



**The importance of Veterinary Medicine in the different professional fields**



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**The fields of action of veterinary medicine are the areas in which the profession can be carried out as a job, as an independent person, or developing entrepreneurship.**

**That is why you can also see the Ideas for entrepreneurship in Veterinary Medicine. You should keep in mind that this article only deals with the various fields of action in which a veterinarian can work, which is completely independent of the areas of specialization in veterinary medicine.**



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## **1. Agriculture**

**In this area, veterinary zootechnicians are also of great importance, since animal production is closely related to the health aspect when it comes to producing food that is safe for humans. These activities include monitoring vaccinations, controlling outbreaks of epidemics when a disease breaks out in these populations, prevention and treatment of diseases, correct design of facilities, distribution of animals at different stages of the production process, nutrition and reproduction.**

**This area includes all businesses related to animal production:**

**1.1 Public or private associations  
As a promoter or supervisor of  
livestock industries: livestock**

**(bovine, ovine, caprine), dairy,  
meat, poultry, aquaculture, rabbit,  
pig.**

## **1.2 Companies aimed at the agricultural sector**

**Performing management positions  
or consulting as an independent**

**1.3 Livestock / Livestock  
production: Pig, poultry, fish, etc.  
As an advisor, coordinator,  
supervisor, manager, among  
others.**

## **1.4 Universities**

**Teaching in the agricultural area**



## **2. Clinic**

**Working in a "Clinic" refers to all activities related to medicine in general terms: internal medicine, diagnosis and prevention of diseases, treatments, etc. These tasks can be performed in various environments as we will see below:**

### **2.1 Airports and seaports**

**There are situations where some animals travel from one country to another for commercial purposes, "on the hoof" (live animals) or "in the carcass (meat and by-**

**products). The presence of a regulatory veterinarian is important to guarantee the optimal conditions for the well-being of the animals during the trip according to the requirements of each species. It is also necessary to supervise compliance with the sanitary requirements established by law for each country and thus exercise epidemiological controls that guarantee the safety of food for human consumption.**

## **2.2 Shelters**

**There are public and private shelters, which require veterinary doctors on staff, both for small and large species; in order to guarantee animal welfare, in prevention and control of pathologies.**

## **2.3 In the field**

**You can work in the field as an independent or as part of an institution (public or private).**

**Working in the field refers to practicing medicine that is applied in clinics, not necessarily within a hospital facility. It involves performing medical work on farms, corrals, zootechnical productions, etc. Many times it involves work outdoors and with limited resources where resourcefulness plays a crucial role for the veterinarian in charge when he does not have the necessary implements for each case in his backpack veterinary "kit."**

**Working in the field is common for specialists in:**

**Medicine for large species (equines and/or bovines): Independent veterinarians or representatives of a company or laboratory, who are called by the different owners to remote farms, where they arrive with their equipment, in their means of transport "at home."**



**Veterinary pathology: When performing necropsies that allow determining diagnoses of pathologies that have not been clearly identified.**

**Veterinary medicine and animal husbandry: In production or animal husbandry farms such as poultry, pigs, flocks, etc. where animal health is crucial (preventing the spread of pathologies in animal populations).**

**Veterinary microbiology: In obtaining samples for laboratory analysis and research.**

**Veterinary parasitology: In obtaining samples to determine when pathologies of parasitic origin occur.**

**Bovine and/or equine reproduction: In the implementation of hormonal protocols that help animals establish their normal reproductive cycles and thus improve productive performance in livestock companies.**

**Animal nutrition: Establishing the ideal diets according to the requirements of each species at different physiological stages.**

**Surgeon: Although some emergency surgeries can be performed "in the field", the ideal is to refer as many surgeries as possible to an operating room, to guarantee aseptic procedures.**

**To learn about veterinary specialties see: areas of specialization in veterinary medicine**

#### **2.4 Carabineros (Army/Police)**

**In this type of institution, a veterinarian is required to be in charge of the dogs and horses that are used for the work required there.**

**In the case of working dogs, for situations where they require medical supervision or in more critical cases; in the management**

**of dogs injured by work with anti-explosives, bullet wounds, among others.**

**Work with equines is usually summarized in the management and prevention of musculoskeletal problems; in addition to ensuring a balanced diet that prevents the appearance of colic or laminitis.**

**It is very rarely necessary to help injured animals that come from war zones, since it is not very common to use animals in "battlefields"; however, in special situations, it is the responsibility of the veterinarian to contribute to the treatment of injured animals, generally at a pre-established meeting point where they are taken, in case they are far from the facilities of this institution.**

**2.5 Equestrian centers/Racetracks  
They require veterinarians to supervise activities related to the**

**preparation, training and physical rehabilitation of recreational horses. Therefore, it is closely related to the areas of physiotherapy, orthopedics, among others. It is also their duty to ensure the prevention and/or treatment of any other type of pathology that may occur there.**

## **2.6 Veterinary clinics**

**This is one of the best-known environments for people who are usually not closely related to the profession.**

**In a veterinary clinic, it can be practiced in various ways, depending on whether or not the professional has a Postgraduate degree. If you only have an undergraduate degree, you can work as a general practitioner, working shifts with defined hours (day and/or night) that involve both scheduled appointments and emergencies. And if you have a**

**postgraduate degree that certifies you as a specialist in a specific subject, you can also work as a general practitioner (in some cases), or under established contracts where you are only called for cases that concern the subject. Example: A veterinary ophthalmologist is called for a case of severe ocular pathology. Likewise, there are clinics specialized in specific subjects that require the continuous presence of this type of professional.**

**On the other hand, there are veterinary clinics specialized for small species, others equipped for large species (equines and/or bovines) and others that extend their specialized services to wild fauna.**

**I also recommend the article: areas of specialization in veterinary medicine so that you know in depth**

**what specialties exist and how to practice them in different environments.**

**2.7 Dolphinariums and/or aquatic entertainment centers, or wildlife centers in natural ecosystems.**

**The presence of a veterinarian in these institutions is of crucial importance, to prevent and control diseases; in addition to contributing to the enrichment of habitats according to the physiology and physiognomy of each species, to contribute to animal welfare as far as possible.**

**2.8 Livestock companies**

**2.9 Forensic**

**A forensic veterinarian inspects situations that determine whether or not there was animal abuse, looking for evidence in post-mortem cases of legal implication. For this, it is necessary to have very solid knowledge in internal**

**medicine, which allows to assertively differentiate the post-mortem findings between specific pathologies of biological origin and cases of animal abuse. Likewise, he or she must know about necropsy techniques and sending samples.**

**This field of action has been gaining strength as government and/or private institutions become increasingly concerned about the issue of animal welfare.**

**It is one of the most emotionally difficult fields to carry out, because it involves permanent contact with acts of human cruelty.**

**You can learn more about this field through the experience of the Forensic Veterinarian Julio César Aguirre [Here](#)**

## **2.10 Racecourses**

## **2.11 Zoos and wild animal rehabilitation centers.**

**To work in zoos and wild animal rehabilitation centers, veterinarians must have greater knowledge of Wildlife Medicine, a highly specialized area that involves mastery of anatomy, physiology and pharmacology in species that function completely differently from each other; in addition to having knowledge about the animal behavior in the wild of each species for its correct management, and to promote the "enrichment of habitats" that contribute to the animal welfare of these exotic species in confinement.**





### **3. Public or private companies**

**Here are some of the fields of action previously mentioned, such as: Veterinary clinics, equestrian centers and racetracks, etc. And**

**those that we will include from now on as:**

### **3.1 Consulting for livestock companies**

**Several institutions offer this type of service (consulting) in order to produce sales of their products or other services, at the same time.**

### **3.2 Associations of livestock breeds**

**Which work for the dissemination of the benefits of their breeds: Some examples are: asocebú, asobrangús, etc. They require veterinarians, preferably zootechnician veterinarians, who contribute to the commercial dissemination of their interests.**

### **3.3 Biotechnology companies for reproduction**

**Private companies that offer services that improve reproduction in cattle and horse livestock are highly sought after on livestock**

**farms in order to improve reproduction in herds that allow improving the profitability of these companies.**

### **3.4 Concentrate manufacturing companies**

**They require zootechnician veterinarians who apply their knowledge of animal nutrition to produce concentrates for pets or large species, according to the requirements of each species and physiological stage.**

## **4. Laboratories**

**There are different types of laboratories in which a veterinarian can work:**

**Molecular biology and/or genetics laboratory**

**Biotechnology laboratories: Such as reproductive biotechnologies.**

**Microbiology laboratory: To collect samples from animals with infectious processes and determine the microbiological agents causing the pathologies and their respective treatments. It is also widely used in research.**

**Parasitology laboratory: Where samples obtained "in the field" are analyzed to determine diagnoses and conduct research.**

**Pathology laboratory: Where macroscopic samples obtained from necropsies are analyzed in order to determine the diagnosis of dubious pathologies.**

**Clinical pathology laboratory: Where laboratory samples previously obtained from the animal are processed to help obtain an accurate diagnosis.**

**Vivariums: Where live animals are available to perform biological**

**tests. They are closely related to research.**

### **Antivenom Serum Production**

**Laboratories: Where snakes and other poisonous animals such as reptiles, arachnids, among others, are available; in order to extract the serums that serve as an antidote to poisonous bites or stings, requested and used in human medicine.**

**Research laboratories in various subjects: In the production of vaccines, drugs for human and animal use. For this type of work, it is essential that the veterinarian has postgraduate studies in molecular biology and/or genetics.**

**See: areas of specialization in veterinary medicine**

### **5. Public Health**

**This is the field of action where veterinarians may have the greatest relevance in their contribution to human health worldwide. Organizations that care for health around the world require**

**veterinarians to rigorously inspect control points where there are possible risks of dissemination of zoonotic diseases (transmission of diseases from animals to humans) and anthroozoonotic diseases (transmission of diseases from humans to animals), in order to avoid the occurrence of epidemics or pandemics in humans. These possible risk factors include means of transmission such as the consumption of contaminated food (meat, milk), through airways or by direct contact with mucous membranes or biological secretions of sick animals.**

**To do this, it is necessary to have knowledge about:**

**The biological cycles of parasites that are shared between species (in which different animal intermediaries are involved), in order to interfere with the cycles (naturally or artificially).**

**Pathologies of bacterial or infectious causes (Zoonotic and/or anthroozoonotic).**

**Pathologies of viral causes (Zoonotic and/or anthroozoonotic).**

**Preventive veterinary medicine. To prevent their dissemination based on knowledge of the sources and means of transmission.**

**Within this field of action, necropsies play a very important role, helping to determine the causes of death of an animal prior to its death or slaughter.**

### **6.1 Government entities**

**In matters of preventive medicine of populations; to carry out actions that lead to the prevention of high-risk diseases for animals and humans. Also in matters of disease epidemiology.**

### **6.2 Slaughterhouses**

**In the so-called "slaughterhouses", veterinarians are responsible for ensuring the safety of food of**

**animal origin by supervising that sick animals do not enter for human consumption.**

**However, this monitoring begins very early on the farms, where veterinary zootechnicians work supervising that the food (of animal origin) is monitored (traceable) throughout the entire process: from the type of food that the animals receive, the health and management on the farms, to the transportation of these to the slaughter plants, among others; to guarantee the quality of the product and its safety (that it does not represent a risk to human health).**

**The veterinary zootechnician works in so many areas and species that he is always directly or indirectly looking after your health and that of all people.**

### **6.3 Livestock auctions**



**A veterinary doctor is required to regulate the health and marketing processes of livestock.**



## **6. MARKETING and sales**

**Although marketing and sales apply to everything, there are more specialized areas in which the primary objective is the commercialization of products in the**

**veterinary industry. This is one of the most profitable fields of action.**

### **5.1 Distributors of products for the field**

**In the sale of Concentrates, medicines, vaccines in strategic points that facilitate access to other veterinarians who practice in the field or in the city and who require their use. Also for owners of clinics and livestock companies.**

**Environmental Health, among others.**

### **5.2 Pet product companies**

**Concentrates or recreational products for pets, which can be promoted by veterinarians through single commissions, salaries with commissions or by being owners.**

### **5.3 Drug laboratories**

**Promoting the commercialization and distribution of medicines, with the help of knowledge in pharmacology and nutrition to provide advice on farms and veterinary clinics, and thus favor the sales of the companies for which they work.**

**Here ethics must be very present in order not to contribute to the excessive consumption of unnecessary products and thus avoid the development of resistance to medicines that act against parasites, bacteria and viruses.**

#### **5.4 Online businesses**

**Digital businesses can be related to many areas, to support physical businesses in the sale of veterinary products and/or services. I include it here because the digital world is a global trend. Those who do not take their services or physical products to the digital world as well, will always be more limited in terms of the number of people they can reach.**

**The creation of these businesses with an online component depends a lot on creativity and the needs identified in the environment.**

### **7. Universidades**

#### **7.1 Docencia en facultades de medicina humana, medicina veterinaria y/o técnico-profesional.**

**Cualquier área de especialidad veterinaria es de gran utilidad para la docencia universitaria en veterinaria, sin embargo en las facultades**

**de medicina humana también se requiere un docente veterinario que conozca las relaciones existentes entre humanos y animales que favorecen el contagio de enfermedades, su prevención, tratamiento y control; para área de salud pública.**

## **7.2 Investigación**

**En donde las mejores universidades, exigen tener títulos de maestría o doctorado con el fin de que los docentes puedan contribuir también a la investigación, para darle mayor prestigio y posicionamiento a la universidad para la cual laboran. El área en la que se realice investigación, estará muy relacionada con la especialidad (postgrado) del médico veterinario docente.**



**Bibliography: Campos de acción de la Medicina veterinaria – MEDVETSITE**

