



Microtome Safety Guidelines

Environmental Health and Radiation Safety

At the University of Toledo, research labs and Pathology often use microtomes to section tissues. These devices pose risks to users during sectioning and cleaning of the instrument. The tissues being sectioned can present an opportunity for the individual to be exposed to infectious disease. All microtomes are made differently, and labs must offer specific training on the exact piece of equipment used in their area. Proper Personal Protective Equipment based on the activity is pertinent in any laboratory procedure. The following are best practices when working with a Microtome.

Placement of the Blade

- Pay special precaution that a microtome blade is extremely sharp and must be handled cautiously.
- Always set the rotary handle of the microtome in the locked position when changing a paraffin block or the blade.
- Place a new blade in the blade holder and clamp it before the rotary wheel lock is released.
- Once the blade is seated and secured the rotary wheel lock can be released and the knife and holder advanced to the specimen block. Remove the blade from the housing if the specimen needs adjusting.

Removal of the Blade

- Disposable blades must always be removed using forceps or a similar instrument and placed directly into a sharps disposal container.
- Do not remove the blade holder from the microtome with a blade present or transport the housing with the blade present.
- If the blades are reusable, cut resistant gloves must be worn when removing the blade for sharpening or cleaning.

Cleaning of the Microtome

- The rotary when must be locked and blade removed from the holder before cleaning. Ensure that the lock is properly engaged.
- Always wear gloves when cleaning the microtome.
- Use a disinfectant that is effective against possible infectious agents. If using 10% bleach, be sure to rinse with water to avoid rusting of equipment.

***If you have any questions on microtome safety,
Please contact Environmental Health and Radiation Safety-419-530-3600**