

**The College
of Veterinarians of Ontario**

**Guidelines
for the Compounding
of Veterinary Drugs**

GUIDELINES

Compounding of Veterinary Drugs

Approved by Council:	September 26, 2007
Publication Date:	Website September 2007, <i>Update</i> December 2007
To be reviewed by:	September, 2012
Key Words:	compounding, veterinary drugs, bulk compounding, manufacturing, in-office use, prescriptions, extra-label drug use
Related Topics:	
Legislative References:	<i>Veterinarians Act, R.S.O. 1990, Chapter V.3, Section 7 (1) 9; Ontario Regulation 1093 Sections 27(1, 3) and 31 (1-4).</i>
College Contact:	Registrar
Reference Materials:	Health Canada, "Issue Analysis Summary: Extra Label Drug Use in Animals"; Health Canada, "Policy on Manufacturing and Compounding Products in Canada"; Canadian Veterinary Medical Association, "Guidelines For The Legitimate Use Of Compounded Drugs In Veterinary Practice."

TABLE OF CONTENTS

	Page #
PURPOSE	1
SCOPE	1
DEFINITION OF COMPOUNDING	1
BACKGROUND	2
GUIDELINES	3
WHEN IS COMPOUNDING APPROPRIATE?	3
WHEN IS COMPOUNDING <i>NOT</i> APPROPRIATE?	4
INFORMED CONSENT	5
ROLES AND RESPONSIBILITIES.....	5
PRESCRIBING AND DISPENSING.....	6
DOCUMENTATION AND LABELLING	7
APPENDIX 1 – CONSENT TO DISPENSE COMPOUNDED DRUGS	8
APPENDIX 2– CONSENT TO DISPENSE COMPOUNDED DRUGS FOR FOOD-PRODUCING ANIMALS AND POULTRY	9
APPENDIX 3 – Relevant sections of the <i>Veterinarians Act 1990</i>	10

Purpose

College publications contain practice parameters and standards which should be considered by all Ontario veterinarians in the care of animals and in the practice of veterinary medicine. College publications are developed in consultation with professional practice leaders 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.

These guidelines describe the appropriate applications of compounded drugs in veterinary practice. The content of this document reflects generally accepted professional standards for the practice of veterinary medicine and the College's expectations for quality animal care.

Scope

The guidelines apply to all practitioners prescribing, administering or dispensing compounded drugs to animals under their care. They do not pertain to medicated feed, the regulation of which falls under the Federal *Food and Drug Regulations* C.08.012.

Definition of Compounding

Compounding of veterinary drugs is the activity whereby customized prescription-medications are created by a veterinarian or pharmacist.

Compounded drugs are created by any of the following means:

1. manipulating an approved drug to produce a dosage, form, or concentration other than that which is provided for in the directions for use on the labeling. This may be achieved by:
 - a) combining two or more drugs to create a new drug;
 - b) diluting a drug other than according to the instructions on the label;
 - c) mixing to administer by a different route than is recommended on the label or directions for use;
 - d) converting an approved medication into a different form (e.g. tablet to liquid; splitting one capsule into two capsules);
 - e) adding an unapproved non-drug substance (e.g. flavour base);
2. creating a product from an Active Pharmaceutical Ingredient [API].

Background

Health Canada has the mandate to approve all drugs, including veterinary drugs, and to regulate related manufacturing processes. Provincial legislation regulates the practice of veterinary medicine and the practice of pharmacy--which includes compounding, repackaging, and dispensing of drugs, pursuant to prescriptions. In Ontario, no individual other than a licenced veterinarian or pharmacist may compound or dispense drugs for administration to animals. Veterinarians wishing to prescribe a compounded drug may either compound the product themselves or issue a prescription to a pharmacist.

Veterinary drugs approved for sale in Canada are submitted to a rigorous and thorough approval process by Health Canada, and are considered safe and effective when administered according to label directions. A manufactured and approved product has data and documentation related to safety, stability, potency, efficacy, and, where appropriate, withdrawal times. The safety of potential residues of drugs administered to food producing animals is a critical aspect of the review process, leading to the establishment of Maximum Residue Limits (MRL) and appropriate withdrawal times. Residues in food products derived from treated animals must meet the established MRLs.

Compounded drugs are not approved by Health Canada and are therefore distinct from those which have completed the rigorous testing and government-approval process. Prescribing a compounded drug requires the veterinarian to assume full and total responsibility for the quality, stability, safety, efficacy and potency of the compounded product.

Drug compounding is an accepted veterinary practice and, in certain cases, a properly compounded prescribed drug may be an appropriate and effective treatment. Veterinarians must be cognizant of potential risks that must be properly managed to provide effective animal care. For example, drug incompatibilities and owner practices may interfere with a compounded product's stability, purity and potency. In general, practitioners must ensure that the products do not inflict harm on an animal, are not associated with therapeutic failure originating from drug interaction or deficient product potency, or cause residues in food products or performance animals.

Guidelines

When is compounding appropriate?

Veterinarians should only use compounded drugs where there is a legitimate medical need that in the practitioner's professional judgment outweighs the risks involved.

The following decision-making hierarchy, starting with the most (#1) desirable course of action and ending with the least (#5), may be beneficial for veterinarians to use in determining when the use of compounded drugs might be appropriate:

1. Prescribe approved veterinary products, according to label directions.
2. Prescribe approved veterinary products in an extra-label manner.
3. Prescribe approved human products in an extra-label manner.
4. Prescribe compounded products that have been prepared from other approved products.
5. Prescribe compounded products prepared from *unapproved* products such as active pharmaceutical ingredients (API).

Veterinarians are reminded that:

- Health Canada's Emergency Drug Release program [www.hc-sc.gc.ca/vetdrugs-medsvet/edr_e.html] allows them to import and use drugs that have been approved in other jurisdictions under emergency circumstances; and
- Where the ingredients in a compounded product include a controlled substance, the compounded product is deemed to be a controlled substance, and all relevant regulations apply.

When is compounding not appropriate?

- Practitioners should not compound for the purposes of growth promotion or performance enhancement.
- Compounded drugs should not be utilized if there is an equally appropriate approved drug available.

- When veterinarians select drugs for recommendation to a client, many factors, including economic, are considered. There may be circumstances where there is a significant difference between the cost of an approved drug and a compounded drug. This cost difference should not drive the practitioner's recommendation to a client that a compounded drug be prescribed except in very extreme circumstances. For example, a situation may exist where the owner genuinely cannot afford the cost of treatment with the approved drug and the only viable alternatives are to use the compounded drug or to provide no treatment. In this situation the owner must be fully informed that there is an approved drug available and they are increasing the risk of treatment failure by using the unapproved compounded product.
- It is not appropriate for veterinarians to prescribe or prepare compounded products to circumvent legitimate drug-approval processes.
- Any drug that has been banned for use in food-producing animals may not be used in compounded products intended for use in these animals. [www.hc-sc.gc.ca/vetdrugs-medsvet/pub_banned_drugs_e.html]
- Drugs should not be compounded in order to be sold to third parties who will in turn sell/deliver to patients outside their defined veterinarian-client-patient-pharmacist-relationship.
- Veterinarians may not manufacture drugs unless licenced to do so. Health Canada may take enforcement action against either a veterinarian or a pharmacist if it appears that either is manufacturing a drug. This may occur if they compound regularly or in inordinate amounts for commercially available drugs, if they compound for resale, or if they compound inordinate amounts given their usual prescription or in-office needs, and on the basis that it is not for an individual animal or group of animals or where no veterinary-client-patient-relationship exists. See Health Canada's "Policy on Manufacturing and Compounding Drug Products in Canada" (POL-0051) for details (URL: http://hc-sc.gc.ca/dhp-mps/compli-conform/gmp-bpf/docs/pol-0051_man_com-fab_prep_ltr-doc_e.html)

Informed Consent

Veterinarians must document that clients have provided consent for the use of a compounded drug that is dispensed for administration by the owner. Informed consent includes understanding that:

- (a) the drug is not approved (i.e. has not gone through the rigorous and thorough government approval process); and
- (b) the efficacy of the drug is not necessarily known.

Appendices 1 and 2 are sample consent forms that practitioners may find useful when prescribing or dispensing a compounded drug.

Many practitioners routinely administer compounded drugs to animals that they are treating either in a hospital or from a mobile unit. Some examples include IV ketamine/diazepam for the induction of general anaesthesia, diluted narcotics for pain control, diluted dexamethasone for diagnostic tests, and combinations of a tranquilizer plus a narcotic for balanced sedation. **Client consent is *not* required for administration of these compounded drugs as long as their use is in accordance with published data in refereed journals, acceptable veterinary textbooks, or recommendations from recognized experts.**

Roles and Responsibilities

Veterinarians should understand the regulatory context within which the prescription for a compounded drug is issued.

A prescription is a written *or* verbal order for a medication from a licenced practitioner. The veterinarian is responsible for providing to the pharmacist the instructions for filling a compounded drug prescription.

The pharmacist is responsible, upon receipt or anticipated receipt of a prescription, for the preparation of the prescription in accordance with the veterinarian's instructions.

While both the veterinarian and the pharmacist must have appropriate knowledge of pharmacokinetics of the active ingredients in the compounded product, the veterinarian is responsible for all consequences arising from the administration of the prescribed compounded drug, including adverse events. The veterinarian is also responsible for determining appropriate withdrawal times for food-producing and performance animals.

A veterinarian dispensing a compounded medication is responsible for warning clients about any risks that may be incurred when handling the product, and for warning the client about any commonly expected side effects that the patient may demonstrate.

Veterinarians are obligated to monitor and report all adverse events to the Veterinary Drugs Directorate at Health Canada when a compounded product is implicated [www.hc-sc.gc.ca/vetdrugs-medsvet/pharmacovigilance_e.html or 1-877-VET-REAC]

Prescribing and Dispensing

A pharmacist should be asked to fill a veterinary prescription only within the context of a valid veterinarian-client-patient-pharmacist relationship (VCPPR) or, in the case of in-office use prescriptions, a valid veterinarian-pharmacist relationship (VPR).

Veterinarians may prepare or obtain a compounded product for use within their facility (veterinary clinic or mobile). If these are prepared by a pharmacist, the prescription will state that it is for “in-office use”. Practitioners may re-dispense these products to individual animals, as long as a record is made noting the original pharmacy that prepared the product and the Rx number. This will allow for trace-back to the original pharmacy and batch in the event of concerns with respect to the product. This information may be recorded in the consent form (see Appendices 1 and 2).

The veterinarian’s compounded-drug prescription must provide the pharmacist with all of the following information and instructions:

- The name of the client/owner;
- The name and species of the animal;
- The date of the prescription;
- The names, strengths, and concentrations of any drugs to be included in the compounded product;
- The directions for administration to the animal including the amount, route and frequency;
- Any renewal instructions permitting refills of the prescription, including the mandatory interval between refills for controlled substances;
- The name and contact information of the practitioner;
- Withdrawal times, if applicable.

Documentation & Labeling

Just as any pharmacist compounding a product must affix an appropriate label, veterinarians compounding and/or dispensing a product must also affix an appropriate label. However, it is not necessary for a veterinarian to affix a label to a compounded product when the entire amount of compounded product is to be administered under supervision to a patient immediately following preparation. The affixed labels must meet the requirements of Regulation 1093, subsections 27 (1) and (3) (see **Appendix 3**).

The instructions for use as well as the names and concentrations of all active ingredients, including the generic name of all API's, should be recorded in the patient record.

Best practice would suggest that a compounded drug should include on its label both storage recommendations and an expiration date based on known stability data. If no stability data exists, products compounded for re-dispensing should have an expiration date identical to the last date the treatment will be administered, as per the duration of the prescription.

Withdrawal times, if applicable, should be indicated on the label.

APPENDIX 1

CONSENT TO DISPENSE COMPOUNDED DRUGS

Client Name:
Animal Identification:
Description of the Compounded Drug:
Pharmacy that prepared product (if applicable):
Rx Number (if applicable) _____
Prescribed Directions for Use:

I grant consent for the compounded drug described above.

- a) I understand the proposed compounded drug is not approved by Health Canada and consequently may provide a greater risk level. This drug has not undergone rigorous testing for efficacy and stability.
- b) I understand the reasons for utilizing the compounded drug, its potential risks and benefits, other alternative treatment (s) and the probable consequences, which may occur if the proposed medication is not administered.
- c) I am willing to accept the risks associated with this compounded drug that my veterinarian has discussed with me.
- d) I hereby authorize Dr. _____ to dispense the compounded drug described above to my animal. This consent is valid until I revoke it or conditions change to the point that all risks and benefits are significantly different.

Client Signature:	Date:
--------------------------	--------------

APPENDIX 2

CONSENT TO DISPENSE COMPOUNDED DRUGS FOR FOOD-PRODUCING ANIMALS & POULTRY

Client Name:
Animal Identification:
Description of the Compounded Drug:
Pharmacy that prepared product (if applicable):
Rx Number (if applicable) _____
Prescribed Directions for Use:
Withdrawal instructions:
Milk from this animal, taken at the am/pm milking, may go into the tank on <u>DD/MM/YYYY</u>
This animal may be shipped for slaughter on <u>DD/MM/YYYY</u>
Eggs may be marketed on <u>DD/MM/YYYY</u>

I grant consent for the compounded drug described above.

- a) I understand the proposed compounded drug is not approved by Health Canada and consequently may provide a greater risk level. This drug has not undergone rigorous testing for efficacy and stability.
- b) I understand the reasons for utilizing the compounded drug, its potential risks and benefits, other alternative treatment (s) and the probable consequences, which may occur if the proposed medication is not administered.
- c) I am willing to accept the risks associated with this compounded drug that my veterinarian has discussed with me.
- d) I hereby authorize Dr. _____ to dispense the compounded drug described above to my animal. This consent is valid until I revoke it or conditions change to the point that all risks and benefits are significantly different.

Client Signature:	Date:
--------------------------	--------------

Legislation

The *Veterinarians Act* Section 7. (1) 9 provides Council with the authority, subject to approval from the Lieutenant Governor in Council and with prior review by the Minister, to make regulations “**regulating the compounding, dispensing and sale of drugs by members of the College, and the containers and labeling of drugs compounded, dispensed or sold by members, and prescribing the records that shall be kept in respect of such compounding, dispensing, and sale.**”

Ontario Regulation 1093, subsections 27 (1) and (3) state:

27. (1) A member who dispenses a drug shall make a written record showing,

- (a) the name and address of the owner of the animal or group of animals for which the drug is prescribed;**
- (b) the name, strength, and quantity of the prescribed drug;**
- (c) the directions for use if they are different than the directions for use on the manufacturer’s label or if the manufacturer’s label does not specify the directions for use;**
- (d) the date on which the drug is dispensed; and**
- (e) the price charged.**

27. (3) A member who dispenses a drug shall mark the container in which the drug is dispensed with,

- (a) the name, strength, and quantity of the drug;**
- (b) the date the drug is dispensed;**
- (c) the name and address of the member;**
- (d) the identity of the animal or group of animals for which it is dispensed;**
- (e) the name of the owner of the animal or animals; and**
- (f) the prescribed directions for use.**