Emergency Eyewash and Shower Testing and Use

Facilities Management & Plant Operations and Maintenance Responsibilities
Facilities Management (FM) performs annual inspections, maintenance, and flow tests on emergency showers and eyewash and shower combination units for the Davis campus. Plant Operations and Maintenance (PO&M) coordinates similar services for the Sacramento Campus. If repairs are needed, they will coordinate the repair, re-inspection and testing of the unit. Once the eyewash or shower has passed the test, a service tag will be placed on the unit. If you know of an emergency eyewash or shower that has not been tested within the past year, contact FM at 530-752-1655 (Davis) or PO&M at 916-734-2763 (Sacramento).

PO&M Coordinates Vendor Services for the Sacramento Campus and UC Davis Health Clinics
A vendor will test, flush, and maintain records related to plumbed eyewash stations in all patient care and research spaces on a monthly basis. The vendor will place a tag on the eyewash unit to document the test/flush was performed in accordance with this SafetyNet. Departments are responsible for ensuring their eyewash station is being tested monthly by the vendor by examining the tag for completion in the last 30 days. If no tag is present on an eyewash station, departments must call PO&M: 916-734-2763.

Exceptions: CAP-accredited laboratories must continue to flush stations and maintain records on a weekly basis.

Principal Investigator Responsibilities
In Davis, Principal investigators are responsible for monthly inspections of emergency eyewashes/showers within their laboratories. In Sacramento, eyewashes are tested monthly by the vendor.

Departmental Responsibilities
Monthly inspections of the emergency eyewashes/showers located in hallways or outside
buildings is the responsibility of the department located in the area or having the laboratory nearest to the unit. Department chairs are responsible for assigning these monthly tests. Typical assignments are made to the Department Safety Coordinator (DSC).

**Monthly inspections are a legal requirement.** These inspections should include the following:

- Ensure access is unobstructed.
- Verify protective eyewash covers are properly positioned, clean, and intact.
- Check that bowl and spouts are clean and free of trash.
- Place a dishpan or bucket under the drainpipe to collect the water.
- Check that flow is effective and continuous by pressing the hand paddle.
  - Verify that protective eyewash covers come off when activated.
  - Check that water flows from both eyepieces.
  - Evaluate for adequate flow. The streams of water should cross.
  - Verify that flow continues until the paddle is moved to its resting position.
- Check that water drains from the bowl.
- Document the inspection date and initial.
- Some emergency eyewashes are designed to fold up against the wall and have no paddle to engage the water flow. These are activated immediately when you pull them down. To test this type, place a large plastic garbage can under the eyewash to collect the water and pull down on the eyewash. Do not worry about activating the shower; it has a separate pull handle.
- Report problems to FM at 530-752-1655 (Davis) or PO&M at 916-734-2763 (Sacramento).

**Training**

Principal investigators are responsible for the initial and annual training of all laboratory workers in the proper use of an emergency eyewash and shower. This training must be documented as part of the laboratory’s Chemical Hygiene Plan. “Laboratory workers” are employees, faculty, students, volunteers and visitors. This SafetyNet may be used for training personnel in eyewash testing and use. Keep training documentation for each laboratory personnel and researcher in your training binder.

**Use of the Emergency Eyewash**

- Emergency eyewashes should be available in work locations where, during routine operations, the eyes or face of a laboratory worker may come into contact with any substance which can cause corrosion, severe irritation or permanent tissue damage or which is toxic by absorption.
- Every laboratory worker should be trained on the locations of emergency eyewashes in each building and area where they perform laboratory work.
• Every laboratory worker should be trained on how to use the emergency eyewashes in his or her work area. Most eyewashes have a paddle that activates flow when you lean on it pushing it forward and downward.

• Note some eyewashes are designed to fold up against the wall and have no paddle to engage the water flow. These folded style eyewashes are activated immediately when you pull them down (away from the wall).

• In the event of contact with a chemical or substance, emergency showers should be used for the immediate removal of chemical splashes and spills.

• Assist the exposed laboratory worker to the emergency eyewash. With chemicals in the eye(s) it is difficult to find the eyewash and the eyewash controls without assistance.

• Assist the exposed laboratory worker in holding open the eyelids during flushing with at the eyewash. With chemicals in the eye the eyelids have a natural tendency to close tightly. The eyelids need to be pried open and held open to allow the eyewash water to remove the damaging substance.

• Training on flushing of the eyes shall include instruction on holding the eyelids open and rolling the eyeballs so that flushing fluid will flow on all surfaces and in the folds surrounding the eyeball.

• The emergency eyewash and the emergency shower may be used simultaneously. 
  Note: Drench hoses are not approved for use as eyewashes.
Use of the Emergency Shower

- Emergency showers should be available in work locations where, during routine operations, a laboratory worker may come into contact with any substance which can cause corrosion, severe irritation or permanent tissue damage or which is toxic by absorption.
- Every laboratory worker should be trained on the locations of emergency showers in each building and area where they perform laboratory work.
- Every laboratory worker should be trained on how to use the emergency showers in their work areas.
- In the event of contact with a chemical or substance, emergency showers should be used for the immediate removal of chemical splashes and spills.
- Emergency showers should be used for extinguishing clothing fires.
- Emergency showers are operated by placing the exposed laboratory worker(s) under the showerhead and pulling firmly downward on the shower handle. This starts a continuously flowing deluge shower.
- Often chemicals and other substances that can do harm on contact with the body are completely or partially on laboratory coats or other clothing. This often provides a protection early in the process and poses its own hazard later in the process. For example, if the hazardous substance splashes on a laboratory coat then the coat may be removed before the substance actually contacts the skin. However, if the coat is not removed promptly then the substance may soak through the clothing and then the coat actually holds the hazardous substance against the skin thus inflicting greater damage. It is advised to carefully remove contaminated clothing, including shoes. Be willing to assist any
exposed individuals with clothing removal if that is the individual’s wish. Clean lab coats and fire blankets may be used to cover the person for warmth and modesty.

- Seek medical advice and attention. While the exposed worker remains under the shower a laboratory coworker should contact the appropriate unit listed in the table below and seek advice on how long the exposed laboratory worker(s) should remain under the shower before leaving to seek medical attention and discuss the various options for transportation (e.g. ambulance). If unable to obtain this information in a timely manner then the standard rule of thumb is to remain under the shower for 15 minutes. Always seek prompt medical attention after using an emergency eyewash and/or shower.

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<thead>
<tr>
<th>Module</th>
<th>Location</th>
<th>Contact Information</th>
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<tbody>
<tr>
<td>Davis</td>
<td>Occupational Health –  Cowell Building, Davis (MTThF 8AM-12PM, 1PM-5PM; W 9AM-12PM, 1PM-5PM)</td>
<td>530-752-6051</td>
</tr>
<tr>
<td></td>
<td>Davis Urgent Care - 4515 Fermi Place, Suite 105, Davis (9AM - 9PM; 365 days a year), for directions, please click [here][1]</td>
<td>530-759-9110</td>
</tr>
<tr>
<td></td>
<td>Student Health - on LaRue in Davis (MTThF 8AM-5:30PM and W 9AM-5:30PM)</td>
<td>530-752-2300</td>
</tr>
<tr>
<td></td>
<td>Sutter Davis Emergency Room</td>
<td>530-757-5111</td>
</tr>
<tr>
<td>Sacramento</td>
<td>Employee Health - Sacramento (M-F 7AM-4PM) Cypress Building</td>
<td>916-734-3572</td>
</tr>
<tr>
<td></td>
<td>Mercy Afterhours Urgent Care Clinic (M-F 4AM-9PM, SS 9AM-5PM) 3000 Q Street</td>
<td>916-733-3377</td>
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<tr>
<td></td>
<td>UCDH Emergency Room</td>
<td>916-703-6576</td>
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- Emergency showers will continue to flow until purposeful steps are taken to stop the flow. Grabbing the shower handle and firmly pushing upward on this handle should stop the flow of water.

**Testing**

- Review the operation and use for the type of eyewash/emergency shower that you will be testing.
- Evaluate whether the unit to be tested has a drain plumbed to the sewer system.
- If the unit to be tested does not connect to the sewer system then you must place a catch basin under the outlet or unit to catch the water that will flow during testing.
- Activate the eyewash/emergency shower and verify that the flow is appropriate.
- Return the activation paddle to its original position.
- Dispose of the collected water in a sink with sewer connections. Exterior units may be drained to a storm drain.

**Monthly Testing Documentation: Annual Calendar**
For each emergency eyewash print the annual calendar

2020 Annual Emergency Eyewash Testing Calendar [3]

- Post the annual calendar near each eyewash/emergency shower.

- Develop a schedule for you or the laboratory to perform monthly eyewash testing. For example, many labs chose the first Wednesday of the month.

- Determine who in your laboratory will conduct the monthly eyewash testing. For example: in small laboratory groups the primary contact often completes this task; large laboratory groups often use a calendar to rotate the responsible parties.

- Eyewashes/showers must be tested monthly and documented by circling the test date and initialing.

- If the emergency eyewashes/showers located in hallways or outside buildings is the responsibility of the department located in the area or having the laboratory nearest to the unit. Department chairs are responsible for assigning these monthly tests. Typical assignments are made to the Department Safety Coordinator (DSC).

- Any problems noted during testing must be reported to FM (Davis) 530-752-1655 or PO&M-Sacramento 916-734-2763. For example: low water flow, high water flow or streams that do not cross.

- At the end of the year archive the testing record(s), post a new calendar and repeat the process.

- Records for documenting eyewash testing must be maintained for three years.

Contact

Research Safety
researchsafety@ucdavis.edu 530-752-1493
FAX: 530-752-4527

More information