Lessons Learned
TCA Splash Due to Improper Storage

What Happened?
Trichloroacetic acid (TCA) is commonly found in clinical areas and is typically used to kill genital warts. It is applied topically to the affected site and may cause discomfort. Several common side effects include burning and tenderness of the skin.

A bottle of TCA was stored on the top shelf of an overhead cabinet, atop a stack of papers (see picture). A Clinical Technician reached to open the overhead cabinet to retrieve some papers from the stack. As the technician removed the papers, the bottle of TCA fell to the floor and broke, splashing the chemical on the technician’s body causing small burns. Fortunately for the employee, they were wearing the appropriate PPE (scrubs and a laboratory coat), which reduced exposure to the chemical.

The employee followed correct exposure response procedures by rinsing the splashed areas with water and notifying EHS. EHS responded to the spill and sent the employee to Workforce Health and Safety. Practice Management and EHS reviewed the clinical storage locations to confirm other chemical bottles were properly stored below eye level and readily visible.

Why Did This Happen?
- Chemicals were stored above eye level and not readily visible, which increased the risk of spill and exposure.
- The hazardous chemical was placed atop a stack of papers. Chemicals stored on uneven surfaces have a greater chance of spill and exposure.

Lessons Learned
- Containers of hazardous materials must be stored securely by placing them upright, on a stable surface and below eye level.
- Due to the corrosive and harmful nature of some chemicals, all laboratory staff must wear appropriate PPE (e.g. laboratory coat, gloves, safety glasses) when around these compounds.
- In the event of chemical exposure, the Exposure and Spill Response Guide should be followed. It is important to get help, flush the affected area with water for 15 minutes using either the nearest eyewash station or emergency shower, seek medical assistance and report the incident to the supervisor.
- EHS Safety Advisors provide training on exposure and spill response procedures.
- For more information on general chemical storage guidelines, please review the EHS Update on Chemical Storage System or contact your Safety Advisor.