

GUIDELINE

Wheelchair Use in a Laboratory

It is important to recognize that the safety plan for any given individual's wheelchair use in any given lab will be unique, with special considerations for lab layout, hazards present, type of wheelchair used, degree of mobility, etc. For this reason, it is strongly recommended that the individual who will use a wheelchair (or other assistive device) in lab should meet well before the start of lab work with the person in charge of overseeing that laboratory's safety. This would be the lab instructor for academic laboratory courses or the principal investigator for a research lab. An individual's CDA (if there is one) should help facilitate this initial meeting.

The wheelchair user and instructor (or PI), should tour the lab space and have an open discussion to develop a safety plan that is tailored to the individual and the laboratory work being performed. After having this discussion and after both parties are comfortable with the plan, a written summary should be made and kept on file by the instructor (or PI) and given to both the individual and their CDA (if applicable). This should NOT be a signed contract.

The following items are provided as guidance to aid in the development of this plan but should NOT be considered "all-inclusive".

Things to consider:

- If lab coats are required in the lab, use a protective covering over as much of the wheelchair user as reasonable. In the event of a spill, this will serve to minimize harm, contamination and aid in clean up. In many cases, draping a second lab coat over the lower half of their body may be the most practical option.
- Ensure that any emergency equipment (eye wash, safety shower, fume hood, etc.) is ADA accessible and that use of the equipment is feasible for the individual.
- Ensure that an ADA (height appropriate) working surface is available.
- Talk through what will happen if a spill occurs on the individual and it is not contained by their PPE. How will they access the safety shower?
 - Is there a standard ADA accessible shower near-by in the building that they could use instead if the hazard from the spill is not immediate?
 - Does the individual have enough feeling in their legs or other parts of their body that they will be able to tell if a corrosive chemical is completely cleaned off?
 - How will the wheelchair be decontaminated?

- Who will be the designated person to assist the individual if needed? Is there a backup to that person? If there is a backup person, have they been briefed by the PI or Instructor so that they are familiar with any plans?
- What methods can be used for minimizing contamination of the wheelchairs or other assistive device(s) and how can high touch point areas be cleaned at the end of each lab session?
 - Consider protective covers for wheels and/or actuators (to be purchased by Dept.)
 - Talk through the order of donning and doffing PPE and protective covers
- Consider the type of chair or device being used. Is it electronic? Is there a risk of damaging the chair or electric shock to the individual given the reagent they are using? If so, would a mechanical chair be more appropriate? Is the material the chair's made of susceptible to a chemical reaction with reagents being used in the lab?
- Consider ways to minimize how much the individual needs to move around in the lab space. For instance, can an unwanted materials container be placed at their lab bench instead of in a central location elsewhere in the room?
- Consider hazards that might be more prevalent given the individual's physical positioning relative to the work they are performing. For instance, when seated, splashes to the eyes may be more likely than if the person were standing. In this case, a face shield could be provided in addition to safety glasses or goggles.
- As always, standard risk mitigation and the hierarchy of controls should be employed to reduce the hazards associated with lab work. This includes answering such questions as:
 - Can a hazard be eliminated from an experiment entirely?
 - Can a less hazardous substance be used in the experiment in place of a more hazardous one?
 - Can engineering controls (fume hood, etc.) be used to reduce risk?
 - Can smaller volumes of reagents be used?

