



Clinical Skills List for Bovine Veterinary Graduates

This document establishes a benchmark for the core skills and knowledge required of entry-level bovine practitioners. It is designed to serve as a primary resource for veterinary students and a framework for the mentorship of recent graduates during their formative years of practice.

While this list is comprehensive, it is intended as a general guide; the relevance of specific competencies may vary based on regional demands and individual practice caseloads.

These guidelines aim to ensure a high standard of animal health, welfare and production efficiency across the bovine industry.

Clinical skills marked with a (D) indicate it is important in dairy practice as an entry level competency.

GATHERING HISTORY, COMMUNICATION AND PERFORMING EXAMS

- Collects a relevant individual and herd history while demonstrating knowledge of the beef or dairy production cycle
- Communicates with diverse stakeholders and adjusts communication based on owner's primary use of the animal (e.g. production vs. pet)
- Can identify and communicate with producers and rural clients (build rapport)
- Identifies abnormal production parameters
- Identifies problems with housing, husbandry and/or management
- Presents range of options to the client

THE VETERINARY CARE TEAM AND SELF-DEVELOPMENT

- Functions as a leader and team member
- Solicits, respects and integrates communication from others
- Prioritizes tasks
- Invites and responds to constructive feedback
- Engages in self-directed learning
- Attends to well-being of self and others
- Functions as a leader and team member
- Performs evidence-based veterinary medicine

ANIMAL WELFARE, JURISPRUDENCE AND FOOD SAFETY

- Performs euthanasia via any AVMA approved method
- Applies ELDU (extralabel drug use) and withdrawal times
- Operates within and documents a valid VCPR (Veterinarian-Client-Patient Relationship)
- Advocates for animal welfare

FLUID AND MEDICATIONS

- Places IV needle for fluid administration in adult bovine
- Uses IV simplex set
- Administers oral fluids to an adult bovine
- Administers oral fluids to a calf via esophageal feeder
- Develop appropriate treatment plan for individual or herd
- Labels drugs appropriately

HERD MANAGEMENT, INFECTIOUS DISEASE AND BIOSECURITY

- Recommends disease prevention measures
- Responds to zoonotic and infectious disease diagnosis through owner education, quarantine, reporting and disinfection (D)
- Develops vaccine protocol for herds (D)



CASE MANAGEMENT

- Identifies normal/abnormal animals in a population
- Performs an assessment of clinical information and acts accordingly
- Defines differential diagnoses for high priority problems
- Develops an initial treatment or management plan
- Explains justification for plan to client in lay language, and to colleague(s) using medical terminology
- Re-evaluates animal or population in a timely manner to adjust plan
- Uses critical thinking to determine appropriate action when unexpected outcomes occur
- Presents a range of options to the clients
- Recognizes and advises when animals need to be euthanized
- Triage cases and recognizes emergent cases
- Consults with other bovine professionals (e.g. nutritionist, consultant, etc.) when appropriate
- Selects drugs for chemical restraint
- Understands the economic impacts of treatment and prevention (D)

TECHNICAL DIAGNOSTIC SKILLS

- Performs a complete physical examination of the bovine
- Selects appropriate collection devices (e.g. needles, syringes, sample tubes)
- Collects blood from the jugular vein
- Collects blood from the tail vein
- Properly collects, labels, packages, and transports postmortem samples to laboratory
- Performs field necropsy

ROUTINE HUSBANDRY AND CATTLE HANDLING

- Moves cattle using flight zone and point of balance
- Places halter
- Ties quick release knot
- Performs tail jack (D)
- Processes a newborn calf (dip umbilicus, etc.) (D)

- Administers intramuscular and subcutaneous injections
- Administers drugs via dose syringe
- Administers medication via balling gun
- Selects correct needle size and length
- Administers IV drugs
- Passes orogastric tube
- Administers oral fluids
- Passes esophageal feeder in calf

ROUTINE OBSTETRICAL PROCEDURES

- Perform rectal palpation to differentiate non-gravid from gravid uterus and place pregnant cows into a trimester with 75% accuracy at 60-90d
- Performs vaginal exam and identifies calf's presentation, position and posture
- Places chains, delivers calf
- Corrects vaginal prolapse
- Corrects uterine prolapse
- Appropriate use of calf jack

EMERGENCY AND THERAPEUTIC PROCEDURES

- Relieves bloat (tube and/or trocar)
- Recognizes anaphylactic shock and initiates treatment

ANESTHESIA, ANALGESIA AND SURGICAL PROCEDURES

- Performs caudal epidural
- Anesthetizes paralumbar fossa
- Performs common local anesthetic blocks (cornual, teat, Bier)
- Selects appropriate injectable anesthetic agents
- Performs aseptic technique for basic field procedures
- Performs hemostasis
- Performs appropriate suture patterns to close skin
- Performs appropriate suture pattern to close muscle
- Recommends analgesic and anesthetic protocols for castration and dehorning
- Castrates using a sharp instrument
- Performs band castration

