

**Standard Operating Procedure  
Emergency Eyewash Safety**

SOP Number:	<u>SOP-EES-02</u>	Category:	Lab Process
Supersedes:	<u>SOP-EES-01.1</u>	Original Date:	<u>December 1, 2017</u>
		Revised:	<u>May 1, 2019</u>
		Pages	<u>1 of 4</u>

Issued by: Director, Health Sciences Research

**1.0 POLICY**

Users of the W.J. Henderson Centre for Patient-Oriented Research (WJHCPOR) must be trained and familiar with what actions should be taken in the event of accidental exposure of hazardous materials to users' eyes.

**2.0 PURPOSE**

To reduce the extent of personal injury and illness as a result of exposure of hazardous materials to eyes.

**3.0 DEFINITIONS**

Emergency Eyewash Station - a device used to provide tepid fluid to irrigate and flush both eyes simultaneously at a velocity low enough not to be injurious to the user. The main type of emergency eyewash station in the WJHCPOR is a plumbed (primary) eyewash station-an eyewash unit permanently connected to a source of potable water.

Hazardous Material - any substance or compound that has the capability of producing adverse effects to the health, well-being and safety of an individual.

Tepid - moderately warm or lukewarm water; temperature of water is between 60°F (15.5°C) and 100 °F (38°C).

**4.0 PROCEDURE****General Rules of Emergency Eyewash Stations**

Users are responsible for:

- Becoming familiar with the locations and operation of the nearest emergency eyewash station. Emergency eyewash stations are located in the Research Centrifuge Room (dirty sink) and in the southeast hallway corridor (wall-mounted) across from Exam Room #7 within the WJHCPOR.

- Ensuring that they are properly trained by a designated Kingston General Health Research Institute (KGHRI) staff member on all emergency eyewash stations within WJHCPOR.
- Properly using the emergency eyewash stations as trained.
- Helping other users within WJHCPOR who are unable to hold their eyelids open while using the emergency eyewash station and ensuring that the injured user maintains flushing of their eyes for a **minimum 15 minutes**. Ensure contact lenses are removed before flushing.
- Reporting incidents that require the use of the emergency eyewash stations. See “Accidental Occupational Exposure and Reporting Workplace Incidents” SOP.
- Reporting to the designated KGHRI staff member any noticeable deficiencies, hazards or malfunctions with any of the emergency eyewash stations.

KGHRI is responsible for:

- Identifying to users of the WJHCPOR the specific locations of the emergency eyewash stations.
- Providing training to all users of the WJHCPOR on the proper operation and use of the emergency eyewash stations.
- Ensuring that all emergency eyewash stations are appropriately installed, maintained, and used in accordance with applicable regulations. All emergency eyewash stations will be plumbed with tepid water.
- Ensuring that the emergency eyewash stations are inspected and activated weekly, as required by institutional policies and applicable regulations. The purpose of the inspection/activation is to remove stagnant water, verify proper operation and remove sediment from the emergency eyewash station. The emergency eyewash stations must be activated for a minimum of 5 minutes during testing. Emergency eyewash station inspections are to be documented by a designated KGHRI staff member using inspection checklists (*Appendix A (Weekly Wall Mounted Emergency Eyewash Station Inspection Checklist)* and *Appendix B (Weekly Sink Mounted Emergency Eyewash Station Inspection Checklist)*). Inspection documentation will be posted/stored near the emergency eyewash stations and maintained for 2 years. Additional training through KHSC is available via a learning module in KHSC’s Learning Management System (LMS) for anyone needing to learn more about emergency eyewash station usage and weekly testing requirements.
- Arranging to have any hazardous materials contained within the emergency eye wash stations remediated by appropriate measures.
- Ensuring that any water overflowing onto the hallway floor is cleaned up immediately to prevent slippage and falls.

- After use of any of the emergency eyewash stations, ensuring piped stations are operational and ready for the next emergency use.
- Participating in annual inspections with KHSC/Queen's Joint Health & Safety Committee and addressing immediately any deficiencies or concerns identified related to the emergency eyewash stations.
- Seeking immediate repair for any malfunctioning emergency eyewash station identified by users of the WJCPOR and/or KHSC/Queen's Joint Health & Safety Committee.
- Completing all required incident investigation reports identified by KHSC and/or Queen's.

### **How to Use an Emergency Eyewash Station**

- First, rinse any splashed hazardous material off your face and clean your hands ahead of using the emergency eyewash station, in order to avoid rinsing more hazardous material into your eyes.
- Activate the emergency eyewash station:
  - Wall Mounted Emergency Eyewash Station: Pull down on the handle on the door in a single action to start the water fountain of the emergency eyewash station. Once the water fountain is activated it will continue to work "hands free".
  - Sink Mounted Emergency Eyewash Station: Rotate the arm of the emergency eyewash station so that it is over the dirty sink, remove the yellow cap, and push down on the paddle to start the water fountain. Once the water fountain is activated it will continue to work "hands free".
- Place both eyes opened in the full stream of the water fountain of the emergency eyewash station.
- With your clean hands, gently pull back your upper and lower eyelids. At the same time move the eyeballs back and forth and up and down. If you are not able to flush your eyes on your own because of intense pain, immediately call out for help to other users on the floor or to KGHRI staff members located within the WJCPOR to further assist you with holding your eyelids open and keeping your eyes under the water fountain for the required amount of time.
- Maintain eye flushing for a **minimum of 15 minutes**.
- For chemical or blood-borne exposures, seek medical attention immediately following eye flushing. KHSC employees need to go to KHSC's Occupational Health, Safety & Wellness (OHSW) first. If OHSW is closed, visit KHSC's Emergency Department. Queen's University Faculty, employees, students and trainees need to go directly to KHSC's Emergency Department.

- **NOTE:** Following any flushing of the eyes, users **MUST** immediately go to KHSC's Emergency Department for further assessment and medical attention **IF** using cytotoxic drugs. Users will need to refer to the material safety & data sheets (MSDS) for more information and to confirm if the drug is a vesicant as this can cause tissue necrosis and an antidote will need to be administered to the area. For more information, see "Safe Handling of Cytotoxic Drugs and Bodily Fluids" SOP.
- Remember to inform your manager/supervisor, the designated KGHRI staff member, and the appropriate institutional occupational health, safety and wellness department of the incident and complete an incident report form. See "Accidental Occupational Exposure and Reporting Workplace Incidents" SOP.

## 5.0 REFERENCES

- KHSC Administrative Policy 02-102 Emergency Eyewash and Shower Stations.
- KHSC Clinical Laboratory Services Safety Manual: SF6-80.01 Emergency Showers and Eyewash Stations.
- Queen's University Environmental Health & Safety Manual: SOP-LAB-03 Emergency Eyewash Stations and Safety Showers.

## 6.0 SOP HISTORY

SOP Number	Date Issued	Summary of Revisions
SOP-EES-01	01-DEC-2017	Original version.
SOP-EES-01.1	01-FEB-2018	Weekly checklists (Appendix A and Appendix B) revised for acceptable height of water stream.
SOP-EES-02	01-MAY-2019	Bi-annual review of SOP completed. SOP header format updated. SOP version number updated. SOP effective date updated. Removed "Contacts" section from SOP. Updated section number for "References" and "SOP History". Under Section 4.0, under "General Rules of Emergency Eyewash Stations", under 'User Responsibilities', under bullet 4, " <i>Ensure contact lenses are removed before flushing.</i> " was added after last sentence. Under Section 4.0, under "How to Use an Emergency Eyewash Station", under bullet 6, reference to exposure to cytotoxic drugs to eyes and SOP-SHCDBF-01 included as a new sub-bullet 1. Updated "SOP History" section. No updates needed to Appendix A or B.