

LAB SAFETY AWARENESS WEEK

Makerspaces

Makerspace safety is best achieved via a collaborative relationship between the responsible person and Environment, Health, and Safety. Elements of safety-by-design, user training, and strategies for monitoring and access control are essential for makerspace safety.

- Makerspace supervisors and EHS should work collaboratively to implement safety-by-design. Examples include: Selection of fabrication equipment to meet guarding and safety requirements; Effective general ventilation and local exhaust ventilation in areas of subtractive and additive manufacturing; Work area design and layout; Mechanical lifting device selection and equipment.
- Makerspace users and employees should have documented training. This training should be tied to authorization to use equipment or makerspace areas. Training matrices and tracking systems can be used. Color coding on badges can be used. Advanced facilities should consider card-swipe-access to machines or areas that is tied to training.
- Makerspaces used by the public and students should have accessible standard operating procedures for equipment. These SOPs should not be generic but be created from the user manual of the specific equipment. SOPs should call attention to primary hazards, controls, safe sequence of use for common operations, and operations that require assistance from a qualified person.
- Makerspaces should have some level of access control and monitoring. Consider locking and securing high risk equipment when qualified employees are not present. Consider preventing access to certain areas when qualified employees are not directly monitoring users. Implement protocols that prohibit individuals from working alone.
- Makerspaces should capture and properly process hazardous waste operations such as: Resin 3D printers and related cleaning solvents; Metalworking lubrication; Coating and paint residue.

