UW-Madison School of Veterinary Medicine Risk Management Policy for Pregnant, Temporarily Disabled, Temporarily Seriously Ill Students

Policy:

The curriculum pertaining to the degree of Doctor of Veterinary Medicine is mentally and physically rigorous. Veterinary medical students are potentially exposed to materials and incidents that may result in human injury. Traumatic accidents can occur while working with animal patients and are an inherent risk of the veterinary medical profession. In addition, the curriculum requires several courses that may involve exposure to animals and/or substances and/or agents that are potentially hazardous (see Attachment A). The potential for injury may be increased when a student is pregnant, temporarily disabled, and/or is temporarily seriously ill.

It is the policy of the SVM to reasonably accommodate all students regardless of disabilities to the extent possible in clinical rotations, classes and laboratory exercises, consistent with federal and state law and University of Wisconsin policies, unless their presence constitutes an unreasonable risk to the health and well-being of the student’s classmates, faculty, staff, or clients and patients of the SVM, as determined by the faculty coordinator of the educational exercise in question in consultation with the Associate Deans for Academic Affairs and Clinical Affairs. (Note that although a healthy pregnancy is not considered a disability that is legally subject to accommodation, the SVM will provide reasonable accommodation for this condition as outlined below.) The following information outlines the specific policy details for students who are pregnant, temporarily disabled, and/or temporarily seriously ill.

Procedure:

In order to receive consideration for accommodation, the affected student (pregnant, temporarily disabled, temporarily seriously ill) is required to:

1. Inform his or her health care provider of curriculum requirements, scheduled laboratory assignments, and/or clinical rotations, obtain health care provider’s recommendations to minimize exposure to the hazards associated with a veterinary medical student’s assignments, and work with his or her health care provider to develop a plan that is most appropriate for the student's specific condition for the prevention of zoonotic infections and other potentially hazardous exposures. (Attachment A lists some potential hazards that the student’s health care provider may find useful; the student is also encouraged to contact the faculty coordinators of specific rotations for additional potential hazard information and the Associate Dean for Academic Affairs for additional curriculum information to provide to his or her health care provider.)

2. Provide the Associate Dean for Academic Affairs a signed statement from the health care provider that defines permitted/unpermitted potential hazard exposures during the pregnancy or period of temporary disability/serious illness if the student chooses either option 1 or 2 below.

3. Inform the Associate Dean for Academic Affairs of the pregnancy or temporary disability/serious illness as early as possible so that steps may be taken to conform to this policy, review and implement available options under this policy, and, if applicable, the plan developed by the health care provider. The Office of Academic Affairs staff will assist the student in their implementation of the chosen option with the faculty and staff at SVM.
Available Options:

The affected student will choose one of the following options to pursue:

1. Continue as a student with no change in schedule or activities.
   a. This option may include anticipated or unanticipated risks to the student’s health. The student acknowledges that possible hazards exist and assumes any and all risks involved.
   - Given the potentially heightened risk of physical injury and/or contracting a zoonotic disease during rotations in the large animal hospital, students in the third trimester of pregnancy and students with health issues resulting in immune compromise are strongly encouraged to reschedule Large Animal Medicine, Large Animal Surgery and Theriogenology clinical rotations to other times relative to their pregnancy or immune compromise.

2. Continue as a student with appropriate schedule and assignment changes to minimize potential exposures as outlined by the student’s health care provider. This option depends on:
   a. Whether changes can reasonably be made in the affected student’s schedule of classroom, laboratory and/or clinical rotation assignments, which may also include whether classmates are willing to exchange scheduled assignments with the affected student.
   - Note that modifications to the scheduling of academic course work in the 1st, 2nd, and 3rd years of the program may not be possible.
   b. Obtaining a signed statement from an attending health care provider identifying any restrictions on the individual’s physical ability to continue participation in any aspects of the degree program.
   c. This option may include anticipated or unanticipated risks to the student’s health. The student acknowledges that possible hazards exist and assumes any and all risks involved. The student also understands that this option may delay the time of graduation and hence delay the ability to obtain a license to practice veterinary medicine.

3. Withdraw as a student from the DVM program: If scheduling and assignment changes cannot be made or do not meet the student’s or student’s health care provider’s perceived needs, the affected student may withdraw and request of the SVM Educational Policy Committee (EPC) for readmission within 1 year of withdrawal. The request and granting of readmission must follow the policies and procedures established by the SVM EPC which, among other things, stipulate that the student to be in good standing at the time of the request and that re-admittance is contingent on the availability of adequate space in a subsequent SVM class. A decision on the latter will typically not be able to be made until mid-summer of the year in which a student would wish to return to the program. The lock-step nature of SVM courses may require the student to withdraw for one full year even if their illness/condition would not require this period away from the SVM program.
   a. The withdrawal option minimizes risks and reduces concern regarding health and safety, but has obvious impacts on the completion of the DVM degree.
**Rights and Responsibilities:**

1. The pregnant or temporarily disabled/seriously ill student has rights and responsibilities for making their own decisions concerning his or her condition. No one acting on behalf of the SVM may discriminate against a student on the basis of pregnancy or disability. The student should expect due consideration from everyone associated with the School as regards the student’s pregnancy or disability, whatever the student’s decision may be. If a student decides that they are unable to complete a rotation because of pregnancy or illness associated issues, they may be given a grade of “incomplete”; students may not be given an unsatisfactory grade (D or F) solely because of lack of completion of rotation activities because of medical issues/pregnancy.

2. No matter which option is chosen, the affected student is expected to complete each and every requirement of the veterinary medical curriculum by a schedule or plan that can reasonably be accommodated by the School of Veterinary Medicine and under which risks are deemed acceptable by the student and his or her health care provider and otherwise assumed by the student.

3. The pregnant or temporarily disabled/seriously ill student has primary responsibility for self-protection during animal contact using adequate personal hygiene and personal protective equipment where appropriate.

4. All other rules and requirements of the University of Wisconsin-Madison School of Veterinary Medicine Academic Standards and Associated Procedures for the Doctor of Veterinary Medicine Degree Program remain in effect.

Approved (with Appendix A) by SVM faculty vote, September 22, 2010; URLs updated July 24, 2012
Appendix A: Examples of Potential Occupational Risks for DVM Program Students, with Emphasis on Pregnant Women or Students Who Are Temporarily Disabled/Temporarily Seriously Ill
(Modified from the AVMA Policy located at http://www.avma.org/issues/policy/pregnant_workers.asp)

Veterinarians and veterinary medical students are potentially exposed to materials and incidents that may result in human injury.

Although scientific data concerning the reproductive health effects of many occupational exposures is limited, the goal of creating a safe environment for pregnant students can be facilitated by awareness of inherent risks and then adopting procedures to minimize risk exposure.

- Traumatic accidents can occur while working with animal patients and are an inherent risk of the veterinary medical profession. Students should always be appropriately cautious so as to minimize the potential for traumatic injuries.
- The key to a safe working environment is communication, planning ahead, and education on how to use protective equipment properly, and avoid unnecessary risks.
- Veterinary medical activities may involve exposure to substances that are potentially hazardous and/or disease agents that are infectious for human beings (zoonotic diseases) - see below.

Areas requiring special attention to risk reduction include:
- Radiological
  X-ray exposure presents a significant risk to the pregnant student. Ideally, all exposure should be avoided and this should be the goal in all cases. If this is not possible, the pregnant student must, as all students should, wear appropriate shielding protection, wear a monitoring badge, take all available precautions to reduce exposure, and the ALARA principle must be followed. ALARA stands for As Low As Reasonably Achievable. This is a radiation safety principle for minimizing radiation doses and releases of radioactive materials by employing all reasonable methods. ALARA is not only a safety principle, but is a regulatory requirement for all radiation safety programs. The three (3) major principles to assist with maintaining doses ALARA are:
  1) TIME – minimizing the time of exposure directly reduces radiation dose.
  2) DISTANCE – doubling the distance between your body and the radiation source will divide the radiation exposure by a factor of 4.
  3) SHIELDING - using absorber materials such as Plexiglas for beta particles and lead for X-rays and gamma rays is an effective way to reduce radiation exposure. Pregnant students should never, under any circumstances, hold film cassettes in place during radiographic procedures. The maximum dose limit to the fetus during gestation is 5 millisievert and the most sensitive period of gestation for potential radiation-induced effects to the fetus is during the 8th – 15th weeks of pregnancy. Therefore pregnant workers should not exceed ~ 0.55 millisievert exposures during any one month. This compares to the annual maximum whole body dose limit to the radiation worker of 50 millisievert. Additional information regarding radiation and pregnancy can be found at the UW Office of Radiation Safety website at http://www.ehs.wisc.edu/ehs-radiation-dosimetry.htm.
• Biological/Zoonotic diseases

Zoonotic diseases (zoonoses) are those caused by infectious agents that are transmissible (directly through contact with animals; via contaminated food or water; or, indirectly via intermediate insect vectors) between animals and human beings. Veterinarians, veterinary medical students, abattoir workers, farm workers, laboratory staff, and others can be at increased risk for certain zoonotic diseases. Brief summaries of some of the more common/important zoonoses are provided below. For more information on these and other zoonoses, see:

- [http://www.cdc.gov/HealthyPets/browse_by_diseases.htm](http://www.cdc.gov/HealthyPets/browse_by_diseases.htm)

1. **Cryptosporidiosis** – is caused by a protozoan parasite that is most commonly found in the intestinal tracts of a number of domestic and wild animal species. It is passed in the feces of both clinical ill and apparently healthy animals, and is acquired by human beings via ingestion. The organism is extremely resistant to inactivation in the environment, and thus can be inadvertently transmitted via any fecal contamination.

   **Clinical presentation in human beings:** gastrointestinal illness (diarrhea, nausea, abdominal pain)

2. **Other gastrointestinal infections** – may involve bacteria such as *Salmonella*, *Campylobacter*, *Yersinia* and others, and the protozoan organism *Giardia intestinalis*. Like Cryptosporidium, these organisms are shed in the feces of both clinically ill and apparently healthy animals, and are acquired by inadvertent ingestion of feces or fecal-contaminated foods or water.

   **Clinical presentation in human beings:** gastrointestinal illness (diarrhea, nausea, abdominal pain)

3. **Larva migrans** – are a group of diseases in which intermediate larval forms of gastrointestinal parasites of animals migrate through tissues in the human body, either following direct penetration of the skin (cutaneous larva migrans [CLM] due to hookworm infections) or ingestion (visceral larva migrans [VLM] due to roundworm infections).

   **Clinical presentation in human beings:** The larva migrans range from self-limiting, red, circuitous, raised skin lesions (CLM) to fever, wheezing, and a wide range of systemic disease manifestations (VLM).

4. **Rabies** – is caused by infection with one of a variety of strains of rabies viruses. Rabies is endemic in wild animals in Wisconsin, and in both domestic and wild animals in other areas of the world; thus, **pre-exposure rabies vaccination is very strongly recommended** for all veterinary medical students. Rabies immunization is typically achieved by administration of a series of 3 vaccine injections. You can potentially be exposed to rabid animals both in the Veterinary Medical Teaching Hospital (VMTH), as well as while working in externship settings.

   **Clinical presentation in human beings:** neurological disease (weakness, paralysis, seizures, coma – Immediate post-exposure treatment should be pursued in all known or potential rabies virus exposures. Treatment to prevent death *after* the onset of clinical disease has only been successful in one known case to-date, thus prevention through prophylactic immunization is key!)
5. **Tetanus** – is caused by wound (particular deep puncture wounds) contamination with the bacterium *Clostridium tetani*. This bacterium produces a neurotoxin. Maintaining up-to-date tetanus immunization is highly recommended for veterinary medical students.

Clinical presentation in human beings: neurologic disease (spastic paralysis)

6. **Cat scratch disease/bartonellosis** – is caused by infection with the bacterium *Bartonella henselae* (or other related *Bartonella* species).

Clinical presentation in human beings: This infection is most often a mild, self-limiting disease consisting of a poorly healing cat scratch (less commonly a bite), possibly surrounded by a series of papules, and subsequent swelling of the lymph node(s) draining the site of the wound. In immunocompromised people, much more serious, systemic infections can occur.

7. **Toxoplasmosis** – is caused by infection with the protozoan parasite *Toxoplasma gondii*. This organism is of most concern to pregnant women who have never been exposed in the past (past infection prior to pregnancy confers immunity that prevents fetal infection) and immunocompromised individuals. In otherwise healthy people, the infection is almost always subclinical. Although cats are important in the life cycle of this organism, they shed infectious oocysts of *Toxoplasma* in their feces for only 10-14 days in their lifetimes; thus, acquisition of oocysts in the soil or ingestion of undercooked meats are much greater risk factors for human infection than direct exposure to cats.

Clinical presentation in human beings: congenital defects, fetal death; blindness; systemic disease involving the brain, heart and other organs in immunocompromised hosts.

8. **Leptospirosis** – is caused by infection with *Leptospira* bacteria. These bacteria are excreted in the urine of both clinically ill and apparently healthy carrier animals, including dogs, cattle, pigs, and a wide variety of wild animal species. Human exposure may occur through direct exposure to contaminated urine or through water contaminated with animal urine. Infection occurs when the bacteria invade across mucous membranes of the mouth or eyes. Clinical presentation in human beings: Two clinical forms of leptospirosis occur in human beings, a mild, flu-like illness (most common) and a more severe (less common) infection targeting the liver and/or kidneys, leading potentially to liver or kidney failure.

9. **Brucellosis** – is caused by infection with bacteria of the genus *Brucella*. *Brucella* are shed by a variety of domestic and wild animals, but of most significance to veterinary medical students are cattle, pigs, sheep, goats, and dogs. The bacteria are shed in genital tract secretions and acquired by humans through contamination of breaks in the skin or mucous membranes, or via ingestion. (*Brucella* in milk was historically a major concern prior to routine pasteurization.)

Clinical presentation in human beings: brucellosis occurs as a systemic disease with recurrent fever, weakness, arthritis and debilitation.

- An additional, important risk factor for exposure of veterinarians and veterinary medical students is inadvertent injecting oneself with live *Brucella* vaccines used in animals. If this happens to you, tell your supervising veterinarian immediately so that they can arrange for appropriate post-exposure treatment. However, increasingly less vaccine is used in the U.S. as brucellosis has been controlled through a federal/state cooperative regulatory program.
10. **Q fever** – is caused by infection with *Coxiella burnetti*. Similar to *Brucella*, this organism is shed in genital tract secretions and post-partum tissues, sometimes in extremely high numbers, and it is highly infectious for human beings via inhalation. The animal of greatest risk for *Coxiella* exposure is sheep, but human infections have also occurred via exposure to parturient cattle, dogs and cats. **Clinical presentation in human beings:** Q fever occurs as a systemic disease with recurrent fever, respiratory symptoms and, in severe cases, endocarditis and/or involvement of other internal organs.

11. **Tuberculosis** – is caused by infection with bacteria of the genus *Mycobacterium*. Tuberculosis caused by *M. tuberculosis* is spread from person-to-person and is estimated to infect nearly 1/3 of the human population. The zoonotic forms of tuberculosis are caused by human infections with *M. bovis* (especially through contact with cattle; less commonly pigs, sheep, goats), and *M. avium* (which is typically acquired from environmental sources rather then directly form birds). Like brucellosis, zoonotic tuberculosis is almost completely gone from the U.S. because of a cooperative federal/state control program. **Clinical presentation in human beings:** Tuberculosis is characterized by chronic fever, respiratory symptoms, and weight loss, with the potential for disease related to a variety of internal organs.

12. **Anthrax** – is caused by infection with the bacterium *Bacillus anthracis*. This bacterium produces spores that persist in the environment for decades. Thus, infected animals today are most commonly found in specific geographic areas of the world (including the northern Midwestern states of Minnesota and North and South Dakota) where animals have died in the past and contaminated the soils with anthrax spores. Vaccination of livestock is practiced in these endemic regions. **Clinical presentation in human beings:** Anthrax can present as a cutaneous infection, or as a highly fatal, hemorrhagic, systemic disease.

13. **Lyme Disease/Lyme Borreliosis** is caused by infection with the bacterium *Borrelia burgdorferi*, which is transmitted to human beings through the bite of *Ixodes* ticks (“deer ticks”). **Clinical presentation in human beings:** Early or localized disease is characterized by the formation of ring-like, red, centrifugally expanding skin lesions, possibly accompanied by fever, chills, headache, stiff neck, and joint and/or muscle pain. Chronic forms of infection can involve joints, peripheral nerves, brain, heart and possibly other tissues. - Additional zoonoses transmitted by ticks and clinically similar in some ways to Lyme disease include ehrlichiosis and Rocky Mountain spotted fever.

14. **Equine encephalitides and West Nile fever/encephalitis** – are caused by infection with viruses transmitted by mosquito bites. Eastern equine encephalitis and West Nile infections can both occur in Wisconsin (less commonly Western equine encephalitis). Although horses may also be infected and clinically affected, direct exposure to horses does not constitute a risk for human exposure. Infection occurs only via the bite of an intermediate insect host. **Clinical presentation in human beings:** fever, lethargy, body aches, neurological disease
15. **Herpes B virus encephalitis** – is caused by infection with *Herpesvirus simiae*. Infection occurs via mucosal exposure to respiratory secretions of infected non-human primates, especially macaques. Importantly, infected primates may show no signs of illness themselves. For those working with primates, you will receive detailed, specific instructions on the use of personal protective equipment to prevent exposure.

**Clinical presentation in human beings:** neurological disease (with the potential for high fatality rates)

- **Chemical**
  1. Care should always be used when handling any pesticide, hormone or chemotherapeutic agent. Read and understand the warnings on the label and package circular. Pregnant students should not apply pesticides or administer chemotherapy.
  2. Exposure to high levels of formaldehyde, anesthetic gases and other volatile chemicals such as xylene and benzene derivatives by pregnant students may increase the incidence of miscarriages and congenital abnormalities in newborns. Ideally, pregnant students should protect themselves from exposure to these substances through either use of a protective face mask, protective clothing (e.g. gloves) or avoidance of any situation in which these substances are present (e.g. gas anesthesia not being effectively scavenged). Special attention should be paid to the maintenance of anesthetic machines to assure leak free operation and use of efficient scavenger systems used to remove waste gases. The Office of Academic Affairs (Student Services Coordinator) can assist students in arranging fit testing for chemical exposure reduction masks through the UW-Madison Environment, Health and Safety office. The OAA can also assist students in ordering the appropriate mask after fit testing is completed. (The purchase cost remains the student’s responsibility.)
  3. A Material Safety Data Sheets (MSDS) manual should be readily available for reference by all students. Additional information on MSDS can be found on the Occupational Safety and Health Administration (OSHA) Web site at [www.osha.gov](http://www.osha.gov), and additional chemical safety information can be found on the UW-Madison Environment, Health and Safety website at: [http://www.ehs.wisc.edu/chemsafety.htm](http://www.ehs.wisc.edu/chemsafety.htm).