

ISE 114 Safety for Engineers

Hierarchy of controls: (From MOST to LEAST Effective)

- 1. Elimination or Substitution**
Reduce energy, speed, less hazardous materials
- 2. Engineering Controls**
Ventilation, machine guarding, interlocks,
- 3. Warnings**
Odor in natural gas, signs, labels, horns, beepers
- 4. Training and Administrative Controls**
Job procedures, rotation of workers, lockout, confined space entry
- 5. Personal Protective Equipment**
Safety Glasses, respiratory protection, back belts, ear plugs