National Research Council).

Other than that, animal research has greatly contributed to preserve animal species that have been endangered. Being able to come up with effective treatments, obliterate parasitism, and use anesthetic devices, the survival of many species has been ensured (National Research Council). Moreover, “through techniques like artificial insemination and embryo transfer, species that are endangered or have disappeared in the wild can now be managed or maintained” (National Research Council). Finally, breeding in captivity is also made possible, mainly due to the research on animal sexual behavior, which has also contributed to save animal species from extinction.

Conclusion

One of the most argued about issues in recent years is animal experimentation for medical purposes. Opposing viewpoints contradict, and from what it seems, this fight between animal rights' advocates and animal research supporters will last long. However, animal experimentation has brought many benefits to both humans and animals. To begin with, many of the once fatal illnesses that led to millions of people dying from them in the past, are now eliminated, thanks to vaccines that have been developed with animal research. Diseases such as smallpox, tetanus, and polio, among so many others, do no longer pose a threat to human health or life.

In regards animals, had it not been for animal research, many species would

have already been extinct, while others would still be suffering and dying from illnesses and diseases, such as heartworm infestation. The use of anesthesia makes a surgical procedure easier than ever before, saving many animals' lives, not to mention the fact that vaccines developed from animal research have contributed to actually maintain the balance in the animal world, and world in general.

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Screenshots of the used sources (first pages):