

Animal Research is Necessary for Continued Medical Progress

Animal studies transform cutting-edge advancements in research labs into medications and treatments provided in clinics and hospitals.

Animal studies help us understand complex living systems and identify new ways to target countless diseases that impact humans and animals alike. Animal research also helps ensure new medications are safe prior to FDA approval.

Basic research, epidemiological studies, computer models, tissue/cell culture studies, animal research and human clinical trials are all necessary for transforming lab discoveries into safe and effective medical therapies.

Veterinarians, Animal Technicians and Scientists Care About Animals

Health studies in animals are humane.

- The "3Rs" rule of animal studies: <u>Reduce</u> the number of research animals required; <u>Refine</u> studies frequently to ensure humane conditions; <u>Replace</u> animals with alternatives whenever possible.
- Researchers and animal staff strive to eliminate any pain/discomfort for animals.
 Care is also taken to protect animals from stress, which can distort study results.
- Research animals are cared for by highlytrained, devoted staff.

Animal Research Saves Lives

Emerging advancements: Spinal cord injury repair, stem cell treatments, gene therapy, targeted cancer medications, immunotherapy, CRISPR gene editing therapies, brain-controlled prosthetics, new diagnostic tests for early treatment of disease, improved therapies for serious illnesses (diabetes, leukemia, COVID-19, HIV/AIDS.)

Past advancements: Polio, smallpox, rabies and measles were essentially eliminated as major public health threats through animal studies.

Surgical procedures developed through animal research: Heart bypass surgery, stent and pacemaker placements, organ transplants, cataract surgery, joint replacements and abdominal surgery.

Animal research benefits animals too: Pets live longer and healthier lives thanks to medicines and vaccines developed through animal studies. In addition, animal behavior research improves welfare and provides new techniques to save endangered species.

The same research often helps both humans and animals: Treatments for arthritis, neurological disorders, organ transplants and cancer therapies were developed in humans and animals. They now benefit both.





Rats and mice are the most common vertebrate animals involved in research. Research in dogs, cats and nonhuman primates is rare, but important.

The US Animal Welfare Act, along with regulations, polices, oversight and voluntary accreditation, all help to protect laboratory animals.

Did you know?

Zebrafish are an important model in biomedical research and drug development.