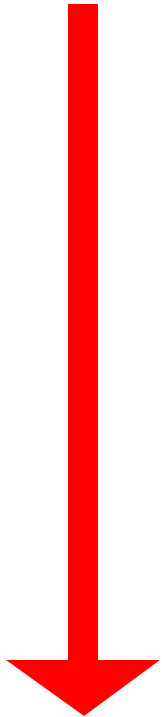


Hierarchy of Health and Safety Controls

Most Effective



Least Effective

1) Elimination or Substitution	<ul style="list-style-type: none">• substitute for hazardous material• reduce speed, force, amperage• reduce pressure, temperature• change process to eliminate noise• perform task at ground level• automated material handling
2) Engineering Controls	<ul style="list-style-type: none">• ventilation systems• machine guarding• sound enclosures• circuit breakers• platforms and guard railing• interlocks• lift tables, conveyors, balancers
3) Warnings	<ul style="list-style-type: none">• computer warnings• odor in natural gas• signs• backup alarms• beepers• horns• labels
4) Training and Procedures Administrative Controls	<ul style="list-style-type: none">• safe job procedures• rotation of workers• safety equipment inspections• Hazard Communication Training• Lockout• Confined Space Entry
5) Personal Protective Equipment	<ul style="list-style-type: none">• safety glasses• ear plugs• face shields• safety harnesses and lanyards• back belts