Lessons learned:

An eye injury from an ammonia leak

What happened?
An ammonia cylinder connection was installed by technicians from the building department. The pipeline was checked for leaks from the cylinder up to the valve in the lab. The researcher asked the technician to connect the equipment to the valve. The researcher wanted to verify flow to the equipment, so she asked a student to open a second valve behind the equipment. Once the second valve was open, ammonia unexpectedly flew through tubing that was located on the front part of the equipment onto the student’s face.

What went wrong?
The technician performed work beyond the end valve in the lab.
The student was not using goggles.
Introduction of a new risk factor without a risk analysis.
The researcher did not understand how the equipment operates.

What went right?
The lab was equipped with ammonia gas detectors.
The lab manager dealt with the emergency according to Technion guidelines (eyewash, evacuated the room, Diphtherine, Took the student to emergency room, notified the safety unit).

How to prevent similar incidents in the future?
Always use PPE in the lab.
The technician should only perform work from the cylinder to the end valve in the lab.
The opening of supply of poisonous/flammable/high pressure gas should be done only under supervision of a gas inspector from the building department.
A risk analysis should be performed for any change or introduction of new risk factor in the lab.
Each piece of equipment in the lab should have an experienced lab worker in charge of maintaining and training on it. This lab worker should be well familiarized with the equipment operation.