Veterinary medicine is the branch of science that deals with the application of medical, surgical, dental, diagnostic and therapeutic principles to pet, domestic, wildlife and livestock animals.

Veterinary science helps human health through the careful monitoring of livestock, companion animals and wildlife health. Emerging ***zoonotic***[1] diseases around the globe require capabilities in epidemiology and infectious disease surveillance and control that are particularly well-suited to veterinary science's "herd health" approach.

Veterinary medicine is informally as old as the human/animal bond but in recent years has expanded exponentially because of the availability of advanced diagnostic and therapeutic techniques for most species. Animals nowadays often receive advanced medical, dental, and surgical care including insulin injections, root canals, hip replacements, cataract extractions, and pacemakers.

Veterinarians assist in ensuring the quality, quantity, and security of food supplies by working to maintain the health of livestock and inspection of meat itself. Veterinary scientists occupy important positions in biological, chemical, agricultural and pharmaceutical research.

In many countries, equine veterinary medicine is also specialized field. Clinical work with horses involves mainly locomotor and orthopedic problems, digestive tract disorders (including equine colic, which is a major cause of death among domesticated horses), and respiratory tract infections and disease.

Zoologic medicine, which encompasses the health care of zoo and wild animal populations, is another veterinary specialty that has grown in importance and sophistication in recent years. Currently 20 veterinary specialties are recognized by the American Veterinary Medical Association (AVMA), including anesthesiology, behavior, dermatology, emergency and critical care, internal medicine, cardiology, oncology, ophthalmology, neurology, radiology and surgery. IN order to become a specialist, veterinarian must complete additional training after graduation from veterinary school in the form of an internship and residency and then pass a rigorous examination.

(Excerpt Source: Wikipedia)

 Zoonosis is any infectious disease that can be transmitted from non-human animals, both wild and domestic, to humans or from humans to non-human animals **(the latter is sometimes called reverse zoonosis).**
Many serious diseases fall under this category.