

LAB INCIDENT SUMMARY: Column Explosion

DESCRIPTION:

A graduate student was working in a chemical fume hood performing flash chromatography. A pop was heard and the graduate student noticed a piece of glass missing from the column. The student was struck in the arm with a piece of glass and was not wearing a lab coat. This resulted in an approximately ½ inch cut that was deep and required 3 stitches.

RESPONSE:

- The Lab Safety Contact notified EHS about the incident.
- EHS Lab Safety responded and consulted with the injured person.
- Lab members assisted the student using the first aid kit. The student was taken to St. David's Medical Center for treatment.

CAUSES:

- The glass column was not thoroughly inspected before setting up the experiment.
- The column had been used several times in the past and may have had microfractures that contributed to the explosion.
- Impurities may have been present in the column causing unwanted chemical reactions.

PREVENTION:

- Wear appropriate PPE at all times when in the lab.
- Establish proper protocol that trains staff on hazards and to regularly evaluate the condition of glassware/equipment. This includes routine processes regularly performed.
- Call EHS immediately when incidents occur or in an emergency.

