

<b>REF. NO.</b>	<b>C-VPH.3</b>
<b>TITLE:</b>	<b>ZOONOSES AND INFECTIOUS DISEASES</b>
<b>CATEGORY AND VALUE:</b>	<b>C - 10 CREDITS</b>
<b>NOTIONAL STUDY HOURS:</b>	<b>100</b>

This module can be taken by candidates who are aiming to achieve the Certificate in Advanced Veterinary Practice (Veterinary Public Health). It can be also taken as a free standing module.

### **LEARNING OUTCOMES**

By the end of the module candidates will be able to:

1. Describe the range of infectious agents and other hazards involved in veterinary public health and explain their collective and relative importance.
2. Identify and summarise the major routes and vehicles of human exposure to hazards of veterinary public health significance.
3. Summarise the sources and veterinary public health relevance of:
  - the enterobacteriaceae, E. coli, Salmonella and Yersinia
  - Campylobacters
  - Clostridia and intoxications
  - other enteropathogens
  - Anthrax and the bacilli
  - Staphylococci, Streptococci, Listeria and Tuberculosis
  - Vector borne bacterial diseases
  - Fungi
  - Lyssaviruses
  - Influenza virus
  - Pox viruses
  - Emerging viruses and genetic manipulation
  - Nematodes
  - Trematodes
  - Cestodes
  - Protozoa
  - Ticks
  - Fleas
  - Mites
  - Insects
  - Environmental toxins and chemical contaminants
4. Summarise the properties and mechanisms of action of antimicrobial and other drugs used to mitigate the effect of hazards in veterinary public health and explain the theories of resistance to these drugs.
5. Recognise the importance of the issue of drug residues in foods of animal origin.
6. Recognise and explain the importance of carrier individuals in infectious diseases.
7. Explain the existing and potential role of vaccination to mitigate the effects of veterinary public health hazards.
8. Describe the importance of environmental exposure and environmental safety in veterinary public health.

9. Recognise the importance and limitations of laboratory investigation of veterinary public health hazards.
10. Synthesise, analyse and interpret laboratory data of relevance to veterinary public health and communicate these findings and recommendations based upon them by means of a written report.
11. Respond positively to feedback and constructive criticism from peers and course tutors.

#### **ASSESSMENT STRATEGY**

Please refer to the general Guidance and Assessment for all Modules.

#### **Module content**

- Hazards in Veterinary Public Health - vehicles of exposure – contact, consumption, environment
- Enteric Bacterial Diseases - The enterobacteria; campylobacters; clostridia and intoxications
- Systemic Bacterial Diseases - anthrax and the bacilli; staphylococci, streptococci; listeria, tuberculosis
- Vector borne bacterial disease
- Fungi and public health
- Antimicrobials in therapy and public health: Residues and antimicrobial resistance
- Vaccination and disease prevention
- Identification of carriers
- TSE
- Viruses in veterinary public health – lyssaviruses, influenza virus, pox virus, emerging viruses and genetic manipulation
- Parasites in veterinary public health - endoparasites – nematodes; trematodes; cestodes; protozoa; ectoparasites – ticks, fleas, mites, insects;
- Resistance to anti-parasitic drugs
- Toxins, chemical contaminants and environmental safety in veterinary public health
- Decision making in agent investigation
- The identification of new infectious agents
- The laboratory