

# Microtome Safety Precautions and Guidelines

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## SET-UP

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1. Prior to operating the microtome, proper minimum PPE must be worn: safety glasses, lab coat, disposable gloves and cut resistant (Kevlar or stainless steel mesh) gloves if changing blades.
2. Dispose of unwanted blades left behind in the area in an appropriate sharps container. Forceps or a magnetic blade tool must be used to remove blades. **NEVER TOUCH A BLADE WITH YOUR FINGERS.**
3. Gather brushes, forceps, and other appropriate sectioning tools and place them near the microtome.

## OPERATION/SECTIONING

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- ❖ Know the various functions of the buttons and handwheels on your instrument (review with trainer).
1. Set up the tissue block and make sure it is positioned as needed.
  2. Insert the blade into the blade holder
    - a. The blade can be pushed into its final position using a brush stick. **NEVER USE FINGERS TO MANIPULATE BLADE.**
  3. Use the appropriate button to move the blade towards the block. Begin sectioning.
  4. Before any manipulation of the block or blade, such as changing blocks or changing the blade, lock the handwheel, lock the foot pedal (if applicable), lock the knife sledge and guard the blade.
  5. The coarse feed wheel will be used to move the block towards or away from the knife. **NEVER USE FINGERS TO MOVE THE BLADE.**
  6. Position and retrieve tissue sections using brushes or any applicable tools. **NEVER USE FINGERS TO MANIPULATE THE SECTION.**
  7. Review safety features with your microtome trainer. In case of an emergency during sectioning, press the stop emergency button
    - a. Do not continue sectioning until the danger has been resolved.

### CLEAN-UP

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1. Lock wheels and guard and remove the blade from the blade holder
  - a. If applicable, the blade ejector can aid in removing the blade from the holder. Then, use forceps or a magnet (**NEVER FINGERS**) to pick up the blade.
  - b. Blades must be stored in the appropriate blade case, or discarded into a sharps container.
2. Remove the remaining tissue block.
3. Clean the section waste tray with a dry brush.
4. Use appropriate cleaning reagents; make sure no liquids enter the inside of the microtome.
5. Reagents will be disposed as chemical waste, used blades will go into a sharps container and discarded tissues will be processed as biohazardous waste.
6. Never attempt catching a falling blade.
7. Make sure the surrounding area is clean and free of sharp objects.



## Microtome Training Confirmation

New Trainee has read and understood the "Microtome Safety Precautions and Guidelines" document. Please sign below to confirm.

New Trainee Name

Trained by

Date

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New Trainee Signature

Trainer Signature

Date

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