

Lessons Learned: Chemical splash to the eye

What Happened?

A graduate student was working alone in a vivarium room to perfuse a mouse carcass with 4% paraformaldehyde for subsequent brain dissection. The perfusion was performed in a fume hood. The student indicated that it was their lab standard operating procedure to do the perfusion in the hood and then move the mouse to a laboratory bench for close visualization to dissect the tissues. In this incident, the student performed the perfusion with the 4% paraformaldehyde in the fume hood and then moved the mouse over to the lab bench. The student started doing the brain dissection by peeling the skull away from the mouse carcass. However, there was residual 4% paraformaldehyde in the cavities of the mouse and a couple of drops splashed into her right eye as she was doing the dissection.

She immediately went to the emergency eyewash and flushed her eyes for about 20 minutes. She subsequently sought medical evaluation at local medical provider. Subsequent medical evaluations including eye exams did not reveal any eye injury or damage.

What went right?

- Student responded appropriately by proceeding to the emergency eyewash to flush her eyes for 20 minutes.
- Student sought out medical evaluation at local medical provider and eye exams for appropriate follow-up.
- There was no injury or damage to the student's eye.

What should have been done differently?

- Student should have been wearing safety goggles.
- Student could ensure that residual 4% paraformaldehyde was drained from carcasses.

What corrective actions will be taken?

- Student and rest of laboratory will wear safety glasses or safety goggles when working in the lab per UC PPE policy.
- Student will ensure that residual 4% paraformaldehyde is drained/absorbed from carcass prior to dissections.
- Student will discuss this incident as a lesson learned as part of their lab meeting.