





## Veterinary Public Health (VPH)

- Veterinary Public Health is the **application of professional veterinary knowledge, skills and resources** to the protection and improvement of human health.
- VPH plays a fundamental role within the scope of primary health care.
- Attainment of optimum human health is a result of a **sustainable relationship between humans, animals and the environment.**



## Veterinary Public Health Cont...

- VPH is a component of Public Health devoted to the:
  - Provision of **safe** and **wholesome** animal derived food for human consumption.
  - Prevention of **zoonotic diseases** and other **occupational hazards** to animal owners.



## Veterinary Public Health Cont...

- Prevention of **environmental contamination** from agricultural and veterinary related activities.
- Enhancement of the **physical, mental and social well being** of humans through application of veterinary Knowledge and skills.





# Role of Veterinarians in Public Health

- Veterinarians in their day to day routines in veterinary practice are involved in Veterinary Public Health work most of their time.
- Many human diseases are transmitted through foods of animal origin especially meat, milk, eggs and fish.
- In this regard, veterinarians are better placed to deal with these diseases.



# Role of Veterinarians in Public Health Cont..

Veterinarians are looked upon by their clients to advise them on:

- The **suitability for human consumption** of meat, milk, or eggs from sick or treated animals.
- The **type of treatment** to render meat, milk or eggs from sick or questionable animals suitable for human consumption.



# Role of Veterinarians in Public Health Cont..

- The **suitability** of an animal for slaughter
- The **disposal of dead animals** or condemned carcasses/organs after slaughter, e.g. anthrax cases
- **How to decontaminate the environment** after disposal of dead animals.
- The **protective measures** against zoonotic diseases and other occupational hazards.



## Core areas of VPH

- Design, operations and hygiene of slaughterhouses
- Protection of food of animal origin (Meat, fish, milk and egg hygiene)
- Diagnosis, surveillance, prevention, control and elimination of zoonotic diseases
- Management of animal facilities and diagnostic laboratories
- Public Health education and extension
- Production and control of biological products





## Core areas of VPH cont...

- Control of chemical residues in food (i.e. pesticide, herbicides, hormones, antibiotics, heavy metals, etc).
- Protection of water (from physical, chemical and microbiological contamination)
- Protection of environment (Waste management and disposal of animal and slaughterhouse wastes)
- Facilitation and control of trade in animals and animal products



# Functions and Responsibilities of VPH Practitioners

- Prevention and control of zoonotic diseases and infections transmitted through foods of animal origin
- Epidemiological studies and assessment of risks to the public from zoonotic diseases.
- Participation in planning, promotion, co-ordination and supervision of VPH programs



## Functions and Responsibilities of VPH Practitioners Cont..

- Planning and participation in laboratory diagnosis of zoonotic diseases
- Reporting of zoonotic disease outbreaks
- Planning and participation in VPH research
- Participation in environmental health programs



## Functions and Responsibilities of the VPH Practitioners Cont..

- Participation in the prevention and control of health hazards of radiation
- Active participation in health education and extension.
- Participation in development of VPH **policy** and **drafting of legislation**.
- Provision of VPH **Advisory services**



## Areas of involvement of VPH in Kenya

**Inspectorate portfolio:** This mainly involve:

- Meat and fish inspection, sanitation of slaughterhouses, licensing of operating slaughterhouses and related facilities.
- Egg and milk hygiene and inspection however at a relatively low level, and
- Control of export and import of foods of animal origin.



## Areas of VPH involvement in Kenya

### Cont...

**Quality control of food and animal feeds.** This involves microbiological, parasitological and toxicological examination of feeds, meat and other foods of animal origin,

**Research** that involve use of animals e.g. primates, rats and livestock for comparative medical research.





# Areas of involvement of VPH in Kenya

## Cont...

**Control of zoonotic diseases.** Control and avoidance of zoonotic in pets and other livestock.

**Legal aspects.** Based on Meat Control Act; Fisheries Act; Animal Disease Control Act.

**Environmental hygiene.** Slaughterhouse hygiene, meat and fish processing plant effluent treatment and waste disposal.



## Challenges Facing Development of VPH

- The following changes will present new challenges for VPH as part of human health systems:
  - Rapid population growth
  - Increasing urbanization
  - Emerging new technologies in animal and food production (e.g. genetic engineering)
  - Climate change affects disease patterns
  - Intensification of livestock production
  - Expanding activities and range of food products (aquaculture and bush meat products)



# Challenges Facing Development of VPH

## Cont..

- Continued expansion of International trade with increased chances of spread of diseases
- Changing lifestyles and food habits
- Changes in consumer expectations due to increased consumer awareness
- Poor perception and understanding of VPH within the public health sector
- Emerging and re-emerging diseases



# Challenges Facing Development of VPH cont.....

- Need for food safety assurance programs e.g. HACCP with Increased responsibility of VPH services at all points in food production chain.
- Emerging information technologies that has enhanced level of consumer awareness
- Emerging animal welfare issues
- HIV/AIDS pandemic –threatens sustainability of VPH service delivery.