

Use of Forms of Energy in the Treatment and/or Care of Animals

Published: January 2021

Introduction

It is the position of Council that the use of a form of energy in the practice of veterinary medicine poses a risk of harm to an animal(s) and/or providers, dependent on its application. Given this position, Council has approved a public statement that outlines the levels of regulatory oversight required to utilize forms of energy in the treatment and/or care of animals. This specific policy statement has been developed to expand on Council's position and to outline how it is to be implemented by veterinarians in their practice.

Definition

Forms of Energy: There is no specific definition of forms of energy that can be found across the professions who utilize them. Forms of energy generally refer to the use of a tool and/or equipment to create either ionizing or non-ionizing radiation designed to produce a specific outcome to aid or enhance the treatment and/or care of a patient. The particulars of the desired outcome vary based on the form and method used.



Classification Based on Risk

Whether the use of a form of energy by a veterinarian in the treatment and/or care of an animal requires regulatory oversight determined by a current risk analysis that considers both real and potential harm.

This risk analysis is based on current research and is designed to evaluate each form of energy in an unbiased and consistent fashion. In particular, the risk analysis seeks to determine if:

- the use of the form of energy constitutes the practice of veterinary medicine;
- the use of the form of energy requires sedation;
- the use of the form of energy inflicts pain or discomfort;
- the use of the form of energy puts the patient and/or provider at risk of undue exposure or harm;
- the use of the form of energy requires a specific set of knowledge or training in order to be properly administered;
- the use of the form of energy has been researched and validated; and
- the use of the form of energy has a high risk of adverse effect if improperly administered.

Note on Efficacy

This risk analysis does not consider the real or perceived efficacy of forms of energy. This is due in large part to the lack of research related to the overall efficacy of many forms. It is recommended that the real or perceived efficacy of a form of energy be included as part of the informed client consent conversation that occurs between the veterinarian and their client.

Levels of Classification

Based on the aforementioned risk analysis, three categories have been developed that oversee the use of forms of energy by a veterinarian in the treatment and/or care of animals. These classifications have been created in accordance with the *Veterinarians Act* and its associated regulation, and are designed to provide clarity related to their oversight.

Category One – High Risk

The first category of regulatory oversight has been designed to oversee forms of energy that have been determined to have high levels of real or potential harm associated with their applied use in animals. In particular, these forms of energy have characteristics and/or uses that associate them with:



- surgery;
- diagnostics;
- the requirement for sedation
- below the dermis procedures;
- high levels of potential harm and/or injury from application;
- requirements for advanced knowledge or training in order to be properly administered;
- high level of risk of harm if improperly administered; and
- varying degrees of clinical research.

Given these characteristics, forms of energy that fall under this category are to be used only by a veterinarian, or an auxiliary working under a veterinarian's delegation with immediate or direct supervision.

At this time the following forms of energy fall under this category:

- any forms of energy that employ or produce ionizing radiation;
- magnetic resonance imaging;
- any forms of energy used in surgery (laser surgery; lithotripsy; cryosurgery; radiosurgery; etc.); and
- diagnostic ultrasound unless otherwise stated (i.e., transvaginal, transrectal, transabdominal, etc.)

Category Two – Moderate Risk

The second category of regulatory oversight has been designed to oversee forms of energy that have been determined to have moderate levels of real or potential harm associated with their applied use in animals. In particular, these forms of energy have characteristics and/or uses that associate them with:

- specific forms of diagnostics;
- varying requirements for sedation;
- above the dermis procedures;
- moderate risk of potential harm and/or injury from application;
- varying requirements for advanced knowledge or training in order to be properly administered;
- medium-to-high level of risk of harm if improperly administered; and
- varying degrees of clinical research.

Due to the specific characteristics associated with these forms of energy, this category of classification has been divided into two subcategories.



Forms of energy that fall under Part A of Category Two are to be used only by a veterinarian, or an auxiliary working under a veterinarian's delegation with a level of supervision determined appropriate by the veterinarian.

Forms of energy that fall under Part B of Category Two are to be used only by a veterinarian, an auxiliary working under a veterinarian's delegation with a level of supervision determined appropriate by the veterinarian, or by a non-veterinarian on referral from a veterinarian.

The following forms of energy fall under Part A of this category:

- transabdominal diagnostic ultrasound when performed for the purpose of pregnancy diagnosis in food-producing animals; and
- focused shockwave.

The following forms of energy fall under Part B of this category:

- Class 4 lasers when used for therapeutic purposes; and
- radial shockwave.

Category Three – Lower Risk

The third category of regulatory oversight has been designed to oversee forms of energy that have been determined to have lower levels of real or potential harm associated with their applied use in animals. In particular, these forms of energy have characteristics and/or uses that associate them with:

- above the dermis procedures;
- lower levels of risk of potential harm and/or injury from application;
- limited requirements for advanced knowledge or training in order to be properly administered;
- lower levels of risk of harm if improperly administered; and
- varying degrees of clinical research.

Given these characteristics, forms of energy that fall under this category may be used by a veterinarian or a non-veterinarian, as long as the non-veterinarian does not represent themselves as practising veterinary medicine.

At this time, the following forms of energy fall under this category:



- pulsed electromagnetic field therapy;
- therapeutic ultrasound;
- Class 3B lasers and below when used for therapeutic purposes; and
- electrical muscle stimulation.

In all circumstances, Council maintains that animal care and welfare is best achieved when these forms of energy are provided by a veterinarian, an auxiliary working under a veterinarian's delegation, or another qualified professional who has advanced education and training in use of forms of energy on animals.¹

Council encourages inter-professional collaboration between veterinarians and other animal care providers to assist in the delivery of safe and informed treatment and/or care.

Legislative Authority

Veterinarians Act R.S.O. 1990, c. V.3 s. 3

Ontario Regulation 1093 R.S.O. 1990 s. 19 made under the *Veterinarians Act*.

Resources

The following can be found at the College's website at cvo.org:

1. *Position Statement: Use of Forms of Energy in the Treatment and/or Care of Animals*
2. *Professional Practice Standard: Delegation*

College publications contain practice parameters and standards which should be considered by all Ontario veterinarians in the care of their patients and in the practice of the profession. College publications are developed in consultation with the profession and describe current professional expectations. It is important to note that these College publications may be used by the College or other bodies in determining whether appropriate standards of practice and professional responsibilities have been maintained. The College encourages you to refer to the website (www.cvo.org) to ensure you are referring to the most recent version of any document.

¹ ** Intended for links to verified sources for a listing of qualified professionals**