



# NSLS ES&H HIGHLIGHTS



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## EXPERIMENTAL ERGONOMICS

NSLS has many ergonomics challenges around the experimental floor. We have congested beamlines and labs, and many Users and Employees trying to accomplish different tasks.

Here are some general reminders of risk factors to avoid, and ways to improve:

- **Awkward postures**

- Does the task require stressful body postures, such as
  - Stooping to the floor?
  - Twisting?
  - Reaching overhead?
  - Excessive lateral bending?
- Is the object difficult to bring close to the body because of its size, bulk or shape?
- Does the task require working in a confined area?

***STOP and THINK – is there a better way to do this? ACT - Try to rearrange equipment, or use steps or platforms to get closer and to avoid twisting or extending reach. Lift with your legs, not your back. REVIEW afterward, and see if that was the best way to accomplish the task, or if improvements can help in the future.***

- **Repetitive motions**

- Does the task require high rates of repetition for prolonged periods of time?

***Alternate tasks so that you use different muscle groups, rotate personnel, and take frequent breaks.***

- **Forceful exertions**

- Do you know what the load weighs?
- Does the load handled exceed 50 lbs?
- Is there more than a few inches between the load and the body?

***If you don't know the weight, or are unsure, STOP, and seek out someone that may know. Modify work practices so that work is performed within a person's "power zone" (between shoulders and knees, close to the body), investigate the use of lifting and/or mechanical aids, utilize two person lifts.***

- **Pressure points**

- Is the load hard to handle because it lacks handles or cutouts for handles?
- Does it have slippery surfaces or sharp edges?

***Provide padding, wear gloves with dots or good gripping surface, provide a better grasping point.***

- **Static postures**

***Take frequent breaks, do stretching/bending exercises, adjust the work surface.***