

## **SAVC DAY 1 SKILLS FOR THE ANIMAL HEALTH TECHNICIAN**

### **PREAMBLE:**

Animal Health Technicians (AHTs) must demonstrate capacity to deliver essential animal health services to help reduce animal mortality and increase the productivity of livestock assets for livestock owners, collaborate with peers and veterinarians and relevant stakeholders, locally, nationally, and internationally.

As guided by the Scope of Practice of Animal Health Technicians as per the Veterinary and Para-veterinary Professions Act, 19 of 1982 as amended and the revised regulations, the Day 1 Competencies should be reflective of technical preventive aspects of disease surveillance, prevention and control including biosecurity and business and entrepreneurial skills aspect of working for own gain. They should also encompass the advisory and extension role the AHT will have in the community in advising clients, livestock owners and relevant stakeholders.

- Animal Health Technicians should be able to practically perform, demonstrate or explain how to perform the following functions:
  - Animal Health Technicians should be able to practically operate basic primary animal health facility and understand the minimal infrastructural requirements to register a PAHC facility;
  - Animal Health Technicians must demonstrate knowledge of the Welfare Principles as per World Organisation for Animal Health' (WOAH) Terrestrial Code and the Livestock Emergency Guidelines and Standards (LEGS);
  - Animal Health Technicians should be able to understand, interpret and apply the rules and regulations in respect of the AHT profession as per the South African Veterinary Council (SAVC), World Animal Health Organisation (WOAH) and other relevant statutory bodies.

### **a. Scope of Practice of AHT as a para-veterinarian**

- Demonstrate an understanding of the legal and regulatory framework governing para-veterinarians' and especially AHTs' work.
- Explain the scope of practice and limitations for AHT's responsibilities.
- Should be able to perceive the situations that need animals to be referred to a veterinarian.

- Demonstrate and uphold ethical and professional conduct and maintain integrity in their interactions with client, communities and stakeholders.
- Respect clients, communities, livestock owners and stakeholders and their diversity and serve them professionally irrespective of culture, religion, politics, sexual orientation or gender.

**b. Regulatory functions on Controlled disease and disease with High Socio-Economic Impact (TB, CA, Sheep scab, etc.)**

*Disease surveillance and inspection of all livestock, poultry and game*

- a. Collect a sample from a suspect rabies infected animal with correct completion of documentation
- b. Do a skin scraping / wool scraping
- c. Perform an intradermal tuberculin test and interpret after 72 hours
- d. Collect blood from the coccygeal vein (tail), jugular veins and wing vein
- e. Restrain the head of a cow and pull out the tongue
- f. Branding of animals that test positive for a controlled disease as per regulation.

**c. Disease control (Non-controlled diseases)**

*Implementation of vaccination programs in livestock, in order to prevent, and/or control animal diseases and to strive towards establishing a disease-free animal population and administration of these vaccines.*

*Implementation of parasite control programs in livestock, in order to prevent, and/or control animal parasites and strive towards establishing a parasite free animal population.*

- a. Examine and evaluate the mucous membranes in an animal
- b. Take the temperature, pulse and respiration of an animal
- c. Read a thermometer quickly and easily
- d. Examine in the live animal the main lymph nodes, for example, the mandibular, prescapular, prefemoral, popliteal and supramammary lymph nodes
- e. Recognise various drugs e.g. an antibiotic, anti-inflammatory, oxytocin, oestrogen, etc, and tell when or under what circumstances they could be used
- f. Recognise a dipping remedy and calculate dip wash strengths for the various dipping methods.

**d. Sampling**

*Carry out basic post mortem examinations and the collection and submission of samples for microbiological, toxicological, histopathological and serological investigation.*

- a. Prepare a blood and or brain smear from a cow, horse, sheep, goat or dog
- b. Collect specimens from PM for bacteriology, toxicology, serology and histopathology, e.g., liver, kidney and fix in formalin including collection of faecal samples
- c. Collect handle and transport sheath wash samples
- d. Prepare faecal floatation and sedimentation
- e. Perform and interpret urinalysis

**e. Disease prevention**

*Implementation of vaccination programs in livestock, in order to prevent, and/or control animal diseases and to strive towards establishing a disease-free animal population and to administer these vaccines.*

*Implementation of parasite control programs in livestock, in order to prevent, and/or control animal parasites and to strive towards establishing a parasite free animal population.*

- a. Calculate dosages of drugs based on live mass of animal and give an intramuscular, intravenous and/or subcutaneous injection in the various locations, i.e. tail vein, jugular, etc
- b. Pass a stomach tube in a cow and be able to use a dosing gun
- c. Restrain sheep and goats for vaccination, examination of feet and trimming using a hoof knife or hoof trimmer

**f. Primary Animal Health Care**

*Perform animal husbandry techniques and herd health measures in line with improving the productivity, comfort and care of the animal.*

- a. Put a nose tong (nose lead) in the nose of a cow
- b. Attend to a swelling on an animal that is suspected of being an abscess or a septic wound
- c. Perform dehorning of immature animals under four (4) months;
- d. Perform castrations of cattle with a Burdizzo; sheep and goats with a Burdizzo and pigs up to 7 (seven) days

- e. Perform tail docking of pigs up to seven (7) days and sheep: open method or the open method in combination with a Burdizzo under 1 (one) month of age;
- f. Identify key equipment utilised in animal husbandry and be able to use equipment falling within the scope of practice of the AHT
- g. Recognition and correct use of the equipment of importance to the AHT:
  - i. McLintock syringes
  - ii. Burdizzo
  - iii. Hot dehorning bolt
  - iv. Hoof trimmer for small stock
  - v. Hoof trimmer for large stock
  - vi. Hoof knife
  - vii. Trocar and cannula
  - viii. Dosing gun/dosing syringe
  - ix. Nose tongs
  - x. Different gauges and lengths of hypodermic needles and what they are used for
  - xi. Different sizes of syringes and what they are used for.

#### **g. Jurisprudence**

*Knowledge of relevant acts pertaining to animal health. Able to implement parts of these acts.*

- a. The Meat Safety Act, 2000 (Act 40 of 2000)
- b. Permit control
- c. Protection of Personal Information 2013 (Act 4 of 2013)- POPI Act
- d. The Promotion of Administrative Justice Act, 2000 (Act 3 of 2000) (PAJA)
- e. -Promotion of Access to Information 2000 (Act 2 of 2000) - PAIA
- f. The Societies for the Prevention of Cruelty to Animals Act 1993 (Act 169 of 1993)
- g. Animals Protection Act 1962 (Act 71 of 1962)
- h. The Labour Relations Act 1995 (Act 66 of 1995)- LRA
- i. Animal Diseases Act 1984 (Act 35 Of 1984)
- j. The Occupational Health and Safety Act 1993 (Act 85 of 1993) - OSHA
- k. The National Environmental Management Act 1998 (Act 107 of 1998)
- l. The Fertilizers, Farm Feeds, Seeds and Remedies Act 36 of 1947
- m. The Animal Identification Act 2002 (Act 6 of 2002)
- n. The Animal Improvement Act 1998 (Act 62 of 1998)
- o. The South African Revenue Service Act 1997 (34 of 1997)
- p. Disaster Management Act 2002 (Act 57 of 2002)

#### **h. Communication, Advisory and Extension services**

- a. Demonstrate skills in public speaking, presentations, and facilitation techniques to engage and educate diverse audiences.
- b. Provide extension services (including training and education) to farmers, community members and their children, to protect and promote the health and well-being of animals and inform on the public health implications of zoonotic diseases.
- c. Organise farmer's days and prepare and present lectures on different animal diseases of importance at these days.
- d. Visit schools in the region and inform them regarding rabies and relevant diseases.
- e. Perform extension service to local farmers at dip tanks and other areas where communities commonly gather.
- f. Be able to engage with staff at own PAHC, clients and communities on matters related to safety.
- g. Understanding roles and responsibilities of ownership (AHT business owner), personnel/staff and clients in operations of the PAHC facility.

#### **i. Welfare and Animal Handling**

- a. Animal Health Technicians must demonstrate knowledge of the Welfare Principles as per WOAH Terrestrial Code.
- b. Animal Health Technicians should be able to understand and practice the standards of animal welfare based on the Livestock Emergency Guidelines and Standards (LEGS) code.
- c. Must be able to identify the most appropriate livestock intervention during emergencies and crisis.
- d. Must be able to demonstrate appropriate techniques for physically restraining and handling animals when sick, and when attending to them.

#### **j. Working for own account**

- a. Principles of Animal Health
- b. Understand, describe, and apply ethics as they apply to an AHT in terms of:
  - Para-veterinary and veterinary colleagues,
  - Primary Animal health care (Para-Veterinary) practices,
  - Business practices, and
  - Research (animal) ethics
- c. Ethics and legislation
- d. Biosafety, Biosecurity, and Occupational Health and Safety

- e. Use and Management of Facilities, Equipment and Human Resources
- f. Animal Welfare and Handling
- g. Technical Business Skills and Workflow Management
- h. Field visits and assessment
- i. Biosecurity assessment and advisory
- j. Business Management Principles and Business Planning
- k. Demonstrate working knowledge to develop a credible Business Plan/s
- l. Basic Financial management and record keeping

#### **k. Basic Principles of Animal Health**

- Demonstrate knowledge of anatomical landmarks for injections (medicine, vaccines and nutritional supplements and other relevant substances)
- Technical ability to inject intramuscular, subcutaneous and intradermal within the scope of practice of an AHT
- Recognise the normal range of vital health parameters and physical characteristics in animals in health and disease state
- Understand the principles of cold chain management when appropriate, ensuring the quality and safety of temperature-sensitive products and keeping within the cold chain guidelines in order to maintain the integrity of veterinary products and samples.

#### **l. One Health and Veterinary Public Health**

- Describe the linkages and interconnectedness between animal health, public health, and environmental well-being (One Health approach).
- Explain with examples the broader societal impact of animal health on food security, and livelihoods and income generation for clients, communities and stakeholders.
- Collaborate effectively with different stakeholders, considering public health and disease control aspects.
- Understand and explain the principles of veterinary public health, zoonosis, and food hygiene, including the importance of ensuring the safety and quality of food of animal origin.

#### **m. General knowledge**

**Disclaimer:** The information used on contributing to this document is from multiple sources, and from participation in developing of competencies for para-veterinarians (FAO Competencies for FAO project in sustainable training of para-veterinarians) and the developing of Community Animal Health Workers (CAHWs) competencies as part of the WOA Ad hoc working group.



**[16 – 17 November 2023 and Electronic Decision Council C/2023/0016 (28 Nov 2023)]**  
**[VC/EDUC/DAY 1 SKILLS]**