

Environmental Health and Safety Office

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INTERNAL X-RAY PERMIT -FAQ

June 25, 2018 VERSION

Internal X-ray Permits are intended to expire every 5 years (Although we have used shorter periods to facilitate updating the conditions when we know the program is facing a major change.)

One application is intended for all areas controlled by Permit Holder, therefore; multiple rooms for storage or use; and multiple X-ray Equipment (list all whether in storage or use) should be included on one application.

The procedures and processes related to the use of X-ray Equipment at the University are described in the <u>Radiation Safety Manual</u>- specific sections will be highlighted below.

Please note that there is no intention, at this time to create an Internal X-ray Permit for X-ray facilities within the Faculty of Dentistry that are being used to provide patient care or educate Dentistry students.

Frequently Asked Questions (FAQ)

Why do I need a permit? Since 2011, all X-ray systems used for research at the University require to be listed on an Internal X-ray Permit. The primary goal of the Internal X-ray Permit is to clarify accountability without unduly hampering research. The Internal X-ray Permit will ensure:

- The persons operated X-ray for purposes of research have an appropriate level of radiation safety training.
- The persons that own, or operate are aware and accountable for complying with regulatory and University specific safety requirements.
- The University provides an appropriate technical resource within the Environmental Health and Safety Office to create generic X-ray safety training and provide advice to researchers and ancillary staff.

Do I need a permit when operating electron microscope?

No.

Do I need a permit to store X-ray equipment?

If you currently do not use the X-ray equipment and do not intend to use it within a year, you do not need a permit.

However, you do need to apply if you are currently using X-ray equipment AND have another in storage, and you have to list all of them on the permit application.

What is a Research X-ray Equipment? Research X-ray equipment, for the purposes of this program, shall refer to X-ray equipment that is not used to provide medical or dental care on human subjects, that includes:

Any X-ray equipment that is not used on humans subjects or

 Any X-ray equipment when used to irradiate human subjects under a research study protocol.

Who is the Permit Holder?

The Permit Holder or Responsible User is the person who applies for an Internal X-ray Permit. The responsibility of compliance rests solely with the Permit Holder under whose direction the X-ray equipment are purchased, stored, used and discarded. See RSP-2, Section 6 in the Radiation Safety Manual.

Who is a Designated Worker?

All persons listed on an Internal X-ray Permit as Designated Workers are approved to use research X-ray equipment limited to the conditions specified on the permit and in the manual. See <u>RSP-2</u>, Section 6 in the Radiation Safety Manual for specific responsibilities. Training requirements are outlined in <u>RSP-5</u>, Section 9. The Permit Holder does not need to be a Designated Worker.

Does everybody who uses the X-ray equipment have to be a designated worker?

Students and staff, working with the interlocked or embedded X-ray equipment, under the supervision of a Designated Worker do not have to be listed as Designated Workers.

Is there any mandatory training for Designated Workers?

Yes! All Designated Workers have to complete generic X-ray Safety training available on the EHS website - provided by the EHS.

The Permit Holder must ensure that every Designated Worker is trained in radiation protection techniques specific to each piece of X-ray equipment.

Additionally, Designated Workers using DEXA (or DXA) to irradiate human subjects must have the designation as either: Certified Densitometry Technologist (CDT) or Certified Bone Densitometry Technologist (CBDT).

Can a non-human subject be irradiated using the DEXA equipment? Do I need the same training as if used on human subjects?

It can and the operator does not need the designation as Certified Densitometry Technologist (CDT) or Certified Bone Densitometry Technologist (CBDT).

Who is the Laboratory Radiation Supervisor?

Laboratory Radiation Supervisor (LRS) is a Designated Worker nominated by a Permit Holder to assist the Permit Holder to carry out duties as specified in this manual. The LRS must be a Designated Worker. LRS is noted on the Permit. See RSP-2, Section 6 in the Radiation Safety Manual for specific responsibilities

Do I need to own a 'radiation detection equipment' (Permit application, Section 7) for the X-ray leakage measurements?

No, if you do not have appropriate meter, contact the EHS for assistance. However, EHS maintains an inventory of all Radiation Detection Equipment (RDE), so please list any RDE in your area on the permit application to help us to maintain accurate inventory.

How does Radiation Protection, Cancer Care Manitoba fit in the University of Manitoba X-ray safety program?

Radiation Protection Services is a department of Medical Physics, Cancer Care Manitoba (RP CCMB). They are responsible to the Government of Manitoba, through the Office of the Chief Medical Office of Health to provide leadership on the radiation protection responsibilities that fall within the regulatory jurisdiction of the Province. Services include administration of the Manitoba X-ray Safety Regulation 341/88R, pursuant to the Manitoba Public Health Act. RP CCMB registers and surveys your equipment and issues the Report on Radiation Protection Survey.

If you have any other questions, please contact the Radiation Safety Officer at 204 789-3613 or email radsafety@umanitoba.ca