



Lessons learned:

Skin Exposure to beta-Mercaptoethanol



What happened?

A student was working in a fume hood with beta-mercaptoethanol (β -ME). The bottle's cork was broken and glued with parafilm. The bottle was not placed in a secondary container. The student lifted the bottle by its cork > the β -ME bottle fell > the liquid spilled through the front ventilation opening in the chemical hood onto the student's hand.

The hand was immediately washed with plenty of water for 15 minutes. Another student, who was at the lab, assisted in cleaning up the spill and throwing the spill waste as chemical waste.

At home, the student noticed that there were red spots on her thigh, which was also immediately washed for 15 minutes with running water, about an hour after the incident.

The student refused medical attention following the incident.

What went wrong?

- The β-ME bottle was not properly corked.
- The β-ME bottle was not placed in a secondary container.
- The student worked without a long-sleeved lab coat.
- The student did not seek immediate medical attention despite the safety unit's instructions.

(\checkmark)

What went right?

- Washing the affected areas with running water for 15 minutes.
- Notifying the PI.

$\underset{\square}{\sim}$ How to prevent similar incidents in the future?

- Make sure volatile liquid chemical bottles are always tightly corked with their original corks.
- Place bottles in a secondary container.
- Work on an absorbent diaper, so that if there is a leak, it will be immediately absorbed.
- In case of a splash onto skin, seek medical assistance ASAP.
- New chemical hoods' surfaces will be checked for impermeability.