

**CAREER  
PATHS**

# INDUSTRIAL

Nathan Moore  
Jenny Dooley

# Safety



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**CAREER  
PATHS**

# INDUSTRIAL Safety

Book

1

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## Scope and Sequence

| Unit | Topic                             | Reading context | Vocabulary  | Function                    |
|------|-----------------------------------|-----------------|---|-----------------------------|
| 1    | Industrial Safety                 | Manual excerpt  | compliance, dangerous, industrial, procedure, reduce, regulation, responsibility, risk, safety, work environment  | Expressing compliance       |
| 2    | Tools 1                           | Webpage         | chisel, drill, file, hacksaw, hammer, hex wrench, needle nose pliers, pliers, saw, torque wrench, utility knife, wrench   | Making a recommendation     |
| 3    | Tools 2                           | Checklist       | circular saw, cutting shears, impact driver, miter saw, nail gun, power drill, power saw, rivet gun, sander, soldering iron, welder   | Expressing necessity        |
| 4    | Warehouse Equipment               | Memo            | crane, forklift, gravity conveyor, hand truck, hoist, pallet jack, scissor lift, stacker, towing truck, trolley   | Expressing preference       |
| 5    | Manufacturing Equipment           | Catalog page    | air compressor, conveyor belt, die cutter, dust collector, embosser, furnace, grinder, laminator, press, sheeter, spray booth, workstation  | Stating requirements        |
| 6    | Heavy Machinery                   | Advertisement   | backhoe, bulldozer, compactor, dump truck, excavator, grader, pile driver, scraper, skidder, tractor  | Expressing surprise         |
| 7    | Personal Protective Equipment 1   | Manual excerpt  | coveralls, earmuffs, earplugs, face shield, gloves, goggles, hard hat, PPE, safety glasses, steel-toed, weld mask, work boots   | Asking about necessity      |
| 8    | Personal Protective Equipment 2   | Webpage         | arc flash clothing, finger cot, flame resistant clothing, forearm cuff, gas mask, hazmat suit, high visibility clothing, lab coat, respirator, safety harness, thumb guard                                | Getting someone's attention |
| 9    | Occupational Health               | News article    | clinic, counseling, fatigue, fitness, fitness for duty, health, nutrition, occupational health, physical exam, preventative care, screening, shift work, stress, urgent care                              | Describing symptoms         |
| 10   | Industrial Housekeeping           | Poster          | broken, clean up, clear, congestion, housekeeping, loose, method, orderly, protrusion, sanitary, schedule, spill  | Making a suggestion         |
| 11   | Ergonomics                        | Article         | comfort, discomfort, environmental, ergonomics, improvement, lighting, musculoskeletal disorder, noise, physical, posture, repetition, task, temperature, vibration                                       | Expressing agreement        |
| 12   | Lifting                           | Pamphlet        | balance, capacity, center of gravity, divide, examine, lift, obstruction, in reverse, safe, squat, straighten, strength, twist  | Offering help               |
| 13   | Occupational Illnesses & Injuries | Manual excerpt  | allergy, asbestosis, asthma, cardiovascular disease, chronic, CTS (Carpal Tunnel Syndrome) dermatitis, emphysema, exposure, HAVS (hand-arm vibration syndrome), hepatitis, RSI (Repetitive Strain Injury) | Giving a diagnosis          |
| 14   | Accidents at Work                 | Leaflet         | accident, burn, concussion, crush, fall, fatal, fracture, injury, laceration, pinch, puncture, slip, trip   | Reacting to bad news        |
| 15   | CPR and First Aid                 | Manual excerpt  | analgesic, antibiotic ointment, bandage, cold pack, CPR, defibrillator, first aid, first aid kit, gauze, heart attack, latex gloves   | Giving reassurance          |

# Table of Contents

|  |    |
|--|----|
| <b>Unit 1 – Industrial Safety</b> .....                      | 4  |
| <b>Unit 2 – Tools 1</b> .....                                | 6  |
| <b>Unit 3 – Tools 2</b> .....                                | 8  |
| <b>Unit 4 – Warehouse Equipment</b> .....                    | 10 |
| <b>Unit 5 – Manufacturing Equipment</b> .....                | 12 |
| <b>Unit 6 – Heavy Machinery</b> .....                        | 14 |
| <b>Unit 7 – Personal Protective Equipment 1</b> .....        | 16 |
| <b>Unit 8 – Personal Protective Equipment 2</b> .....        | 18 |
| <b>Unit 9 – Occupational Health</b> .....                    | 20 |
| <b>Unit 10 – Industrial Housekeeping</b> .....               | 22 |
| <b>Unit 11 – Ergonomics</b> .....                            | 24 |
| <b>Unit 12 – Lifting</b> .....                               | 26 |
| <b>Unit 13 – Occupational Illnesses &amp; Injuries</b> ..... | 28 |
| <b>Unit 14 – Accidents at Work</b> .....                     | 30 |
| <b>Unit 15 – CPR and First Aid</b> .....                     | 32 |
| <b>Glossary</b> .....  | 34 |



**CAREER  
PATHS**

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Book

2

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## Scope and Sequence

| Unit | Topic                     | Reading context   | Vocabulary  | Function                        |
|------|---------------------------|-------------------|---|---------------------------------|
| 1    | Fire Safety               | Employee manual   | class A fire, class B fire, class C fire, class D fire, combustible, escape route, evacuate, fire alarm, fire extinguisher, flammable, ignite, PASS method, smoke detector, spark                     | Discussing possibilities        |
| 2    | Electrical Safety         | Safety poster     | cardiac arrest, current, de-energize, electrical cord, electricity, electrocution, exposed, hazard, live wire, paralyzed, shock, static electricity, tingle, voltage                                  | Making a realization            |
| 3    | Chemical Safety           | Pamphlet          | carcinogenic, chemical, classification, corrosive, explosion, exposure, eye wash station, fumes, IDLH, irritant, label, PEL, reactive, safety shower, STEL, toxic                                     | Emphasizing                     |
| 4    | Hand Tool Safety          | Poster            | amputation, damaged, dull, grip, harmless, keep track, loss, pass, right, secure, sharp, store, toss  | Advising                        |
| 5    | Laser Safety              | Information sheet | class, class 1 laser, class 2 laser, class 3a laser, class 3b laser, class 4 laser, deflect, directly, laser, low-powered, momentary, naked eye, view, visible, warning sign                          | Asking for a reminder           |
| 6    | Machinery Safety          | Webpage           | adjustable guard, contact, edge, fasten, fixed guard, flying, insert, interference, interlocked guard, nip point, safeguard, self-adjusting guard, surface, user-built guard                          | Expressing ambiguity            |
| 7    | Heavy Machinery Safety    | Tip sheet         | assume, cab, controls, dismount, entry platform, grounded, ignition, implement, mount, parking brake, seatbelt, shut down, surroundings   | Giving a warning                |
| 8    | Loading Dock Safety       | Safety notice     | dock bumper, dock leveler, dock light, dock seal, loading dock, rollover, traffic light, trailer creep, trailer stand, vehicle restraint, weight capacity, wheel chock, wheel riser                   | Admitting an error              |
| 9    | Ladder Safety             | Manual excerpt    | center, extension ladder, face, fixed ladder, job-built ladder, lock, position, rail, rung, sole, steep, step, step ladder, tool belt, ladder   | Expressing concern              |
| 10   | Scaffold Safety           | Memo              | base, brace, caster, clearance, dismantle, erect, guardrail, mobile, scaffold, scaffolding, support, toe board, unstable  | Making a suggestion             |
| 11   | Hearing Protection        | Article           | compatibility, convenience, damage, decibel, frequency, gradual, in conjunction with, noise-induced hearing loss, sensitivity, shout, tinnitus  | Apologizing                     |
| 12   | Respiratory Protection    | Information sheet | asbestos, cartridge, concentration, filter, full-face respirator, half-face respirator, hydrogen sulfide, particulate respirator, replacement, respirator fit testing, respiratory, SCBA, seal, vapor | Asking for an explanation       |
| 13   | Cold Exposure             | Pamphlet          | blister, constrict, delirious, deteriorate, dilate, extremity, frostbite, hypothermia, lethargy, numbness, sensation, superficial, throbbing, tingling, tissue  | Expressing probability          |
| 14   | Heatstroke                | Manual excerpt    | coma, cramp, dehydration, fever, heat exhaustion, heatstroke, humidity, life-threatening, lightheaded, nausea, seizure, sweat, vomit, weakness  | Expressing degrees of certainty |
| 15   | Severe Weather Conditions | Emergency plan    | all-clear, designated, drill, evaluate, initiate, monitor, safe zone, severe, shelter, shut off, threat, warning, weather watcher   | Expressing intentions           |



# Table of Contents

|  |    |
|--|----|
| <b>Unit 1 – Fire Safety</b> .....                | 4  |
| <b>Unit 2 – Electrical Safety</b> .....          | 6  |
| <b>Unit 3 – Chemical Safety</b> .....            | 8  |
| <b>Unit 4 – Hand Tool Safety</b> .....           | 10 |
| <b>Unit 5 – Laser Safety</b> .....               | 12 |
| <b>Unit 6 – Machinery Safety</b> .....           | 14 |
| <b>Unit 7 – Heavy Machinery Safety</b> .....     | 16 |
| <b>Unit 8 – Loading Dock Safety</b> .....        | 18 |
| <b>Unit 9 – Ladder Safety</b> .....              | 20 |
| <b>Unit 10 – Scaffold Safety</b> .....           | 22 |
| <b>Unit 11 – Hearing Protection</b> .....        | 24 |
| <b>Unit 12 – Respiratory Protection</b> .....    | 26 |
| <b>Unit 13 – Cold Exposure</b> .....             | 28 |
| <b>Unit 14 – Heatstroke</b> .....                | 30 |
| <b>Unit 15 – Severe Weather Conditions</b> ..... | 32 |
| <b>Glossary</b> .....                            | 34 |

**CAREER  
PATHS**

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3

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## Scope and Sequence

| Unit | Topic                            | Reading context     | Vocabulary   | Function                   |
|------|----------------------------------|---------------------|--|----------------------------|
| 1    | Machinery Inspection             | Memo                | build-up, checklist, clockwise, counterclockwise, defective, downtime, leak, maintenance, repair, service hour, walk-around inspection, worn   | Making an assumption       |
| 2    | Lockout-Tagout Procedures        | Information sheet   | affected employee, authorized employee, danger zone, energy control point, energy isolating device, hazardous energy, individual, isolation, notify, override, residual energy, lockout-tagout, verification   | Clarifying information     |
| 3    | Working in Confined Spaces       | Company regulations | atmosphere, attendant, confined space, engulf, entry supervisor, entry, exit, occupancy, permit space, permit system, rescue service, standby, trap  | Expressing relief          |
| 4    | Hazardous Materials              | Webpage             | biohazard, contaminated, contamination, decontaminate, explosive, handling, hazmat, MSDS, poison, radioactive, storage, upwind, vacate   | Expressing urgency         |
| 5    | Hazard Communications            | Guide               | adverse, generate, hazard determination, health hazard, identify, independent duty, inventory, list, physical hazard, substitute, supplier, transmit   | Inquiring about interest   |
| 6    | Hazardous Waste Disposal         | Website             | characteristic waste, corrosive, dispose, gas, hazardous waste, ignitable, liquid, listed waste, mixed waste, recycle, sludge, solid, solid waste, transporter, treat, universal waste   | Inquiring about knowledge  |
| 7    | Decontamination                  | Manual excerpt      | chemical decontamination, concentration, containment, contamination-reduction zone, decontamination, decontamination corridor, disinfectant, dissolve, head-to-toe decontamination, hot zone, neutralize, physical decontamination, rinsate, scrub, support zone | Expressing an opinion      |
| 8    | Backovers                        | Pamphlet            | backover, backup alarms, blind spot, high-visibility, internal traffic control plan, in-vehicle display monitors, proximity detection device, rear view, reversing, spotter, training  | Agreeing                   |
| 9    | Workplace Violence               | Poster              | aggression, assault, behavior, bully, co-worker, crime, harassment, homicide, intimidation, offender, stranger, threat, victim, workplace violence, intervention   | Providing reassurance      |
| 10   | Inappropriate Behavior           | Company policy      | chase, disciplinary, distract, encourage, freak accident, harass, horseplay, humor, intend, offensive, practical joke, prank, prosecute, reckless, wrestling, zero-tolerance   | Expressing regret          |
| 11   | Emergency Preparedness           | Article             | address, contact list, emergency, evacuation, failure, first responder, natural disaster, probability, provisions, secure, standard, transportation, utility   | Giving a reminder          |
| 12   | Reporting Safety Issues          | Guide               | anonymously, challenge, complaint, contact, federal, fine, immediate, online, OSHA, print, regional, reply, resolve, truthful  | Expressing frustration     |
| 13   | Safety Inspections               | Pamphlet            | commitment, comprehensive, dependent, general knowledge, ideal, limitation, mark, participant, particular, practice, ready-made, risk mapping, specific  | Expressing (dis)approval   |
| 14   | Conducting Safety Meetings       | Handbook excerpt    | confirm, effective, pertain, procedural, regulatory, reserve, review, safety meeting, special note, subject, suitable, video, visual aid   | Asking for information     |
| 15   | Creating a Safe Work Environment | Article             | analysis, assessment, associated, caution tape, clarify, condition, coordination, document, evident, expectation, measurement, repair tag  | Expressing dissatisfaction |

# Table of Contents

|   |    |
|---|----|
| <b>Unit 1 – Machinery Inspection</b> .....              | 4  |
| <b>Unit 2 – Lockout-Tagout Procedures</b> .....         | 6  |
| <b>Unit 3 – Working in Confined Spaces</b> .....        | 8  |
| <b>Unit 4 – Hazardous Materials</b> .....               | 10 |
| <b>Unit 5 – Hazard Communications</b> .....             | 12 |
| <b>Unit 6 – Hazardous Waste Disposal</b> .....          | 14 |
| <b>Unit 7 – Decontamination</b> .....                   | 16 |
| <b>Unit 8 – Backovers</b> .....                         | 18 |
| <b>Unit 9 – Workplace Violence</b> .....                | 20 |
| <b>Unit 10 – Inappropriate Behavior</b> .....           | 22 |
| <b>Unit 11 – Emergency Preparedness</b> .....           | 24 |
| <b>Unit 12 – Reporting Safety Issues</b> .....          | 26 |
| <b>Unit 13 – Safety Inspections</b> .....               | 28 |
| <b>Unit 14 – Conducting Safety Meetings</b> .....       | 30 |
| <b>Unit 15 – Creating a Safe Work Environment</b> ..... | 32 |
| <b>Glossary</b> .....                                   | 34 |



# 1

# Industrial Safety

## Get ready!

1 Before you read the passage, talk about these questions.

- 1 What are some common industrial workplace hazards?
- 2 Why is industrial safety important?



## Industrial Safety



**Industrial safety** is very important. Companies have a **responsibility** to their employees. They need to provide a safe **work environment**.

Those working in industry encounter physical hazards. Such **risks** are often unavoidable. However, having set safety **procedures** **reduces** **dangerous** situations.

Moving machinery is a common workplace hazard. Other dangers include chemicals, tight spaces, noise and temperature.

Most countries have safety **regulations**. **Compliance** with such regulations is usually the law. Some companies dislike government involvement in industry. But industrial safety benefits both employers and employees. It decreases costly sick days and legal action. Having a good safety program also improves a company's reputation.

## Reading

2 Read the manual excerpt. Then, mark the following statements as true (T) or false (F).

- 1  Businesses have a duty to provide a safe workplace.
- 2  Safety rules reduce workplace risk.
- 3  Industrial safety benefits employees more than companies.

## Vocabulary

3 Read the sentences and choose the correct words or phrases.

- 1 Safety procedures decrease the chance of **dangerous** / **industrial** situations.
- 2 There are always some **risks** / **work environments** associated with industrial settings.
- 3 The manager was careful to follow every **safety** / **regulation**.
- 4 The company owner introduced a new safety **compliance** / **procedure**.

4 Fill in the blanks with the correct words or phrases: *compliance, industrial, reduce, responsibility, safety, work environment*.

- 1 The manager's goal was to \_\_\_\_\_ accidents in the workplace.
- 2 The factory owner made sure she was in total \_\_\_\_\_ with safety laws.
- 3 It is the company's \_\_\_\_\_ to provide a safe workplace for its employees.
- 4 New workers study the company's \_\_\_\_\_ manual.
- 5 The government has special safety guidelines for \_\_\_\_\_ workplaces.
- 6 Felicia tries to make a safe and productive \_\_\_\_\_ for her workers.

- 5 Listen and read the manual excerpt again. How do governments ensure industrial safety compliance?

## Listening

- 6 Listen to a conversation between a supervisor and a new employee. Choose the correct answers.

- What is the purpose of the conversation?
  - A to review the causes of an industrial accident
  - B to inform the man about company procedure
  - C to discuss newly introduced regulations
  - D to explain potential hazards to the woman
- What can be inferred about the woman?
  - A She is making a list of industrial safety regulations.
  - B She has not been involved in a workplace accident.
  - C She is concerned about moving the machinery.
  - D She wants to keep the company's good safety record.

- 7 Listen again and complete the conversation.

**Supervisor:** Before you start, we need to 1 \_\_\_\_\_ safety.

**New Employee:** Okay.

**Supervisor:** Here's a list of 2 \_\_\_\_\_. Please read it carefully.

**New Employee:** Of course. I'll be sure to follow all 3 \_\_\_\_\_.

**Supervisor:** Good. We have a lot of moving machinery here. Ignoring safety procedures 4 \_\_\_\_\_ accidents.

**New Employee:** I see you 5 \_\_\_\_\_ of accident-free days.

**Supervisor:** We do. No one has been hurt in 401 days. So, just ask if you have 6 \_\_\_\_\_ about safety.

**New Employee:** I'll be sure to do that.

## Speaking

- 8 With a partner, act out the roles below based on Task 7. Then, switch roles.

### USE LANGUAGE SUCH AS:

*Please read ...*  
*I'll be sure to ...*  
*So, just ask if ...*

**Student A:** You are a supervisor. Talk to Student B about:

- industrial safety
- company procedures
- accident-free days

**Student B:** You are a new employee. Talk to Student A about industrial safety.

## Writing

- 9 Use the manual excerpt and the conversation from Task 8 to complete the workplace safety poster.



**Workplace safety:** \_\_\_\_\_

**Potential Hazards:** \_\_\_\_\_

**Responsibility:** \_\_\_\_\_

**Regulations:** \_\_\_\_\_

# Glossary

- accident** [N-COUNT-U14] An **accident** is a sudden event in which a person is hurt without anyone intending for it to happen.
- air compressor** [N-COUNT-U5] An **air compressor** is a machine that converts power from an electric motor, diesel engine, or gasoline engine into mobile energy.
- allergy** [N-COUNT-U13] An **allergy** is a negative reaction of the body to substances and elements that do not usually affect others. Examples may include pollen, medications, and certain foods.
- analgesic** [N-COUNT-U15] An **analgesic** is a drug that relieves pain without blocking the transmission of nerve impulses or dulling the senses.
- antibiotic ointment** [N-COUNT-U15] An **antibiotic ointment** is a jelly-like chemical substance that prevents and fights infection and helps to heal wounds faster.
- arc flash clothing** [N-UNCOUNT-U8] **Arc flash clothing** is clothing worn to protect a person against high voltage electricity.
- asbestosis** [N-UNCOUNT-U13] **Asbestosis** is a type of lung disease that is caused by long-term exposure to asbestos fibers.
- asthma** [N-UNCOUNT-U13] **Asthma** is a chronic lung disorder characterized by airway blocks and difficulty breathing, accompanied by coughing, wheezing, and tightness in the chest.
- backhoe** [N-COUNT-U6] A **backhoe** is a big machine that digs holes.
- balance** [N-UNCOUNT-U12] **Balance** is a sense of stability that is produced by even distribution of weight.
- bandage** [N-COUNT-U15] A **bandage** is a strip of fabric or elastic adhesive that is used to cover or bind up wounds.
- broken** [ADJ-U10] If something is **broken**, it does not work correctly or at all.
- bulldozer** [N-COUNT-U6] A **bulldozer** is a heavy vehicle with a big, curved, open container on the front. It is used for moving earth and rocks and knocking down structures.
- burn** [N-COUNT-U14] A **burn** is an injury that a person gets from fire, heat, sunlight or acid.
- capacity** [N-UNCOUNT-U12] **Capacity** is the physical ability to perform tasks.
- cardiovascular disease** [N-UNCOUNT-U13] **Cardiovascular disease** is an illness or condition related to or involving the heart and blood vessels. Examples include hypertension and atherosclerosis.
- center of gravity** [PHRASE-U12] **Center of gravity** refers to the point at which the body's weight can be supported, allowing it to remain stable in any position.
- chisel** [N-COUNT-U2] A **chisel** is a long blade with a sharp edge for trimming and shaping wood and stone.
- chronic** [ADJ-U13] If something is **chronic**, it is characterized by long intervals or frequent recurrence.
- circular saw** [N-COUNT-U3] A **circular saw** is a powerful electrical saw with a round, spinning blade.
- clean up** [PHRASAL V-U10] To **clean up** is to tidy and clean an area thoroughly.
- clear** [ADJ-U10] If something is **clear**, it is empty, without lots of objects on it.
- clinic** [N-COUNT-U9] A **clinic** is a place where people go to get medical treatment when they do not need to stay in a hospital.
- cold pack** [N-COUNT-U15] A **cold pack** is an ice pack or refrigerant gel pack used to reduce pain from minor injuries, such as sprains.
- comfort** [N-UNCOUNT-U11] **Comfort** is a relaxed feeling in the body without pain.
- compactor** [N-COUNT-U6] A **compactor** is a machine or device used to decrease the size of waste material by pressing down hard on it.
- compliance** [N-UNCOUNT-U1] **Compliance** is the practice of following a rule or obeying a law.
- concussion** [N-COUNT-U14] A **concussion** is a type of brain injury that is caused by an impact to the head.
- congestion** [N-UNCOUNT-U10] **Congestion** is anything that blocks a route and makes it difficult to pass through.
- conveyor belt** [N-COUNT-U5] A **conveyor belt**, also known as a belt conveyor, is a machine that consists of two or more pulleys and a continuous loop of material that moves around them.
- counseling** [N-UNCOUNT-U9] **Counseling** is advice and help given by a professional to someone who has problems.



**coveralls** [N-PLURAL-U7] **Coveralls** are protective clothing that cover a person's body, and it's worn over the clothes.

**CPR** [N-UNCOUNT-U15] **CPR** is an emergency procedure that provides an unconscious person's brain and other vital organs with life-sustaining oxygen, usually administered after a heart attack or near drowning.

**CTS (Carpal Tunnel Syndrome)** [ABBREV-U13] **CTS (Carpal Tunnel Syndrome)** is a condition caused by an injury on a nerve in the wrist.

**crane** [N-COUNT-U4] A **crane** is a machine, often suspended from the ceiling of a warehouse, equipped with a hoist that is used to lift and lower materials, or to move them horizontally.

**crush** [V-T-U14] To **crush** is to hit or press something with so much force that it breaks.

**cutting shears** [N-UNCOUNT-U3] **Cutting shears** is an electrical tool for cutting through sheets of metal or other tough material.

**dangerous** [ADJ-U1] If something is **dangerous**, it is likely to cause harm or damage to someone or something.

**defibrillator** [N-COUNT-U15] A **defibrillator** is an electronic device used on people experiencing cardiac arrest that sends electric shocks to the heart to restore normal heart rhythm.

**dermatitis** [N-UNCOUNT-U13] **Dermatitis** is a skin condition, often caused by an allergy, which is characterized by itching, redness, and blistering.

**die cutter** [N-COUNT-U5] A **die cutter**, also called a shearer, is a machine that cuts wood without producing chips, and that does not require burning or melting.

**discomfort** [N-UNCOUNT-U11] **Discomfort** is an uncomfortable, painful feeling in the body.

**divide** [V-T-U12] To **divide** something is to separate it into different sections, categories, or parts.

**drill** [N-COUNT U2] A **drill** is a tool, either electrical or non-electrical, that makes holes for screws.

**dump truck** [N-COUNT-U6] A **dump truck** is a vehicle with a big, open container on the back. This container can be tilted so that the material inside pours out onto the ground.

**dust collector** [N-COUNT-U5] A **dust collector** is a system that enhances air quality, particularly during industrial and commercial processes, by collecting dust and other particles from air or gas.

**earmuffs** [N-PLURAL-U7] **Earmuffs** fit over the head and ears and protect the wearer from loud noises.

**earplugs** [N-PLURAL-U7] **Earplugs** fit inside the ears and protect the wearer from loud noises.

**embosser** [N-COUNT-U5] An **embosser** is a machine that produces raised or sunken designs in pieces of sheet metal.

**emphysema** [N-UNCOUNT-U13] **Emphysema** is a lung condition characterized by air-filled expansions in the lungs. It is usually caused by cigarette smoking, and symptoms include breathlessness, chest tightness, and wheezing. It may also lead to death.

**environmental** [ADJ-U11] If something is **environmental**, it is related to a place or area.

**ergonomics** [N-PLURAL-U11] **Ergonomics** study and design the work environment in a way so as to reduce injury to workers and allow them to work in comfort.

**examine** [V-T-U12] To **examine** something is to inspect it or test its condition.

**excavator** [N-COUNT-U6] An **excavator** is a large machine with a big arm, which is used to dig holes and move earth.

**exposure** [N-UNCOUNT-U13] **Exposure** is the state of being unprotected from disease or illness.

**face shield** [N-COUNT-U7] A **face shield** is a clear plastic guard that covers the face and protects from projectiles and splashes.

**fall** [N-COUNT-U14] A **fall** is the movement of a person or object downward, or to the ground.

**fatal** [ADJ-U14] If something is **fatal**, it results in a person's death.

**fatigue** [N-UNCOUNT-U9] **Fatigue** is the feeling of being either very mentally or physically tired and drained.

**file** [N-COUNT-U2] A **file** is a long tool with a rough side for making metal smoother.

**finger cots** [PLURAL-U8] **Finger cots** are disposable covers for the fingers and thumbs, to use instead of gloves.

**first aid** [N-UNCOUNT-U15] **First aid** is temporary treatment given to a person in the instance of illness or injury before professional medical help arrives.

# Glossary

- first aid kit** [N-COUNT-U15] A **first aid kit** is a collection of supplies and equipment used when providing first aid. Some supplies include bandages, gauze pads, antiseptic wipes or sprays, and saline. Some equipment includes stethoscopes, tweezers, scissors, and syringes.
- fitness** [N-UNCOUNT-U9] **Fitness** is the state of being healthy and strong enough to do something.
- fitness for duty** [PHRASE-U9] **Fitness for duty** is a type of medical assessment to assess if someone is able to do their job.
- flame resistant clothing** [N-UNCOUNT-U8] **Flame resistant clothing** is clothing worn to protect a person against fire.
- forearm cuff** [N-COUNT-U8] A **forearm cuff** is a plastic device worn around the lower arms to stop sleeves dropping.
- forklift** [N-COUNT-U4] A **forklift**, also called a lift truck, fork truck, or tow-motor, is motorized equipment used in manufacturing and warehousing operations to lift and transport materials, such as pallets and crates.
- fracture** [N-COUNT-U14] A **fracture** is a crack or break that occurs in a bone.
- furnace** [N-COUNT-U5] A **furnace** is an enclosed structure that produces heat, particularly for a house.
- gas mask** [N-COUNT-U8] A **gas mask** is a type of protective clothing worn over the face, to protect a person from poisonous gases. It is the same as a respirator.
- gauze** [N-UNCOUNT-U15] **Gauze** is a light, loosely woven cotton used for surgical dressings or used to wrap more serious wounds.
- gloves** [N-PLURAL-U7] **Gloves** are items of clothing that fit on a person's hand.
- goggles** [N-PLURAL-U7] **Goggles** fit over the head with an elastic strap and protect the eyes from chemicals, gases and projectiles.
- grader** [N-COUNT-U6] A **grader** is a heavy piece of machinery which is used to flatten dirt.
- gravity conveyor** [N-COUNT-U4] A **gravity conveyor** is an adjustable device, usually used near a loading dock, which uses roller wheels and supports to move boxes quickly from one location to another.
- grinder** [N-COUNT-U5] A **grinder** is a tool that is used to refine materials or to resharpen cutting tools.
- hacksaw** [N-COUNT-U2] A **hacksaw** is a hand tool with a toothed blade for cutting metal.
- hammer** [N-COUNT-U2] A **hammer** is a tool for hitting nails into wood.
- hand truck** [N-COUNT-U4] A **hand truck**, also known as a dolly, is a wheeled device used to transport small loads.
- hard hat** [N-COUNT-U7] A **hard hat** is an item of protective clothing worn on the head.
- HAVS (hand-arm vibration syndrome)** [ABBREV-U13] **HAVS (hand-arm vibration syndrome)** is a condition that leads to numbness in the fingers, muscle weakness, and some bouts of white finger due to injuries in small nerves and blood vessels. It is caused by operating vibrating tools.
- hazmat suit** [N-COUNT-U8] A **hazmat suit** (hazardous materials suit) is a suit and mask which completely covers the body. It is worn in dangerous and highly toxic environments.
- health** [N-UNCOUNT-U9] **Health** is the overall condition of your body and whether or not you are sick.
- heart attack** [N-COUNT-U15] A **heart attack** is an episode of heart disease, characterized by severe chest pain, marked by the death of a section of the heart muscle caused by an interruption of blood flow to the area.
- hepatitis** [N-UNCOUNT-U13] **Hepatitis** is a viral disease that causes inflammation of the liver. There are seven known types, marked from A to G.
- hex wrench** [N-COUNT-U2] A **hex wrench** is a small wrench which turns nuts by fitting inside a hexagonal-shaped hole in the nut.
- high visibility clothing** [N-UNCOUNT-U8] **High visibility clothing** is fluorescent clothing, usually yellow or orange, which is easy to see during the day and at night.
- hoist** [N-COUNT-U4] A **hoist** is a manually or electrically-operated device that is used to lift or lower items with the help of wire rope, fibers, or chains.
- housekeeping** [N-UNCOUNT-U10] **Housekeeping** refers to the general jobs that help keep a building clean, tidy and safe.
- impact driver** [N-COUNT-U3] An **impact driver** is a powerful tool for screwing or unscrewing tough screws.

**improvement** [N-COUNT-U11] An **improvement** is when something gets better.

**in reverse** [PHRASE-U12] To move **in reverse** means moving in an opposite direction.

**industrial** [ADJ-U1] If something is **industrial**, it relates to the production of goods and substances, particularly in a factory setting.

**injury** [N-COUNT-U14] An **injury** is physical damage or harm done to part of a person's body.

**lab coat** [N-COUNT-U8] A **lab coat** is a long coat, usually white, worn over the clothes in laboratories.

**laceration** [N-COUNT-U14] A **laceration** is a cut in a person's skin.

**laminator** [N-COUNT-U5] A **laminator** is a machine that manufactures material in multiple layers so that the completed material has greater strength, stability, and improved appearance.

**latex gloves** [N-PLURAL-U15] **Latex gloves** are disposable gloves worn by caregivers during medical examinations and treatment procedures to prevent infection.

**lift** [V-T-U12] To **lift** something is to raise it from a lower position, usually off of a surface, to a higher position.

**lighting** [N-UNCOUNT-U11] **Lighting** is a way of making a dark place bright. It usually refers to electric lights, but sometimes includes windows too.

**loose** [ADJ-U10] If something is **loose**, it is not tightly fixed, and may come out.

**method** [N-COUNT-U10] A **method** is a way of doing something.

**miter saw** [N-COUNT-U3] A **miter saw** is a saw which allows a person to cut accurate angles.

**musculoskeletal disorder** [N-COUNT-U11] A **musculoskeletal disorder** is an injury to the bones and muscles in the body.

**nail gun** [N-COUNT-U3] A **nail gun** is a powerful tool for pushing nails with force.

**needle nose pliers** [N-UNCOUNT-U2] **Needle nose pliers** are pliers with long thin ends for fitting inside tight spaces.

**noise** [N-UNCOUNT-U11] **Noise** is how loud or quiet something is.

**nutrition** [N-UNCOUNT-U9] **Nutrition** is the process of giving or receiving the correct kind of food for good health.

**obstruction** [N-COUNT-U12] An **obstruction** is an object that blocks or prevents action or operation.

**occupational health** [N-UNCOUNT-U9] **Occupational health** is the kind of medicine that focuses on all aspects of employee health in the workplace.

**orderly** [ADJ-U10] If something is **orderly**, it is tidy and neat.

**pallet jack** [N-COUNT-U4] A **pallet jack**, also called a pallet truck, pump truck or jigger, is a device that is used to lift and move pallets.

**physical** [ADJ-U11] If something is **physical**, it is related to the body and its movements.

**physical exam** [N-COUNT-U9] A **physical exam** is a medical assessment to see if someone is healthy enough to do something, like a specific job.

**pile driver** [N-COUNT-U6] A **pile driver** is a big machine, which is used to push posts into the ground.

**pinch** [V-I-U14] To **pinch** is to press someone's skin or flesh very tightly between two things, causing pain.

**pliers** [N-PLURAL-U2] **Pliers** is a tool with two handles, used to cut, pull or twist wire.

**posture** [N-UNCOUNT-U11] **Posture** is the way a person stands, sits or moves.

**power drill** [N-COUNT U3] A **power drill** is an electrical tool that makes holes for screws.

**power saw** [N-COUNT-U3] A **power saw** is an electrical tool for cutting large objects, such as wood.

**PPE** [ABBREV-U7] **PPE** is personal protective clothing and equipment that employees must wear when they work at factories, construction sites and laboratories.

**press** [N-COUNT-U5] A **press**, also called a forming press, is a machine that is used to change the shape of work material.

**preventative care** [N-UNCOUNT-U9] **Preventative care** is the kind of medicine that focuses on stopping diseases or injuries before they actually happen.

**procedure** [N-COUNT-U1] A **procedure** is the correct or typical way of doing something.



# Glossary

- protrusion** [N-COUNT-U10] A **protrusion** is something that sticks out of an otherwise smooth surface.
- puncture** [V-T-U14] To **puncture** something is to form a small hole in it.
- reduce** [V-T-U1] To **reduce** something is to make it smaller in terms of size, quantity, significance or price.
- regulation** [N-COUNT-U1] A **regulation** is an official order that determines the way in which things are done. It can also mean using rules to control something.
- repetition** [N-UNCOUNT-U11] **Repetition** is the action of doing something again and again.
- respirator** [N-COUNT-U8] A **respirator** is a type of protective clothing worn over the face, to protect the wearer from poisonous gases. It is the same as a gas mask.
- responsibility** [N-UNCOUNT-U1] **Responsibility** is the job or duty of being in charge of someone or something. It often involves making decisions and taking the blame if something goes wrong.
- risk** [N-UNCOUNT-U1] **Risk** is the chance that something bad, unpleasant or dangerous might happen.
- rivet gun** [N-COUNT-U3] A **rivet gun** is a powerful electrical tool for pushing bolts into sheets of metal.
- RSI (Repetitive Strain Injury)** [ABBREV-U13] **RSI (Repetitive Strain Injury)** is any type of musculoskeletal disorder, such as carpal tunnel syndrome (CTS), caused by damage to muscles, tendons, ligaments, nerves, or joints, as a result of repetitive movements. Symptoms include pain, weakness, and loss of feeling.
- safe** [ADJ-U12] Something that is **safe** is not harmful or dangerous.
- safety** [N-UNCOUNT-U1] **Safety** is when someone or something is protected from damage, harm or danger.
- safety glasses** [N-PLURAL-U7] **Safety glasses** are equipment that fit over the eyes and protect them from projectiles.
- safety harness** [N-COUNT-U8] A **safety harness** is something people wear around their waist and legs and attach to ropes when climbing.
- sander** [N-COUNT-U3] A **sander** is an electrical tool for making wooden surfaces smooth.
- sanitary** [ADJ-U10] If something is **sanitary**, it is clean of harmful bacteria that can cause illness.
- saw** [N-COUNT-U2] A **saw** is a tool, either electrical or non-electrical, that cuts large objects, such as wood.
- schedule** [N-COUNT-U10] A **schedule** is a timetable which states when something needs doing.
- scissor lift** [N-COUNT-U4] A **scissor lift** is a platform, composed of linked supports that form a crisscross pattern, which can only move vertically.
- scraper** [N-COUNT-U6] A **scraper** is a machine with a blade that scrapes the roadbed or earth and stores rubble for later disposal.
- screening** [N-UNCOUNT-U9] **Screening** is when medical tests are done to check that someone does not have a specific disease.
- sheeter** [N-COUNT-U5] A **sheeter** is a machine that forms a material into sheets.
- shift work** [N-UNCOUNT-U9] **Shift work** is an employment practice that splits the day into set time periods, during which different employees take up their posts. Each of these divisions is called a shift.
- skidder** [N-COUNT-U6] A **skidder** is a heavy vehicle, which is used to remove cut trees from a forest.
- slip** [V-I-U14] To **slip** is to slide a short distance by accident and either lose your balance or fall down.
- soldering iron** [N-COUNT-U3] A **soldering iron** is a tool for fixing together small pieces of metal, such as wires.
- spill** [N-COUNT-U10] A **spill** is when some liquid falls on the floor or onto a surface.
- spray booth** [N-COUNT-U5] A **spray booth** is a pressure-controlled, enclosed space, which helps to control temperature, humidity, and air flow, and is used to paint vehicles in a body shop.
- squat** [V-I-U12] To **squat** is to bend the knees to lower oneself to the ground, using the feet for support.
- stacker** [N-COUNT-U4] A **stacker** is a large machine that is used in bulk material handling, such as piling limestone, ores, and cereals onto stockpiles.
- steel toed** [ADJ-U7] If boots are **steel toed**, they contain metal to protect the toes from falling objects.
- straighten** [V-T-U12] To **straighten** the body is to arrange it so that it is free from curves, bends, or angles.
- strength** [N-COUNT-U12] **Strength** is the quality or state of being strong, or having the physical power to exert force on objects.

**stress** [N-UNCOUNT-U9] **Stress** is an ongoing worried or nervous feeling that stops someone from relaxing.

**task** [N-COUNT-U11] A **task** is a specific activity of work that someone must do.

**temperature** [N-UNCOUNT-U11] **Temperature** is how hot or cold something is.

**thumb guard** [N-COUNT-U8] A **thumb guard** is a protective sheath made of leather, worn around the thumb, to protect from accidental cuts when using a knife.

**torque wrench** [N-COUNT-U2] A **torque wrench** is a wrench which applies equal pressure to a nut as it tightens it.

**towing truck** [N-COUNT-U4] A **towing truck** is an electric tractor, equipped with a shift and a roller bed, which may be used indoors or outdoors to transport heavy items.

**tractor** [N-COUNT-U6] A **tractor** is a vehicle with big wheels, which is used to pull farm machinery.

**trip** [V-I-U14] To **trip** is to accidentally hit your foot on an object, causing you to fall or stumble.

**trolley** [N-COUNT-U4] A **trolley** is a device used in warehousing, composed of a flatbed, wheels mounted on a swivel frame, and a fixed handle that is used to push or pull the loaded platform.

**twist** [V-T-U12] To **twist** the body is to turn it at the waist.

**urgent care** [N-UNCOUNT-U9] **Urgent care** is a type of medical facility that provides outpatient help to those with medical issues. It is usually for patients who need immediate attention but whose injuries are not severe enough for the emergency room.

**utility knife** [N-COUNT-U2] A **utility knife** is a multipurpose knife. It often has a replaceable and/or retractable blade.

**vibration** [N-COUNT-U11] A **vibration** is a quick, repetitive shaking movement.

**weld mask** [N-COUNT-U7] A **weld mask** is a special faceshield used by welders that protects against light and heat as well as projectiles.

**welder** [N-COUNT-U3] A **welder** is a tool for fixing together large pieces of metal.

**work boots** [N-PLURAL-U7] **Work boots** are heavy boots for industrial environments.

**work environment** [N-COUNT-U1] A **work environment** is any location where people do work for money.

**workstation** [N-COUNT-U5] A **workstation** is an area supplied with equipment for the performance of a task, usually one that is completed by a single individual.

**wrench** [N-COUNT-U2] A **wrench** is a tool for turning nuts. It is like a spanner, but it can be made larger and smaller.

# INDUSTRIAL Safety

**Career Paths: Industrial Safety** is a new educational resource for industrial safety professionals who want to improve their English communication in a work environment. Incorporating career-specific vocabulary and contexts, each unit offers step-by-step instruction that immerses students in the four key language components: reading, listening, speaking, and writing. **Career Paths: Industrial Safety** addresses topics including parts of a factory, inspections, safety equipment, emergency response, and handling chemicals.

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**Nathan Moore** is an industrial safety engineer with a master's degree in Industrial Engineering. Mr. Moore has over fifteen years' of experience working for large manufacturing companies, ensuring they maintain a safe work environment for their employees.



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