



MPC's Industrial Safety Quiz

<http://www.mpofcinci.com/industrial-safety-quiz>

General Safety

1. How many workers were killed on the job in 2012?

- A. 46
- B. 462
- C. 4,628
- D. 46,280

2. What violations are most commonly cited by OSHA?

- A. Hazard communications
- B. Scaffolding
- C. Fall protection
- D. Respiratory protection

3. What is the leading cause of death on construction sites?

- A. Struck by object
- B. Falls
- C. Caught-in or -between
- D. Electrocutions

Hazardous Materials

4. The following symbol is used when something in your workplace is a:



- A. Chemical Weapon
- B. Biohazard
- B. Toxic Substance
- C. Radiation Danger

5. Which of the following is *not* a chemical-related health hazard?

- A. Carcinogenicity
- B. Reactivity
- C. Corrosivity
- D. Toxicity

6. A container holding a hazardous material must include which of the following as of June 15, 2014:

- A. Identity of the hazardous chemical only
- B. Identity of the hazardous chemical, instructions on how to use
- C. Identify of the hazardous chemical, names of employees authorized to use
- D. None of the above

7. If you wanted to convey the most severe type of hazard, which word would you use?

- A. Warning
- B. Notice
- C. Danger
- D. Caution

8. This symbol means which of the following:



- A. Danger, ionizing radiation
- B. Danger, how-hanging and powerful fan
- C. Danger, risk of frostbite
- D. None of the above

9. This hazard symbol is used when something is:



- A. Corrosive
- B. Almost empty
- C. Flammable
- D. Highly acidic

10. If you transfer chemicals from a labeled container to a portable container, you don't need to comply with standard hazardous material labeling requirements when:

- A. You hand the container off to someone else
- B. You leave the work area before using the materials
- C. You don't use the materials before the end of your work shift

D. None of the above

11. Ammonia becomes an immediate danger to your life and health when it is present at the following level or greater:

- A. 10 ppm
- B. 30 ppm
- C. 300 ppm
- D. 1000 ppm

Hand & Power Tools

12. You should wear eye, head, and face protection if you are working with which of the following tools?

- A. Portable abrasive wheel tools
- B. Electric tools
- C. Pneumatic tools
- D. Liquid fuel tools

13. Which of these is *not* a power tool safety precaution?

- A. Never carry a tool by the cord or hose.
- B. Never yank the cord or the hose to disconnect it from the receptacle.
- C. Keep tools plugged in when not in use, before servicing, and when changing accessories such as blades, bits and cutters.
- D. Keep cords and hoses away from heat, oil, and sharp edges.

14. Which of the following is *not* true about powder-actuated tools?

- A. If a powder-actuated tool misfires, you should try to fire it again immediately.
- B. They are so dangerous they can only be powered by specially trained employees.
- C. They should never be loaded unless they are being used immediately.
- D. They require two separate motions for firing -- one to bring to tool into position and another to pull the trigger.

15. Hydraulic jacks exposed to freezing temperatures must:

- A. Be filled with adequate antifreeze liquid
- B. Be warmed up before use
- C. Be tagged and immediately removed from service
- D. None of the above

16. If you are working near a flammable substance, you should always use iron or steel hand tools.

- A. True
- B. False

17. OSHA requires that electric tools:

- A. Have a three wire cord with ground and be grounded
- B. Be double insulated
- C. Be powered by a low-voltage transformer
- D. Any of the above

18. You should not use a wedge if it has:

- A. Pointed head
- B. Triangular head
- C. Mushroomed head
- D. Flat head

Noise

19. The Occupational Safety & Health Administration requires employers to have Hearing Conservation Plans if the average 8-hour noise exposure is more than:

- A. 1000 decibels
- B. 500 decibels
- C. 105 decibels
- D. 85 decibels

20. A normal conversation registers at about:

- A. 0 to 10 decibels
- B. 10 to 20 decibels
- C. 30 to 40 decibels
- D. 50 to 60 decibels

21. Exposure to high levels of noise can lead to which of the following:

- A. High blood pressure

- B. Gastrointestinal problems
- C. Chronic fatigue.
- D. All of the above

22. The most effective way to prevent hearing loss at work is to:

- A. Monitor your hearing loss over time with a routine hearing test
- B. Always wear ear protection everywhere you go
- C. Monitor noise levels through engineering and administrative controls to minimize overexposure
- D. None of the above

Slip & Fall

23. How many points of contact should you maintain with a ladder at all times?

- A. At least two
- B. At least three
- C. One
- D. Four

24. How often should ladders be inspected?

- A. Before each use
- B. Once a week
- C. Once a month
- D. Every 6 months

25. OSHA prohibits working on a scaffold in the presence of winds above:

- A. 10 mph
- B. 20 mph
- C. 30 mph
- D. 40 mph

26. Ladders should be angled so that the its base is one foot out from the wall for each ____ feet of a ladder's height.

- A. 2

- B. 4
- C. 8
- D. 10

27. If you fall, you should always try and break your fall with your hands.

- A. True
- B. False

28. OSHA restricts ladders from being higher than:

- A. 20 feet
- B. 15 feet
- C. 12 feet
- D. 10 feet

Forklift & Manlifts

29. If you are driving a forklift and it begins to tip over, you should

- A. Jump out immediately
- B. Stay in the vehicle with your seatbelt unfastened
- C. Stay in the vehicle with your seatbelt fastened
- D. Stand up with a tight grip on the steering wheel

30. A forklift or industrial truck is unattended if the operator is:

- A. More than 25 feet away from the vehicle
- B. More than 18 feet away from the vehicle
- C. More than 8 feet away from the vehicle
- D. More than 3 feet away from the vehicle

31. Which of the following information is *not* found on a forklift nameplate?

- A. Fuel type
- B. Load capacity
- C. Names of licensed operators
- D. Weight of the forklift

32. While carrying a load downhill on a forklift, you should:

- A. Zig-zag down the hill slowly
- B. Drive forward with the fork pointing downhill
- C. Drive in reverse with the fork pointing uphill
- D. None of the above

33. While lowering a load with a forklift, you should *not* do which of the following?

- A. Tilt the mast backward to stabilize the load
- B. Stop the truck and put the mast to vertical position
- C. Move the truck 8 to 12 feet away from the stack
- D. Lower the load so that its lowest point is 6 to 8 inches from the ground

34. What is OSHA's maximum capacity for a manlift?

- A. 500 lbs, 2 people
- B. 500 lbs, 3 people
- C. 400 lbs, 2 people
- D. 200 lbs, 1 person

Fire

35. On which of the following types of surfaces should a Class B fire extinguisher *not* be used?

- A. Paint
- B. Grease
- C. Oil
- D. Plastic

36. On which of the following types of surfaces should a Class A fire extinguisher *not* be used?

- A. Cloth
- B. Wood
- C. Paper
- D. Electrical equipment

37. Which type of fire extinguishing system is most commonly used to protect areas containing valuable equipment such as data processing rooms, telecommunications switches, and process control rooms?

- A. Fixed extinguishing systems
- B. Portable extinguishing systems
- C. Hose extinguishing systems
- D. It's up to the discretion the employer

38. Which class of fire extinguishers should you use on electrically energized fires?

- A. Class A
- B. Class B
- C. Class C
- D. Class D

39. The acronym "PASS" used for fire extinguisher operation stands for:

- A. Pick up, Aim, Squeeze, Squirt
- B. Push, Alarm, Swirl, Sweep
- C. Pull, Aim, Squeeze, Sweep
- D. Pull, Aim, Swirl, Swat

Personal Protective Equipment

40. If you need to wear glasses with your eye or face protection, which of the following options is acceptable:

- A. Wearing prescription spectacles with side shields and protective lenses that meet safety requirements and also correct your vision
- B. Wearing goggles that fit comfortably over your glasses
- C. Wearing goggles that have corrective lenses mounted behind the protective lenses
- D. All of the above

41. Which helmet provides electrical protection from high-voltage conductors?

- A. Class A helmets
- B. Class B helmets
- C. Class C helmets
- D. Class D helmets

42. Which of the following helmets should you *not* use around electrical hazards?

- A. Class A helmets
- B. Class B helmets
- C. Class C helmets
- D. Class D helmets

43. Rubber insulating gloves need to be tested:

- A. Before first use and then every 6 months
- B. Before first use and then once/week
- C. Before first use and then once/month
- D. Before first use only

44. Which of the following conditions is least likely to prevent you from wearing a respirator?

- A. Having sideburns
- B. Wearing glasses.
- C. Having a beard.
- D. Wearing contact lenses

Electrical

45. If you see this sign in your workplace you should:



- A. Not work near in area if it can be avoided
- B. Always assume the line is live
- C. Avoid using tools like ladders and scaffold poles that might touch the power lines
- D. All of the above

46. Portable space heaters can be a danger in the workplace, and therefore, must:

- A. Be approved by the Plan Administrator
- B. Have tip-over protection that shuts off the heater if it tips over
- C. Have adequate clearance between the heater and any combustibles
- D. All of the above

47. The most dangerous place to use electrical equipment is:

- A. Near a ladder
- B. Outdoors
- C. Near water
- D. Near other electrical equipment

48. The safest ladder to use around electricity is:

- A. Wood
- B. Aluminum
- C. A smaller step stool
- D. Fiberglass

49. Flexible cords may *not* be used for which of the following:

- A. Wiring of cranes and hoists
- B. Elevator cables
- C. To prevent transmission of noise or vibration
- D. As a substitute for permanent wiring

50. The effects that an electrical shock has on your body can depend on:

- A. Its current
- B. The presence of moisture in the environment
- C. Its duration
- D. All of the above

ANSWERS:

General Safety

1. Answer: C

The Occupational Safety & Health Administration (OSHA) reports that 4,628 workers were killed on the job in 2012. This is the second lowest number of reported deaths since this data collection began in 1992.

2. Answer: C

The four most commonly cited violations are fall protection, followed by hazard communication, followed by scaffolding, followed by respiratory problems.

3. Answer: B

In 2012, of 806 construction fatalities, the leading cause of death was falls (279), followed by struck by object (79), electrocutions (66), and caught-in/between (13).

Hazardous Materials

4. Answer: B

A biohazard is a biological material that poses significant health risks to humans or animals.

5. Answer: B

OSHA identifies chemical health hazards as: carcinogen, corrosive, toxic, highly toxic, irritant, sensitizer, and target organ effects.

6. Answer: D

OSHA's new labeling standards will require that containers have the product identifier, pictograms, a signal word, hazard and precautionary statements, and supplier name and address.

7. Answer: C

According to the OSHA, *Danger* conveys the highest level of risk and if not avoided, it will cause death or serious injury. *Warning* means that the risk can cause death or serious injury if not heeded. *Caution* means that the risk may cause minor or moderate injury if ignored. *Notice* is used for best practices rather than potential injury.

8. Answer: A

This symbol is used in the occurrence of a dangerous level of ionizing radiation emitting from a high-level sealed radioactive source. Accidental exposure to large radioactive sources can cause serious physical harm or death.

9. Answer: A

A corrosive sign indicates that a substance may eat through or destroy living tissue. You should avoid breathing in vapors or avoid any type of contact with your skin or clothes.

10. Answer: D

Labels aren't required on a portable container of hazardous materials if the materials are used immediately and completely during that same work shift, you are the only one using the materials transferred, and you did not leave the work area at any point.

11. Answer: C

Ammonia is corrosive to the skin, eyes, and lungs. Ammonia is also flammable at concentrations of approximately 15% to 28% by volume in air. It can explode if it comes into contact with fire or a source of ignition in an enclosed space.

Hand & Power Tools

12. Answer: C

Pneumatic tools like drills, hammers, chippers, and sanders run on compressed air and can cause injuries if the operator is hit by one of the tool's attachments' fasteners.

13. Answer: C

You should always disconnect tools when not in use, before servicing, and when changing accessories such as blades, bits and cutters.

14. Answer: A

If the tool misfires, you should wait at least 30 seconds before trying it again. If it still doesn't fire, you need to wait another 30 seconds, then carefully remove the load and put the bad cartridge in water.

15. Answer: A

OSHA rules state; "Hydraulic jacks exposed to freezing temperatures shall be supplied with an adequate antifreeze liquid."

16. Answer: B

Steel or iron hand tools can become a source of ignition when near flammable substances. Non-ferrous materials should be used in flammable environments.

17. Answer: D

To protect you from shock, OSHA states that electric tools “must either have a three-wire cord with ground and be grounded, be double insulated, or be powered by a low-voltage isolation transformer.”

18. Answer: C

Impact tools are unsafe if they have mushroomed heads because they might shatter into sharp fragments upon use.

Noise

19. Answer: D

If workers are exposed to a time-weighted average noise level of 85 dBA or higher over an 8-hour work shift, employers are required to measure noise levels, provide free hearing exams, training, and protection.

20. Answer: D

A whisper typically reaches about 30 dBA, a normal conversation reaches 50-60 dBA, and a power mower reaches about 90 dBA.

21. Answer: D

OSHA reports the following negative health effects: hearing loss, ringing in the ear, stress, anxiety, high blood pressure, gastrointestinal problems, and chronic fatigue.

22. Answer: C

According to OSHA, noise control in the form of “engineering and administrative controls” is the best step to minimize employee overexposure. Hearing protection is recommended when damage has already occurred or when the noise level can’t be controlled.

Slip & Fall

23. Answer: B

Always maintain at least 3-points of contact with a ladder – either two hands and a foot or two feet and a hand. Center your body in the middle in the middle of the steps and always face the ladder when climbing.

24. Answer: A

Ladders should be checked for defects prior to each day's use and after any incident that could cause damage to it.

25. Answer: D

Workers should not be on scaffolds when winds are above 40 mph unless a competent person has concluded it is safe and the workers are protected from fall.

26. Answer: B

OSHA states that "non-self supporting ladders are to be positioned at such an angle that the horizontal distance from the top support to the foot of the ladder is about 1/4 the working length of the ladder."

27. Answer: B

Falling safely requires training. You should:

- Never try to break your fall with your hands
- Tuck in your chin and turn your head.
- Twist your body to the side.
- Bend your wrists, knees, and elbows
- Use your arm to protect your head
- Land on as much of your body as possible to evenly distribute the weight of the fall

28. Answer: A

OSHA identifies three types of ladders:

- Industrial stepladder, which can be 3 to 20 feet for heavy duty work
- Commercial stepladder, which can be 3 to 12 feet for medium duty work
- Household stepladder, which can be 3 to 6 feet for light duty work

Forklift & Manlifts

29. Answer: C

To survive a forklift tip over, you should stay in the vehicle with your seatbelt fastened. Tightly grip the steering wheel with your feet braced against the floor, and lean away from the direction over the tip over.

30. Answer: A

If the operator is more than 25 feet away from a vehicle or the vehicle is no longer in the operator's view, the vehicle is unattended.

31. Answer: C

The nameplate displays information like the fuel type, weight of the forklift, load capacity, and model type. Forklift operators should read the nameplate before operating and should not operate machines with rusted or illegible nameplates.

32. Answer: B

When moving a load downhill, you should drive in reverse, turning your head to face downhill while the fork points uphill. You should keep the load pointing uphill regardless of the direction of travel.

33. Answer: C

OSHA provides the following guidelines for lowering a load via forklift:

1. Ensure the load is secured before moving.
2. Carefully tilt the mast backward to stabilize the load.
3. Slowly move the truck 8 to 12 inches away from the stack.
4. Return the mast to the vertical position before lowering the load.
5. Lower the load so that its lowest point is 6 to 8 inches from the floor.
6. While traveling, keep the load at a safe travel height. See [Traveling & Maneuvering](#).

34. Answer: A

The maximum basket load limit is 500 lbs with a maximum of two people in the basket.

Fire

35. Answer: D

Class B fire extinguishers use carbon dioxide to extinguish oils, paints, lacquers, grease, solvents, and flammable liquids. Plastic surfaces should be used with a Class A fire extinguisher, which contains water.

36. Answer: D

Class A extinguishers are used on ordinary combustibles including wood, cloth, and paper.

37. Answer: A

Fixed fire extinguishing or suppression systems are commonly used to protect areas containing valuable or critical equipment. They quickly extinguish a developing fire by filling the protected area with a gas or chemical agent and alert occupants before extensive damage occurs.

38. Answer: C

Class C extinguishers are used on fires involving energized electrical equipment.

39. Answer: C.

The acronym stands for:

- Pull the pin to break the tamper seal.
- Aim low, pointing the extinguisher nozzle at the base of the fire.
- Squeeze the handle to release the extinguishing agent.
- Sweep from side to side at the base of the fire until it goes out.

Personal Protective Equipment

40. Answer: D

These three options are all deemed acceptable by the Occupational Safety & Health Administration

41. Answer: B

Class B helmets are proof tested up to 20,000 volts.

42. Answer: C

Class C helmets are usually made of aluminum which conducts electricity.

43. Answer: A

OSHA states that rubber insulating gloves should be tested before first use and then every 6 months after.

44. Answer: D

OSHA's current standard on respiratory protection allows the use of contact lenses with respirators where the wearer has successfully worn such lenses before.

Electrical

45. Answer: D

Working near live overhead power lines is extremely dangerous, and should only be done when absolutely necessary and by taking the necessary precautions for your safety.

46. Answer: D

Space heaters can be used safely in the workplace if the above precautions are taken. In addition, space heaters should never be used with extension cords, as most extension cords which can become overloaded and catch fire.

47. Answer: C

Contact with water is extremely dangerous and will result in electric shock.

48. Answer: D

Aluminum ladders conduct electricity. Wooden ladders do not conduct electricity, but they can become moist and rotted over time. Fiberglass ladders offer the best choice for both for longevity and safety from electricity.

49. Answer: D

Flexible cords are one of the most frequently violated electrical standards due to their seeming ability to quickly and easily carry electricity to where it is needed. Flexible cords in general are more vulnerable than the fixed wiring of the building and should not be used in place of recognized wiring methods.

50. Answer: D

Effects can range from a barely perceptible tingle to severe burns and immediate cardiac arrest. The most important factors contributing to severity are current, path, and duration.

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