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.
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

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.
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.