

Air Tools, use of

Type

- Physical

Specific Hazards

- High pressure stream of air
- Noise: loud, persistent, close to ears
- Flying objects
- Whipping hoses
- Vibration

Potential Harm

- Air in the bloodstream (embolism)
- Eardrum puncture
- Eye puncture, damage, blindness
- Hearing damage
- Rapid onset of death
- Skin puncture, air
- Strike by whipping hose

Engineering Controls

- Whip check fittings

Administrative Controls

- Air compressor SOP
- Air tools SWPs
- Site-specific hazard assessments and work plans

Personal Protective Equipment

- Safety headwear
- Safety eyewear
- Hearing protection
- Long-sleeved shirt, long pants
- Safety footwear

Airborne Dust or Fibres

Type

- Physical

Specific Hazards

- Airborne sand dust or sawdust
- Airborne fiberglass, stone wool, or cellulose fibers
- Clothing contaminated with dust or fibers
- Dust or fibres in eyes
- Dust or fibres on skin
- Inhalation of dust or fibres

Potential Harm

- Allergic reaction
- Disability
- Eye irritation
- Illness
- Lung damage
- Lung diseases, including silicosis, COPD, cancer, asthma, silicosis
- Premature death
- Sinus damage
- Skin irritation
- Tracheal damage

Administrative Controls

- Airborne dust and fibres SWPs
- Site-specific hazard assessments and work plans
- Workplace housekeeping SWPs

Personal Protective Equipment

- Safety eyewear
- Respirator, NIOSH N-95
- Gloves, work
- Coveralls

Complacency

Type

- Psychological

Specific Hazards

- Assuming someone else is responsible
- Assuming something is safe
- Failure to look for hazards while working
- Failure to notice changes to working conditions
- Failure to wear PPE
- Gradual reduction of safety standards
- Horseplay
- Overconfidence
- Risk taking
- Skipping steps in procedures

Potential Harm

- Increased risk of health or safety incidents

Administrative Controls

- Health and safety meetings
- Inspections
- Job / task rotation
- Progressive discipline policy and procedure
- Site-specific hazard assessments and work plans

Hydrogen Sulfide (H₂S) Gas

Type

- Chemical

Specific Hazards

- Hydrogen sulfide gas is toxic at low concentrations. The gas:
 - Accumulates in confined spaces
 - Can be released without warning from drilling operations
 - Pools in low-lying areas, such as valleys, trenches, and ditches

Routes

- Inhalation

Potential Harm

- Illness
- Inability to detect the gas by smell
- Rapid onset of death

Administrative Controls

- Emergency response procedures
- Placement of H₂S monitors
- H₂S safe work practices
- Site-specific hazard assessments and work plans

Personal Protective Equipment

Less than 100 ppm concentration

- Air-purifying respirator with specialized canisters/cartridges for hydrogen sulfide.

100 or more ppm concentration

- Full face pressure demand self-contained breathing apparatus (SCBA) with a minimum service life of thirty minutes or a combination full face pressure demand supplied-air respirator with an auxiliary self-contained air supply.