HAZARD ALERT

Subject: Deep laceration caused by microtome blade

Incident Date: 2018

Incident Description
A graduate student was sectioning paraffin-embedded tissue for the first time using a microtome when their hand slipped trying to replace the paraffin block. This caused them to cut their left thumb on the microtome blade. The graduate student had just received on-site training by an experienced worker on the microtome before the incident occurred.

Injuries Received
Lab members in the immediate vicinity quickly administered first aid and accompanied the graduate student to the emergency department where they were assessed by a physician. The graduate student suffered a deep laceration that required stitches and possible plastic surgery.

Immediate and root cause(s):
1. The blade lock was not engaged prior to adjusting or replacing the paraffin block.
2. The blade guard was not in place when the blade was present.
3. Graduate student was not using cut-resistant gloves when removing paraffin block.
4. Cut-resistant gloves were available but were not in the immediate vicinity and readily visible.
5. Standard Operating Procedure for the microtome was not developed with detailed instructions on safe handling and use.

Corrective Actions:
1. Always use blade lock and guards when blade is present.
2. Put cut-resistant gloves in a visible location next to the microtome.
3. Develop, communicate and enforce use of a Standard Operating Procedure for microtomes.
4. Review and document training of lab personnel on Standard Operating Procedure for microtomes.

Continuing Actions:
Standard Operating Procedures on the safe handling and use of all types of microtomes (compressstome microtome, sledge microtome, rotary microtome, cryomicrotome, ultramicrotome, vibrating microtome, saw microtome, laser microtome) are to be developed and site-specific training is to be provided.