

# VETERINARIANS ROLE IN ONE HEALTH

Deepa Chaudhary

Agriculture and Forestry University (AFU), Rampur.

.Email : [depatharuni77@gmail.com](mailto:depatharuni77@gmail.com)



What is One Health? How is veterinarian inter-related to One Health? I think these quires are roaming in everyone’s mind. It has become one of the burning issues globally in order to improve the health and well-beings through prevention of risks and mitigation of effects of health hazards. So, it has become a 21<sup>st</sup> century exhortation to action by many individuals and organizations. Simply One Health can be defined as “the collaborative effort of multiple disciplines working locally, nationally, and globally to attain optimal health for people, animals and our environment. Also One Health is the process of the improvement of health and well-being through the prevention of risks and the mitigation of effects of crises that originate at the interface between humans, animals and their various environment.

The profession of veterinary needs to be more proactive and prepare for the future by recognizing the changing needs of a global society with veterinarians playing important roles in five intersecting domains of work Public health, biomedical research, global food safety and security, ecosystem health and the more traditional role of caring for animals. The range of employment and responsibilities of veterinarians is now so diverse that it is difficult to capture a complete sense of the entire veterinary profession. Veterinary profession functions have been enlisted by species and by type of employment.

1. Veterinary professional functions by type of species
  - Agricultural animals – food, fiber, draft
  - Companion animals – small animals, exotic, equine
  - Sports medicine – racing horses, dog, camels, pigeons, falconry
  - Zoo and wildlife medicine – wildlife animals in captivity, free ranging wildlife
  - Lab animal – traditional laboratory animal, wide variety of other species for specific traits amphibians to primates
  
2. Veterinary profession functions by type of employment
  - Private clinical profession – small animal, food animal, equine
  - Comparative vet medicine – pharmaceutical and laboratory testing, product design and marketing, franchised clinical practices
  - Government – municipal state, federal, international development, regulation and policy, public health, disease surveillance, forensics
  - Biomedical research – lab animals, infectious diseases, clinical application, development
  - University – research, clinical, training and service, administration, teaching

The reactive role of veterinarians in support of One Health can be categorized as Direct or Indirect. The direct approach to disease investigation and control is exemplified by multidisciplinary teams which come together in the field to work side-by-side in solving an emerging disease problem. The indirect approach occurs when veterinarians work on a component of a One Health problem and share the results through information exchange. It is research based. Most disease outbreaks/epidemics are investigated by a combination of the direct and indirect approaches with several types of multidisciplinary teams being assembled for different aspects of the investigation. This is probably the most common approach to practicing One Health today. The individual teams may represent only part of the One Health triad, such as veterinarians working with physicians and microbiologists on vaccine development or veterinarians engaging wildlife biologists and entomologists to determine the ecology of disease reservoirs and vectors. Sometimes, the collaborative components of the work may focus solely on public outreach and education.

The production of a safe and reliable source of food from “farm to fork” involves thousands of veterinarians around the world; the human-animal interface may not be obvious, but it exists. From clinical treatment of individual animals using the appropriate antibiotics on the farm to zoonotic diseases surveillance activities in free ranging wildlife, One Health is being practiced each and every day. Even the daily activities of a veterinarian vaccinating a dog against rabies is One Health in action, even though it may not be recognized as such. Other roles and responsibilities of veterinarians in One Health are as:

- Human health – reduce global hunger, control zoonosis, monitor food quality and safety, biomedical research, disease surveillance, biosecurity, human-animal bond maintaining companion animal health
- Domestic animal health – promote animal welfare, prevent disease outbreaks, increase domestic animal production for food, increase and support animal product exports,

disease surveillance, diagnosis and control, provide clinical and population health expertise for all animals, combating antimicrobial resistance

- Ecological health – protect biodiversity, management of wildlife resources, control movement of exotic species and diseases, disease prevention in wild animal population, disease surveillance, conservation of natural resources, conservation medicine, climate change adaptation activities.

One Health “reactive” approach to outbreaks of disease attracts great attention from scientists, the public, and government, the major contribution of veterinarians to One Health lies in their day-to-day routine activities. The One Health initiative has welcomed by veterinary profession. No profession is better qualified, through history and training, than the veterinary profession to promote the interdisciplinary approach of One Health and to be a leader in implementing it precepts.