



The University of Vermont

Controlled Substances in Research Guide

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Introduction

The Federal Drug Enforcement Administration (DEA) regulates the use of substances that have a high potential for abuse. The DEA classifies controlled substances (CS) on a scale of I through V, with I being the highest level of potential abuse. The [DEA Website](#) maintains a current schedule of what substances are controlled and their classification. The University of Vermont's (UVM) use of controlled substances is limited to research that has been approved by the appropriate institutional review committee (e.g. IACUC) or other appropriate University authority and under the supervision of researchers that are registered with the DEA. Investigators who use CS for use in animals as part of an approved research project must obtain a DEA registration.

Registration

DEA registration grants practitioners (defined as a physicians, dentists, veterinarians, pharmacies, or hospitals) federal authority to handle controlled substances in the course of professional practice. Vermont is a one license requirement state, meaning that individuals who already possess a state practitioner license (i.e., physicians, veterinarians, dentists) and who wish to also use CS for research can use their state license to apply for a DEA registration. While the Vermont Office of Professional Regulation requires that applicants for DEA registration be a practitioner, they have waived the Vermont State Board of Pharmacy license requirement for UVM research faculty and individual investigators that do not have a state practitioner's license. With this exemption, non-licensed researchers may apply directly for a DEA registration per the instructions below. Licensed practitioners must still register with the DEA; however, they should use their Vermont license information when requesting a DEA registration for the purpose of doing research.

The DEA Certificate of Registration must be maintained at each registered location in a readily retrievable manner and kept available for official inspection. A separate registration must be obtained for each principal place of business or professional practice where controlled substances are manufactured, distributed, or dispensed. In other words, a physician-researcher cannot use the same registration to dispense CS to human subjects at a clinic and to procure CS for use in animal research in a laboratory.

Initial Registration

Forms and instructions for registration are available on the [DEA website](#). Prior to registering, investigators must first have a protocol which is approved by the appropriate institutional review

committee (e.g. IACUC) and which stipulates the use of a specific CS. PI's that have been approved may then register with the DEA on-line under the business category of "researcher" and use Form 225. Researchers applying for registration for use of Class 1 substances must submit additional information and cannot apply online. Individual registrants will need to provide the following information:

Section 1. Personal/Business Information

For an Individual Registration (Practitioner, Researcher) you are required to provide your Full Name, Address, Social Security Number, and Phone Number. Since you are getting this registration in your capacity as a UVM researcher, please use UVM's federal tax ID number: 03-0179440. Note that the business address provided in this section must be the physical location where the CS are physically stored (generally, a laboratory); a separate mailing address can be entered at the bottom of the page (if, for instance, you wish to use an office address for mailing).

On page two of the personal information section, check the box under "fee exempt applicants only." On page three of this section, you will be asked to enter "fee exempt details." For this section, enter the following: Dr. Richard Galbraith, VP for Research, 656-2918, Richard.galbraith@uvm.edu. Then, check the "agree" box.

Section 2. Activity

This section captures Business Activity and Drug Schedule information. Check ONLY the specific schedule(s) for the drug(s) approved in your IACUC protocol. If you require any Schedule II drugs (e.g. pentobarbital), you will want to check that you DO require order forms. You do not need order forms for ketamine or buprenorphine, which are Schedule III drugs.

Section 3. State License(s)

If you have a medical, veterinary or pharmacy license, enter your license number in the section where a State License number is requested. If you do NOT have a DVM/MD/RPH, enter "000000" for the license number, VT for the state, and the date one year from the application date. Also, if you do NOT have a DVM/MD/RPH license, you do not need to enter anything in the State Controlled Substance Registration block.

Section 4. Background Information

Check the appropriate boxes.

Section 5. Payment

You should not be required to make any payment.

Section 6. Confirmation

Applicants will confirm the entered information, make corrections if needed, and electronically "sign" and submit the application. A submission confirmation will be presented. Applicants will be able to print copies for their records.

Within a day or two of submitting your registration, you will receive a 4-page questionnaire from the DEA. A sample is provided in [Appendix I](#). The sample contains some common responses; however, applicants are responsible for reviewing these responses to verify they are accurate and applicable. Applicants are ultimately responsible to edit the sample responses in order to ensure accuracy.

PLEASE NOTE: The questionnaire contains social security numbers as well as other identifying information. Therefore, failure to maintain the privacy and security of this form could constitute a breach of personal information under either federal or state law, or both. Please make sure that copies of this form are maintained in a secure location and that any loss is reported to the Information Security Officer at iso@uvm.edu.

The DEA questionnaire must be completed and returned to the DEA within 30 days of receipt. In addition, the local Burlington Resident Diversion Investigator may request additional supporting documentation (i.e., a copy of approved IACUC protocols.)

PLEASE NOTE: In order to comply with federal and state privacy and security laws, it is strongly recommended that confidential or protected information be redacted from protocols before sending to the Investigator.

Upon receipt of your DEA registration certificate (which will take 4-6 weeks), notify Dr. Ruth Blauwikel (UVMVET@med.uvm.edu or 656-7881).

Renewals

Research registrations are valid for one year and renewals are made online using Form 225A. The DEA will no longer send its second renewal notification by mail. Instead, an electronic reminder to renew will be sent to the email address associated with the DEA registration. Registrants are individually responsible to ensure their registration remains current and active.

Background Screening

As part of the DEA registration process, every registrant is required to undergo a DEA background check/screening. In addition, anyone listed on the DEA follow-up questionnaire as having access to CS is subject to DEA background check requirements.

Authorized Use

Registrants are responsible for managing controlled substances according to the regulatory requirements covering inventory, record keeping and security provisions. Each registrant must designate and document those individuals that will be given authority to access and use controlled substances. A list of active users shall be maintained by each registrant. This list should include Full Name, UVM Net ID, responsibilities delegated (e.g. purchase, use, dispose), date access granted and date access removed. All individuals with CS access that are involved in RPO approved protocols must complete training as described below.. Registrants should limit the number of individuals granted access to CS to the minimum necessary.

Training

All registrants and any individual who they designate as having authorized access to or use of CS must receive training prior to access. CS training is included in the IACUC training for individuals involved in IACUC protocols. Successful completion of the training quiz is required to document training requirements have been met. Additionally, all registrants should be familiar with this guide and ensure those that they have granted access to CS understand their personal responsibilities as outlined in this guide.

Purchasing Controlled Substances

All controlled substances for use in animals must be USP formulations purchased through approved vendors. The UVM Veterinarian (UVMVET@med.uvm.edu) maintains a list of recommended vendors; if you are having difficulty sourcing a product, or wish to propose a new vendor for this list, please contact Dr. Blauwikel.

Purchasing records must contain:

- _ The name, address, and DEA number of the company from which the controlled substance was purchased
- _ The name of the controlled substance purchased
- _ The size and strength of the controlled substance purchased
- _ The amount purchased (which should match the amount received)
- _ The purchasing record (invoice, shipping document, or packing slip) must be annotated with the handwritten date of receipt and when logged into drug usage log.

Recommended vendors are listed below. The quantity of CS purchased should not exceed the intended use.

I. Midwest Veterinary Supply (ketamine, euthanasia products)

5374 Maly Road

Sun Prairie, Wisconsin 53590

1-800-643-9378

DEA Reg. # RM0178675

Ketamine, 10 ml vials, 100 mg/ml

Euthanasia solutions, pentobarbital 390 mg/ml

Fentanyl for injection, 50 ml vials, 50 mcg/ml

Buprenorphine for injection 1 ml vials, 0.3 mg/ml

II. Diamondback Pharmacy (compounded pentobarbital)

7631 E. Indian School Rd.

Scottsdale, Arizona **85251**

1-866-578-4420

DEA Reg. #RD0476576

Pentobarbital for injection (compounded), 10 ml vials, 50 mg/ml

For compounded drugs,

III. PENRO Specialty Compounding

987 Main Street (mail: P.O. Box 930)

Colchester, VT 05446

Ph. 802-879-1100

DEA Reg. # BP6122953

Additional requirements for purchases of Level I or II CS

- DEA Form 222 must be completed to purchase CS levels I or II
- If anyone except the registrant is going to order level I or II CS, the registrant must first grant power of attorney to that individual providing authority to order these levels of CS.

Storage and Safeguarding Access

Controlled substances must be stored in a double locked cabinet that is fixed in place and not moveable. Controlled substances should not be located near a glass panel where they can be visible from the outside. The key to the drug cabinet must be kept in a secure key safe or a locked drawer. Developing a key accountability standard operating procedure is strongly recommended. When possible, only authorized personnel should be allowed in the laboratory where controlled substances are used or stored.

Inventories, Usage Logs and Record Keeping

Every registrant shall maintain usage records and inventories and shall file reports as required by 21 CFR 1304.03.

Usage Logs

Registrants are required to maintain a usage log of controlled substances at each physical location of CS that can be reconciled to both purchasing and inventory records. The log must contain:

- _ Date
- _ Protocol or project #
- _ Animal ID #
- _ Amount used
- _ Reporter's name
- _ Remaining drug balance in inventory

A link to a sample drug usage log sheet is included as [Appendix II](#).

Inventories

See [Appendix III](#) for a sample inventory form.

The DEA requires that each licensed researcher and their authorized agent inventory the controlled substances under their possession as detailed at 21 CFR 1304.11. This section requires a physical inventory of controlled substances to be completed on the date the registrant first engages in business with controlled substance(s) (initial inventory), then at a minimum of every two years thereafter (biennial inventory). In addition, an inventory must be taken on the effective date that the substance you are using becomes controlled by DEA (newly controlled substances inventory) .

A separate inventory must be performed at each registered location. While the DEA inventory is mandatory, in order to ensure accurate records, a more frequent inventory is strongly recommended, i.e. at least annually. Each registered researcher is responsible for his/her own periodic inventory.

The DEA **required** biennial inventory will:

- 1) consist of a hands-on counting of inventory and not a database check
- 2) be completed in a single business day, i.e., either the before the opening or after the close of business
- 3) completed by at least two authorized personnel (licensed researcher and authorized agent or authorized lab personnel).

The recommended more frequent inventory should include the same elements listed above.

Recordkeeping

Inventory records **must be kept** at least two years after the final disposition of the controlled substance. All records and logs must be readily available for periodic review by the DEA.

Registrants are also required to maintain registration, authorized user, and purchasing documentation as described by this guide.

Disposal

To minimize waste, DEA registrants should only purchase quantities they intend to use. Damaged, expired, unwanted, unusable, or non-returnable CS must be accounted for, retained, and disposed of in accordance with applicable regulations.

Registrants must dispose of controlled substance by:

- Using an approved onsite method of destruction that has been sanctioned by the UVM Veterinarian (such as injecting into an animal carcass), or
- Work with the Environmental Safety Facility to arrange a scheduled pick-up and disposal by UVM's approved vendor. Contact Safety@uvm.edu to arrange a pick-up.

Theft or Loss

Any suspected theft, loss or diversion must be immediately reported to [the](#) DEA using on-line form 106. [Click here](#) for the DEA form 106 on-line. Also, suspected theft, loss or diversion must be reported to the Office of Compliance Services at (802) 656-3086 or at compliance@uvm.edu.

Federal regulations require that registrants notify in writing the DEA Field Division Office in their area of the theft, significant loss or diversion of any controlled substance within one business day of discovery of such loss or theft. The registrant shall also complete and submit to the Field Division Office in their area, [DEA Form 106](#), "Report of Theft or Loss of Controlled Substances" regarding the theft or loss. ([21 C.F.R. § 1301.76\(b\)](#)). Current field office contact information is available [here](#).

Spills

Breakage, spills, or other witnessed controlled substance losses do not need to be reported as lost. This type of loss must be documented by the registrant and witness on the inventory record. Controlled substances that can be recovered after a spill, but cannot be used because of contamination (tablets), must be disposed of in accordance with disposal procedures.

Inspections

IACUC Inspections:

The IACUC monitors CS use every six months as part of their semi-annual inspections. Representatives of the IACUC will review CS documentation, storage areas, and security controls.

DEA Inspections:

The DEA makes periodic **unannounced** inspections of registered controlled substance storage locations. Additionally, reporting of a loss or theft may result in a DEA inspection or visit. The DEA is a law enforcement agency, with the ability to assess civil and criminal penalties.

If a DEA Inspector makes contact regarding an inspection or visit, immediately notify the UVM Veterinarian at (802)-656-0459 or [http://Ruth.Blauwikel@uvm.edu](mailto:Ruth.Blauwikel@uvm.edu). If the UVM Veterinarian is not available, contact the Office of Compliance Services at Compliance@uvm.edu, (802) 656-3086 or the Office of General Counsel at (802) 656-8585.

If an inspector arrives unannounced, ask to see their credentials and photo identification, obtain their contact information and any information about the reason and purpose of their visit, then contact the aforementioned offices. Refer to the [Government Reviews University Operating Procedure](#) for additional guidance. Be courteous, but ask the inspector to wait in a comfortable location. Do not produce any documents or allow a site inspection until a University representative from the VP Research, Compliance or General Counsel can advise and/or accompany you.

How to Prepare for an Inspection

The best way to prepare for an inspection is to maintain current, accurate and readily retrievable record keeping including, registration certification, purchasing documentation, usage logs, inventories, and authorized use documentation. It is also important that we are able to demonstrate physical security controls and compliance with lab safety policies at all times. Registrants should ensure that any inventory discrepancies are adequately supported.

Appendix I

RESEARCHER

Applicant/Business: Investigator's Name, University of Vermont

Address: Physical storage location of CS (generally a lab)

City/State: Burlington, VT

Telephone #: 802-656-XXXX

Return to: XXXXXXXXXXX XXXXXXXX Fax # (999)555-1212 Telephone # (999)555-1212

PLEASE USE ADDITIONAL SPACE IF NEEDED FOR QUESTIONS

1. What type of controlled substances will you be handling? Supply a list of controlled substances.
2. What quantities will you be handling? (List quantity per year per drug)
3. What is your state controlled substances registration number? Supply a copy of this certificate.

Do you have any other DEA registrations?

If so, list numbers and type of business for which you are registered.

4. What type of testing/research will you be conducting? Brief but inclusive description.
5. Who will be responsible for over-all security of controlled substances?
Name/Title, Home address, DOB and SSN.

6. What will be the procedures for handling the C/S?

Ordering:

Receiving:

Storing: *The drugs will be stored in a locked drug box.*

Utilizing: *All drug bottles will be weighed before first use and then weighed every time an aliquot is taken from the bottle. The weights will be noted in a log book and the notes will be stored. The drugs will be used for injection to laboratory animals.*

7. What security measures will be employed to keep the controlled substances secure?

The drugs will be stored in a locked drug box with two unique locks. The keys in turn will be stored in a key box with a combination lock. The key box is located in a different locked room than the drug box. Only members of Dr. XYZ's lab, named on this form, will have access to the keys.

8. Who will be handling the C/S? (List anyone who has key access to the controlled substances) Utilize form on next page.

APPLICANT'S NAME:	
TITLE:	
HOME ADDRESS:	
DATE OF BIRTH:	
SOCIAL SECURITY #:	
DEA #:	

NAME:	
TITLE:	
HOME ADDRESS:	
DATE OF BIRTH:	
SOCIAL SECURITY #:	
DEA #:	

APPLICANT'S NAME:	
TITLE:	
HOME ADDRESS:	
DATE OF BIRTH:	
SOCIAL SECURITY #:	

NAME:	
TITLE:	
HOME ADDRESS:	
DATE OF BIRTH:	
SOCIAL SECURITY #:	

DEA #:

APPLICANT'S NAME:

TITLE:

HOME ADDRESS:

DATE OF BIRTH:

SOCIAL SECURITY #:

DEA #:

DEA #:

NAME:

TITLE:

HOME ADDRESS:

DATE OF BIRTH:

SOCIAL SECURITY #:

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APPLICANT'S NAME:

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HOME ADDRESS:

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SOCIAL SECURITY #:

DEA #:

APPLICANT'S NAME:

TITLE:

HOME ADDRESS:

DATE OF BIRTH:

SOCIAL SECURITY #:

DEA #:

NAME:

TITLE:

HOME ADDRESS:

DATE OF BIRTH:

SOCIAL SECURITY #:

DEA #:

9. What type of safe, cabinet, locker, or drawer will you be keeping the C/S in?

The drugs will be stored in a locked drug box. The box is made of steel, has two doors, one behind the other each equipped with a unique lock. The keys in turn will be stored in a key box with a combination lock. The key box is located in a different locked room than the drug box.

10. What are the dimensions of the safe, cabinet locker, or drawer? (L X H X W)

10"×14.5"×5" (note to investigators: this is the most common drug safe that I see in labs – you should check that this describes your drug cabinet)

11. What is the safe, cabinet, locker or drawer constructed of? (i.e. steel, aluminum, wood, plastic) *Steel*

12. How much does it weigh? *Approximately 3 kg*

13. Is it bolted permanently to a wall or the floor? *Permanently bolted to the wall.*

14. Is the safe, locker, or cabinet in a locked office? Please provide a picture of the safe, locker, or cabinet.

15. What is the exact location of the controlled substances (i.e. room number, name of the building, floor) **NOTE: A photograph of the secure storage device is required. Include with response to this survey.**

16. How will you obtain the Controlled Substances? (Who do you order from?)
Name/Address/DEA #

17. Who is responsible for record-keeping? (i.e. Ordering, taking initial inventory and biennial inventory of controlled substances.)

NAME:	
TITLE:	
HOME ADDRESS:	
DATE OF BIRTH:	
SOCIAL SECURITY #:	
DEA #:	

NAME:	
TITLE:	
HOME ADDRESS:	
DATE OF BIRTH:	
SOCIAL SECURITY #:	
DEA #:	

NAME:	
TITLE:	
HOME ADDRESS:	
DATE OF BIRTH:	
SOCIAL SECURITY #:	
DEA #:	

NAME:	
TITLE:	
HOME ADDRESS:	
DATE OF BIRTH:	
SOCIAL SECURITY #:	
DEA #:	

For discussion: (Investigator will discuss the following with individuals in charge of security and record-keeping)

___Recordkeeping. Bound log book, kept with controlled substances.

___Power of Attorney. NOTE: If anyone except the applicant who signed the DEA Form 225 Application is going to order controlled substances, a power of attorney is required granting that individual authority to order controlled substances.

___Are you going to keep a perpetual inventory?

___Initial Inventory. To be done at the time you receive your DEA Registration, even if the quantity is zero.

___Biennial Inventory. Physical inventory conducted every two (2) years after initial inventory.

___Maintenance of records. Records must be maintained and readily retrievable for two years prior. A physical inventory of all controlled substances must be done biennially from the date you receive your DEA Registration.

___Theft or significant losses. All thefts and any significant losses must be reported to DEA immediately upon discovery utilizing a DEA Form 106. Inform police immediately.

___Do you require DEA Form 222 Order Forms? (required to order Schedule II CS's only)

Appendix II

Controlled Substance Usage Log

Lab Name/Location: _____

Controlled Substance (Drug Name): _____

Log Number	Generic Name	Drug Trade Name		Controlled Substance Class	
	<i>Drug XX</i>	<i>Drug Trade Name</i>		<i>C-??</i>	
<i>Drug Size</i>	<i>Drug Concentration</i>	<i>Expiration Date</i>	<i>Lot Number</i>	<i>Drug Received Order Number</i>	
<i>?? ml</i>	<i>?? mg/ml</i>				
<i>DEA#</i>	<i>Contact Person</i>	<i>Phone Number</i>	<i>Dispensed Location</i>	<i>Room</i>	<i>Amount Received (mg)</i>
	<i>Bob Smith</i>	<i>802-656-YYYY</i>			
<i>Date Administered</i>	<i>Investigator (Name or ID)</i>	<i>Protocol #</i>	<i>Amount retrieved</i>	<i>Balance (mg)</i>	<i>Signature</i>

Appendix III

Controlled Substance Inventory Form

The DEA requires a physical inventory of all controlled substances to be conducted once every two years (bi-ennially) for each registered location. The inventory may be taken on any date within two years of the previous inventory date. The inventory Form must be kept at least for an additional two years at the registered site after completion.

This form may be used for the Initial, Bi-ennial or periodic self-inventory¹.

	Opening of Business:_____Close of Business:_____
Registrant:	
Registrant Address:	
DEA Registration #:	

Reference: 21 CFR 1304.04 & 21 CFR 1304.11 Inventory Requirements

Controlled Substance Name	DEA Schedule ^{2, 3}	Strength/Dosage form (e.g. 10 mg tablet, W10 mg concentration per ml etc...)	# of units or volume of each finished form per Container (e.g. 100 tab bottle or 3 ml vial)	#of containers (e.g. four 100 tab bottles or six 3 ml vials)

	Name	Signature	Date
Inventory performed			
Inventory witnessed			

¹ The bi-ennial DEA inventory will review purchasing records. It is strongly recommended that PI's also match usage log to purchasing records during any periodic self-inventory.

² If the container has been opened and the substance is listed in Schedule I or II, make an exact count or measure of the contents. If the substance is listed in Schedule III, IV or V, make an estimated count or measure of the contents, unless the container holds more than 1,000 tablets or capsules in which case make an exact count of the contents (CFR 1304.11(e)(3)).

³ Inventories of Schedule I and II controlled substances must be maintained separately from all other controlled substances inventory records. ([CFR 1304.04\(g\)](#)).

Please note: Controlled substances awaiting disposal must be included in your inventory as long as they remain in your possession. The reason for the substance being maintained by the registrant and whether such substance is capable of use in the manufacture of any controlled substance in finished form should be documented in the inventory.

Page ____ of ____