Educational Information: Handling and Storage of Xylene

**Precautionary measures**:

* Proper protective equipment such eyewear, fluid resistant lab coat and gloves must be worn while working with Xylene. Personnel must read safety precautions before handling Xylene or any other chemical in the Laboratory.
* The area must be well ventilated (biosafety hood), meeting regulatory requirements.
* Xylene must be kept in a climate-controlled room in a flammable cabinet. Container caps/lids must be securely sealed. Containers must be stored in the upright position to avoid leaks. The flammable cabinet door must be closed when not in use. Empty containers should not be reused.
* Eyewash stations and safety shower(s) should be easily accessible and located proximal to the work-station area.
* Eating, drinking and smoking is prohibited in the work area and thorough washing of hands must be performed immediately after handling Xylene.
* Confirm that all Xylene containers (new, unopened and waste Xylene) are properly labeled.
* Xylene waste must be labeled with “Hazard” and “DOT” labels with the appropriate required information on these labels.
* A spill kit must be available and located near the work-station area(s) for use in the event of a Xylene spill.
* Always practice good hygiene measures (washing hands, forearms and face thoroughly) after handling Xylene and other lab chemicals. Remove any potentially contaminated clothing as well.
* Lab coats or body/skin protective equipment (with sleeves) should cover as much skin as possible exposed when handling Xylene and other chemicals. Upon opening a Xylene container (new or waste), avoid splashes in eyes and on skin or clothing.
* Contaminated items from Xylene spills must be disposed in the same manner as Xylene waste which is to isolate, mark as biohazard and disposed of via a license waste disposal contractor.

 **Handling and Storage**:

* Discarding Xylene waste into an approved and labeled waste container:
	+ Confirm the container is properly labeled with a “Hazard” and “DOT” label.
	+ Use a large funnel to safely pour Xylene waste into the labeled container.
	+ Once completed, securely seal the Xylene waste container so no vapors or leakage occurs.
	+ Check the working area to confirm a spill has not occurred before storing Xylene waste containers back into the Flammable cabinet. ALWAYS KEEP XYLENE CAPS/LIDS SEALED AND TIGHTENED when not in use.
* If a spill occurs use the lab universal spill kit(s).
	+ For smaller spills (less than 200 liters of liquid, less than 300 kilograms of solids), stop the leak and move container(s) from spill area, use absorbent pads or dry material from spill kit. Place used absorbent pad and/or dry material into an appropriate waste disposal container for a license waste disposal contractor to retrieve.
	+ Large spills (greater than 200 liters of liquid, greater than 300 kilograms of solids), stop leak (if w/o risk) and move containers from spill area. Alert other team members as a safeguard of unprotected personnel entering the area. Make every effort to prevent entry into sewers, water sources, lower level/basement or confined areas. Contain and collect spillage with non-combustible, absorbent material from spill kit(s) and dispose material in an approved waste disposal container via a licensed waste disposal contractor.
* Accidental spills are reported to the Department Safety Officer, Department Supervisor, Manager and Hospital Safety Officer as appropriate.
* Chemical spills which include Xylene should be entered into SaFER with detailed description of the occurrence.

**Exposure and First Aid Measures:**

**Refer to medical attention, poison control or physician if initial steps listed below are not helping/relieving the irritation and/or symptoms below**.

* **Eye Contact**: Xylene causes serious eye irritation. Immediately flush eyes with water for 10 minutes.
* **Inhalation**: Xylene is harmful if inhaled and may cause respiratory irritation. Move exposed individual into fresh air away from source.
* **Skin Contact**: Xylene causes skin irritation. Wash exposed skin area with soapy tap water for 10 minutes.
* **Ingestion**: Xylene may be fatal if swallowed and be irritating to mouth, throat, and stomach. Immediate medical attention is needed. Contact poison control or physician.
* Enter any occurrence of employee exposure into SaFER with a detailed description of the occurrence. These reports are routed to Risk Management.

**Xylene Waste Pickup**:

* A licensed waste disposal contractor will come to the Histology Lab to retrieve all properly labeled (Hazard and DOT stickers) xylene waste containers.
* The licensed waste disposal contractor will replace the old waste containers with empty properly labeled new waste containers in the Histology lab flammable cabinet.
* A manifest will be completed by the waste disposal contractor listing specifically what waste products are being picked up and their quantity.
* A Histology team member will review the manifest and confirm the information is correct before signing it.
* A copy of the signed manifest will be left for Histology’s file records. This should be given to either the department supervisor or manager.
* A formal manifest will be sent via regular mail from the licensed waste disposal company to the Pathology Manager to maintain in department records.