

NDMRB-RA-060

Risk Assessment: Use of the Microtome

Scope

The Leica RM2135 is rotary microtome used to prepare very thin slices of formalin fixed paraffin embedded tissues.

Only trained people are authorised to use the microtome.

Microtome blades are VERY SHARP!

Utmost care must be used when the blade is not in use. Use blade guard.

It is very important not to be distracted when using the microtome because of the risk of injury.

The instructions in the SOP (NDMRB-SOP-033 Use of Microtome) must be read, understood and followed to ensure the safe use of the microtome

For training and guidance in respect of using the microtome then prospective users must consult with Dr Tammie Bishop.

Name of assessor:	Julie Adam	Date of Assessment:	May 2017	Review Date:	Every three years
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Risk Matrix:

Risk Matrix		Likelihood			
		High	Medium	Low	Negligible
Consequence	Severe	High	High	Medium	Effectively Zero
	Moderate	High	Medium	Medium/low	Effectively Zero
	Insignificant	Medium/Low	Low	Low	Effectively Zero
	Negligible	Effectively Zero	Effectively Zero	Effectively Zero	Effectively Zero

Risk Assessment:

Hazard (Cause and consequence)	Affected Groups	Existing controls	Risk	Further Action
Microtome knives and disposable blades are extremely sharp and can inflict serious injuries unless appropriate care is taken when working with them. Accidents often occur when a user is distracted and not concentrating fully.	Staff/students/visitors	Use forceps or brush instead of your fingers to pick up sections or wax fragments from blade or block face. The safety guard can be positioned to cover the whole length of the cutting edge. Users of the microtome must not let themselves become distracted during use.	Medium	Only trained users are allowed to use the microtome
Risk of injury when manipulating blocks on the microtome	Staff/students/visitors	The guard must be in place and the hand wheel lock engaged when a block is being placed into or removed from the cassette clamp, or when any manipulation of the block is being undertaken while the knife or blade is in place.	Medium	None
Risk of injury during cleaning	Staff/students/visitors	The knife or blade should be protected when cleaning the instrument. This is best done by unclamping the blade, then using the blade ejector on the left side of the guard to start moving the blade laterally out of the clamp. It can then be grasped with forceps (<u>not fingers</u>) or picked up with the magnet at the end of the Leica brush and safely removed. Used blades should be disposed of appropriately in a "sharps" container or into the "used blades" slot in the base of the blade dispenser.	Medium	None

Accidental dropping of blades when changing blades or moving blade.	Staff/students/visitors	If you happen to drop a blade, let it fall. On no account try to catch it (a natural reflex action that you must guard against). Never place a knife or blade on the bench or in a box with the cutting edge facing up.	Medium	None
Exposure to untrained members of staff	Staff/students/visitors	The guard must be in place and the hand wheel lock engaged when it is not in use. Under no circumstances should anyone who has not had sufficient training attempt to use the Microtome	Medium	<u>Only trained users are allowed to use the microtome</u>

Signed By Author:

Approved by (sign and print):

Reviewed by:

Review date: