
Guidance for the Categorical Classification of Procedures for Applications for Scientific Purposes-related Authorisation from the South African Veterinary Council

A. Definition of Scientific Procedures for which Section 23(1)(c) Authorisation is Required under the Veterinary and Para-Veterinary Professions Act (Act 19 of 1982)

Authorisation is required for procedures defined as veterinary or para-veterinary procedures, services or functions in the Regulations or Rules for the veterinary or para-veterinary professions; or for clinical veterinary or para-veterinary procedures that are carried out on animals for scientific purposes, that may cause an animal a level of fear, pain, suffering, distress, deterioration or lasting harm, that is equivalent to, or higher than, that caused by inserting a hypodermic needle according to good veterinary practice. Killing is considered to be a procedure when an animal is killed for scientific purposes, including the killing of animals that were bred or acquired, but not used, for scientific purposes. Welfare monitoring or welfare assessment is considered to be a procedure in which clinical judgement is used to assess or diagnose the presence or degree of fear, pain, suffering, distress, deterioration in wellbeing or lasting harm. The transport of docile animals within a building; and general animal husbandry; are not considered to be procedures.

B. Categorical Classification of Procedures

Describe the groupings of veterinary and para-veterinary procedures, functions or services, for which authorisation for scientific purposes may be applied for, as follows:

1. **Category A**: Minor, minimally invasive, or killing procedures, that do not involve sedation, analgesia or general anaesthesia;

2. **Category B**: Minor or minimally invasive procedures involving sedation, analgesia or brief (< 15 minutes duration) general anaesthesia, with no residual pain on recovery; or surgical procedures conducted under brief non-recovery general anaesthesia;

3. **Category C**: Surgical procedures involving general anaesthesia; the administration and maintenance of balanced or more prolonged (≥ 15 minutes duration) general anaesthesia; or use of neuromuscular blocking agents;
4. **Category D**: Other procedures or techniques that do not fall into any of the other Categories [Note: This Category should only be used in exceptional cases];

5. **Category E**: Health practitioners registered with the Health Professions Council of South Africa (HPCSA) who perform Category A to C procedures, in cases where the procedures on humans are included in the health practitioner’s Scope of Practice;

6. **Category F**: Persons who perform, on a professional or employment level, *inter alia* some of the services, functions or procedures of veterinarians, laboratory animal technologists or other para-veterinary professionals.

C. **Examples of Procedures per Category**

Examples of procedures per Category are given below.

1. **Category A**
   
   i. Welfare monitoring or welfare assessment
   
   ii. Physical restraint or confinement in a restricted area, of a nature or duration that may cause fear, pain, suffering, distress or lasting harm
   
   iii. Variation in composition, constituents, quantity or availability of diet or water, which may cause pain, suffering, distress or lasting harm
   
   iv. Administration of substances by intravenous (IV), subcutaneous (SC), intradermal (ID), intramuscular (IM) or intraperitoneal (IP) injection
   
   v. Administration of substances by the oral route including by gavage but excluding simple administration by natural ingestion;
   
   vi. Administration of substances by Inhalation; by immersion; or topically to the skin, conjunctiva or eye
   
   vii. Administration of substances or withdrawal of fluids via previously implanted cannula, catheter, or delivery or access system (does not include surgery or anaesthesia required for placement; includes use of stomas or similar)
viii. Withdrawal of blood from superficial blood vessels by non-surgical methods (does not include venesection or tail tip removal)

ix. Collection of cells or secretions from the oral or nasal cavities, the vagina or rectum, or the external structures of the eye

x. Breeding and maintenance of genetically altered animals (includes pairing to produce offspring, keeping alive with potential for harm)

xi. Non-surgical implantation of a microchip or telemetry device

xii. Cannulation of blood vessels, ducts or cavities by non-surgical means (including genitourinary tracts)

xiii. Manipulation of germ cells, gametes, fertilised ova or pre-implantation embryos, with the intention of producing genetically altered animals (includes micro-injections and electroporation)

xiv. Exposure to ionising or non-ionising radiation

xv. Exposure to infectious or toxic agents in the environment (including agents transmitted by contact, inhalation, in feed or on grazing)

xvi. Non-surgical placement or removal of electrodes, probes or other devices that may cause pain, suffering, distress or lasting harm

xvii. Stimulation via electrodes (does not include the surgery required for placement)

xviii. Locomotor or maze testing that may cause pain suffering distress or lasting harm (includes rotarod performance tests, elevated and plus mazes and open field test in potentially compromised animals)

xix. Forced learning procedures that may cause pain suffering distress or lasting harm (e.g. water baths, electric shocks, exposure to noxious substances)

xx. Exposure to other animals (including con-specifies) with the intention of producing aggression, abnormal behaviour or fear/anxiety

xxi. Exposure to environmental conditions that may cause pain suffering distress or lasting harm (including social deprivation, housing in conditions that may cause pain, suffering, distress or lasting harm, housing in a barren environment, housing in permanent darkness, changes in the gaseous environment such as hypoxia, or warming/cooling to a stressing extent)
xxii. Application of, or exposure to, physical stimuli that may cause pain suffering distress or lasting harm (Includes auditory, thermal or pressure exposure, inflation of gastrointestinal balloon)

xxiii. Administration of substances or withdrawal of fluids/tissues from tracts or cavities or body structures by non-surgical means (includes the respiratory system, peritoneal cavity, gastrointestinal, urogenital tracts, subcutaneous pouches)

xxiv. Physical damage to superficial tissues (includes abrasion of skin or mucous membrane)

xxv. Maintaining an animal in an environment which may restrict the animal’s ability to satisfy its physiological and ethological needs

xxvi. Non-surgical embryo transfer

xxvii. Killing by destruction of the brain and spinal cord by mechanical means

xxviii. Killing by dislocation of the neck

xxix. Killing by decapitation

xxx. Killing by gases (excluding anaesthetics) that displace oxygen from inhaled air and thus induce hypoxia (including CO₂, argon, nitrogen, CO, etc)

2. Category B

i. Any Category A procedures, which are of such a nature that sedation, analgesia or brief (< 15 mins duration) general anaesthesia should be used

ii. Induction of general/local anaesthesia by use of agents and by routes suitable for the species, nature and duration of the procedure (general anaesthesia for non-surgical or minor procedures only, or for procedures under brief general terminal anaesthesia. Does not include maintenance of balanced anaesthesia)

iii. Biopsy of superficial tissues or tail tip removal.

iv. Cannulation of the heart and/or major blood vessels, ducts, tracts or cavities under terminal anaesthesia

v. Exposure and removal of organs or tissues, including withdrawal of blood from heart, vessels or of body fluids, under terminal anaesthesia

vi. Endoscopy with or without biopsy
vii. Withdrawal of blood by cardiac puncture under terminal anaesthesia

viii. Killing under terminal anaesthesia by exsanguination and/or perfusion with fixative

ix. Killing by overdose of an anaesthetic agent e.g. inhaled (halothane, isoflurane, sevoflurane), injectable (e.g. pentobarbitone, thiopentone), etc.

3. Category C

i. Induction and maintenance of general/regional anaesthesia by use of agents and by routes suitable for the species, nature and duration of the procedure (for balanced and/or prolonged general anaesthesia)

ii. Biopsy or removal of internal organs or tissues

iii. Surgical cannulation of blood vessels, ducts, tracts or hollow organs

iv. Subcutaneous, intramuscular or intraperitoneal implantation or removal of any device, tissue, substance or delivery system (includes minipumps and radiotracking devices)

v. Exposure, section, partial removal, crush, ligation, occlusion or de-occlusion of vessels, peripheral nerves or ducts (includes vasectomy, and lesioning by ligation or compression of peripheral nerves)

vi. Surgical administration of substances or implantation of tissue into or onto organs, cavities, ducts, tracts including into or onto the central nervous system

vii. Surgical exposure of tissues, organs, vessels, ducts, tracts or cavities including the central nervous system

viii. Surgical biopsy or removal of organs or tissues

ix. Surgical implantation of ova, and/or embryos into the reproductive tract

x. Surgical implantation with or without exteriorisation, and/or removal of cannula, electrodes, micro-dialysis probes or other devices into discrete areas of the central and peripheral nervous system or other internal tissues or organs (including implantation or insertion into muscles or joints)

xi. Lesioning of discrete areas of the central nervous system, tissues or organs by chemical, thermal or physical means (includes lesioning using ultrasound or local irradiation)
GUIDANCE FOR THE CATEGORICAL CLASSIFICATION SYSTEM FOR THE AUTHORISATION OF PERSONS WHO PERFORM VETERINARY OR PARA-VETERINARY PROCEDURES ON ANIMALS FOR SCIENTIFIC PURPOSES (INCLUDING FOR RESEARCH, TEACHING, TESTING OR VALIDATION)

xii. Implantation of fixation devices and/or recording or observation chambers
xiii. Transplantation of organs, vessels, ducts, tracts, tissues or nervous tissue
xiv. Surgical manipulation of the circulatory system (includes formation of arteriovenous shunts, carotid loops)
 xv. Induction and maintenance of neuromuscular blockade by the use of neuromuscular blocking agents (Note: neuromuscular blocking agents may not be used in place of anaesthetic agents)
 xvi. Killing by permanent cessation of circulation under general anaesthesia, e.g. transection of aorta, excision of heart, etc.

4. Category D

i. Other procedures or techniques that do not fall into any of the other Categories [This Category should only be used in exceptional cases]

5. Category E

i. Applies to Health practitioners who are registered with the Health Professions Council of South Africa (HPCSA), who perform Category A to C procedures, in cases where the procedures on humans are included in the health practitioner’s Scope of Practice

ii. The general clinical competence of the HPCSA-registered professionals (per Scope of Practice) is regulated by the HPCSA. Therefore, for the purposes of SAVC authorisation, the training, assessment of competence, supervision, maintenance of competence, and periodic re-confirmation of competence, pertain specifically to veterinary aspects, including species-specific anatomy, physiology, biology, ethology, husbandry, handling, restraint, clinical examination, health and welfare monitoring, pharmacology, peri-surgical management, anaesthesia and related complications, good veterinary practice, etc.

6. Category F
i. The intention is to distinguish this Category of persons, who on a professional level more broadly perform the functions or services of veterinary or para-veterinary professionals – in contrast to the aforementioned Categories A-E, which consist of people who only perform these procedures as a much more limited part of their work (e.g. a post-graduate student, post-doc, scientist or medical practitioner, who perform procedures on animals for scientific purposes from time to time, during the course of their scientific endeavours).