



Veterinary Science Project



A natural compassion for animals and an interest in science often inspire youth to explore careers in veterinary medicine. Through hands-on activities, participants will discover the vital role veterinary professionals play in promoting both animal and public health. Youth will engage in experiences that build a sense of purpose, mastery, and belonging, while exploring the tools, diseases, and health challenges veterinarians encounter. This project also supports youth in becoming Beyond Ready by developing problem-solving, critical thinking, and career awareness skills that prepare them for future success. You don't have to own an animal to be part of this project, just bring your curiosity and compassion!

Starting Out *Beginner:*

- Recognize major breeds of different animal species.
- Identify basic needs of animals.
- Investigate different roles animals play in our lives.
- Describe different stages of an animal's life.
- Discover body systems and organs.
- Learn how to safely respect and handle animals.
- Understand what animals need to survive.

Learning More *Intermediate:*

- Explore how veterinarians and animal caregivers keep animals healthy.
- Complete animal health records.
- Learn how to recognize and reduce animal stress.
- Investigate how the immune system works.
- Recognize how disease spreads among animals.
- Learn how parasites affect animal health.
- Understand connection between animal and public health.

Expanding Horizons *Advanced:*

- Discover the bond between humans and animals.
- Investigate the mammalian reproductive system.
- Learn about breeding and genetics.
- Recognize importance of zoonotic diseases.
- Explore animal welfare and ethics.
- Explore veterinary medicine career pathways.

Beyond Ready

Ready to Lead

Youth involved in 4-H are **two times more likely to have the goal of becoming a leader**. Through real-world experiences and the guidance of caring mentors, they develop the confidence, communication, and decision-making skills needed to lead in today's changing world.

Ready to Serve

Youth who participate in 4-H are **three times more likely to engage in community service**. Service learning provides them with purpose and connection at a time when **more than 53% of Gen Z report feeling lonely**. Through 4-H, youth are empowered to serve with compassion and make a meaningful impact.

Ready to Build

With nearly **10 million unfilled jobs and 77% of employers seeking real-world skills**, 4-H helps youth build what matters. Through hands-on projects and career exploration, youth gain adaptability, problem-solving, and workforce readiness.

Ready to Conquer

While 52% of young people feel like they're failing at life goals, 4-H youth rise with resilience. Backed by research and supported by caring adults, they learn to overcome challenges, set goals, and take charge of their future with confidence.

***Building a Ready
Generation in a
World of Change!***

Veterinary Science Project

Expand Your Experiences!

Healthy Living:

- Visit a pharmacist.
- Learn how a complete blood count is performed.
- Explore proper nutrition and diet for pets or livestock.
- Observe or practice safe animal handling and care techniques.

Science and Agriculture:

- Research normal heart rate, respiratory rate, and body temperatures of different animals.
- Attend a youth quality assurance class.
- Look into artificial insemination, embryo transfer, and cloning.
- Interview a veterinary medicine professional.

Community Vitality:

- Volunteer at a local humane society.
- Organize a vaccine clinic for dogs, cats, or horses.
- Volunteer or assist at a local animal shelter, rescue, or farm.
- Take your pets to a local nursing home.

Communication and the Arts:

- Read Jane Goodall's work about chimpanzee behavior.
- Write a story to share with others from an animal's point of view.
- Create a play about animals and have your club perform it for local organizations.
- Draw or paint some type of animal picture related to veterinary science.

Career Exploration:

- Job shadow a public animal health professional.
- Job shadow a small or large animal veterinarian.
- Interview an animal geneticist.
- Visit a livestock nutritionist.
- Shadow a veterinary surgeon.
- Create a real/conceptual veterinary product or service business; participate in a YEC (Youth Entrepreneurship Challenge) competition.
- Explore cybersecurity jobs in veterinary science.
- Visit KSU Animal Science Department.
- Visit KSU Veterinary Teaching Hospital.

Contact Information

Kansas 4-H
201 Umberger Hall
1612 Claflin Road
Manhattan, KS 66506
Email: kansas4h@ksu.edu
Website: kansas4-h.org

Resources & Events:

- Share what you have learned at a Club Day presentation.
- Exhibit at a county fair.
- Vet Med Rocks Summer Camp.
- Kansas 4-H Discovery Days.
- KSU Animal Science Junior Producer Days.
- Kansas 4-H Animal Science Webinars.

Curriculum & Resources:

- Contact your local Extension office.
- Go to National 4-H Curriculum - <https://shop4-h.org/collections/veterinary-science-curriculum>
- Go to Kansas 4-H Project Website - <https://www.kansas4-h.org/projects/animal-science/veterinary-science/>
- Go to Kansas 4-H Animal Science Webinar Series - <https://www.kansas4-h.org/projects/animal-science/animal-science-webinar-series/>

4-H Record Keeping:

Learning to keep accurate records is a life skill.

- Setting 4-H Project Goals (4H1100), https://bookstore.ksre.ksu.edu/item/setting-4-h-project-goals_4H1100
- Kansas 4-H Record Keeping, <https://www.kansas4-h.org/resources/awards-and-recognition/LocalRecordKeeping.html>
- Complete a Veterinary Science Journal that tracks:
 - Animal behavior.
 - Heart rate, respiration, body temperature.
 - Note visits to the veterinarian.
 - Record service project participation.

Project Exhibit Ideas:

- Create a notebook about animal breeds.
- Create a pet food comparison poster.
- Design a poster identifying veterinarian tools.
- Display the life cycle of a parasite.
- Showcase a specialty veterinarian career.
- Present a display of animal cells and their functions.
- Build a first-aid kit for small animals; explain its components.

