Quiz: PPE – General



QUESTION

What must be done in conducting a workplace survey to find risks and hazards to set controls and choose appropriate PPE?

A. Eliminate the hazard, engineering models, introduce experts in PPE design, talk to employees.
B. Examine materials, inspect the site, administrative controls, observe employees.
C. Inspect the site, observe employees, utilize existing procedures/protocols in workplace, examine materials.
D. Inspect the site, examine materials, observe employees, talk to employees.

ANSWER

D. Inspect the site, examine materials, observe employees, talk to employees.

WHY IS IT RIGHT

Creating a PPE Program

There are steps and processes you must conduct to successfully follow applicable regulations, establishing a PPE program that is cost-effective and reduces risk of injury.

To develop your PPE program, managers, supervisors and employees should work together to conduct the following processes:

1. Surveying the Workplace:

Conducting a workplace safety survey is an exercise in finding risks and hazards, allowing you to set controls and choose appropriate PPE.

Your team of managers, supervisors and workers must:

- Inspect the site – Look for physical dangers across your work site, such as exposed wires and obstructed paths or areas. If the site is indoors, ensure you have fire extinguishers around the facility and clearly-marked emergency exits. If the site is outdoors, ensure there is signage to alert pedestrians of danger.
- Examine materials– List materials that employees interact with or are exposed to, helping you pinpoint threats and how to mitigate them. For example, chemicals may call for the use of respirators.
- Observe employees – Take time to see how employees work, ensuring they aren’t doing anything that could lead to injury. For example, using improper technique when handling tools.

- Talk to employees – Ask them questions to see how safe they feel on a daily basis. Note specific concerns and pose follow-up questions to determine exactly why they feel at risk.

Based on the survey's results and insights, you'll be able to complete the next steps in creating a PPE program.

2. Select Appropriate Controls:

Introduce a pre-contact or point-of-contact control for each hazard you identify.

The goal of a pre-contact control is to stop workers from reaching the hazard, and vice-versa.

This can involve eliminating the hazard in question. You can do this by, for example, replacing old machinery or finding an alternative way to complete a task. You can also contain the hazard with machine guards or through isolation methods. Alerting employees of danger by introducing new signage is another obligation.

The goal of a point-of-contact control is to prevent or mitigate damage from the hazard when a worker makes contact with it.

Because point-of-contact controls don't eliminate the hazard, you should only introduce them when pre-contact controls aren't adequate. Or, you simply desire an additional safety measure.

PPE is the standard point-of-contact control.

3. Select Appropriate PPE:

The PPE that you select must protect against the workplace risks and hazards you identified, acting as either a last resort, back-up measure or temporary policy to prevent injuries.

Let's say you identified the possibility of debris falling onto workers.

Wearing hardhats can act as a last resort of protection if you can't prevent debris from falling. If you've implemented an effective control measure or are doing so, wearing hardhats can act as a back-up or temporary measure.

4. Fitting:

Keep in mind, the effectiveness of most equipment partially depends on how it fits the worker. For example, if leg protectors are too long, they can hinder wearer mobility. And if protective boots are too small, workers may forgo wearing them.

This is why you must take each worker's measurements, cross-referencing numbers with the sizing charts you can receive from PPE manufacturers.

5. Training:

Training is a crucial part in formalizing any PPE program. Workers and their supervisors must learn how to protect themselves and use their new equipment.

Tailored to the specific risks and equipment, training must cover:

- What PPE is for – Employees shouldn't just see PPE as manager-mandated accessories. Or else, they may not understand the point of using them. Explain the specific function that each piece serves, indicating the workplace hazards it protects against.
- How and when to wear PPE – It's usually not enough to talk about using PPE. Instead, demonstrate how to use each piece in different scenarios. Then, get

workers to put pieces on, allowing them to see how they should fit.
- How to spot problems – To prevent workers from using ineffective PPE, tell them how to spot deficiencies. For example, helmets with cracks have to be fixed or replaced.

Whether you run training sessions for groups or individuals, make sure new and veteran employees are up-to-date on your worksite's policies and equipment.

6. Program Audits:

Many work sites run annual audits of their PPE and general safety programs, but you may wish to review especially dangerous or important aspects more frequently.

Typically, audits involve inspecting PPE and monitoring workers to make sure they're following procedures. You should also review procedures themselves, spotting opportunities to introduce hazard controls or provide additional equipment.

To analyze your program's effectiveness, measure safety-related figures. You can do this by tracking near-accidents, injuries and the severity of these injuries.

How to Select PPE

Three Questions to Consider:

1. How long should each piece of PPE last?

Due to variation among equipment types and how heavily they're used across work sites, there isn't a consistent answer to this question.

First, look into the manufacturer's warranty and other information sources. Many manufacturers will offer a warranty period of at least one year, covering any sort of product failure.

Their products may also include information tags, detailing life expectancy. For example, most hard hats come with these tags, stating the product lasts between three and five years.

Second, talk to colleagues who have used the kind of PPE you need. Word-of-mouth can lead you towards trusted brands, helping you find equipment designed to be effective for long periods.

Remember that the longevity of PPE plays a key role in your purchasing decision, ensuring you don't have to buy equipment at a faster-than-expected rate.

2. When do you know it should be replaced?

Take these factors and scenarios into account when deciding if it's time to replace a piece of PPE:

- Manufacturer's Information – Generally, manufacturers provide information about how to identify a piece of PPE's "end of life." This is typically based on a specific date or maximum service time.
- Damage – When certain pieces of PPE are involved in accidents, they need to be replaced. For example, if a safety helmet's shell receives an irreparable scratch, you should replace it.
- Inspection – If a piece of PPE does not pass inspection, which will be discussed later in this guide, you must replace it.

3. How do you know if a specific piece properly fits?

To ensure employees can comfortably wear equipment, run fitting sessions and use information from PPE manufacturers.

Schedule timeslots for each worker who will wear PPE, taking their measurements and keeping a file with this information. Note any factors that may influence sizing. For example, if an employee wears prescription glasses, protective eyewear should fit over them.

Cross-reference your data with sizing charts, which your manufacturer of choice should provide.
Doing so will allow you to buy or distribute PPE that properly fits workers, effectively mitigating relevant risks.

WHY IS EVERYTHING ELSE WRONG

There are different types of PPE available depending on the type of job or the type of hazards. PPE offers protection against injury or illness resulting from contact with physical, chemical, radiological. Mechanical, and electrical hazards. The use of PPE is the last line of protection and indicates that the hazards cannot be controlled through engineering, design, or administrative controls.

Common Personal Protection Equipment

- eye and face protection
- foot and leg protection
- head protection
- hearing protection
- arm and hand protection
- protective clothing

OSHA does not mandate specific PPE for specific circumstances but OSHA does require that:

- employees identify hazards that require PPE
- select the appropriate safety equipment; and
- train workers on their proper use.

Causes of PPE Failures

- Inadequate assessment by the employer – Failure of the employer to properly assess hazards can lead to workplace injuries, ranging from head trauma to chemical exposures.
- Poorly fitted PPE – in order for PPE to work properly, it should fit properly, It is particularly important when working with hazards such as heat, respiratory irritants, and chemicals.
- Improper PPE usage – Eye protection can be aggravating and gloves can limit dexterity. Workers often find respiratory protective equipment uncomfortable and fell that it interferes with vision and communication. However, it is important to understand that the proper usage of PPE is essential for worker safety and well-being.
- Insufficient worker training – employers often fail to provide detailed training to workers on the proper use of PPE. The training should include:
    1. How to inspect PPE
    2. When to use PPE
    3. How to wear and adjust PPE
    4. Limitations of PPE
    5. How to remove, maintain, and store PPE safely
    6. Identifying and replacing damaged and worn PPE

Precautions in the use PPE

PPE programs are often plagued by the belief that once a piece of equipment is put on, the worker is totally protected. This is a false sense of security. Basic safety principles, such as housekeeping and engineering controls, must not be ignored.

PPE is designed to meet criteria which is only an approximation of real working conditions. PPE should not be used when hazards are greater than those for which that specific piece of equipment is designed. When it comes to the evaluation of potential hazards, uncertainties need to be taken into account. Unfortunately, PPE design criteria cannot cover all eventualities.

Wearing PPE should not in itself create a greater danger. For example, gloves prevent skin damage while working with moving equipment, but can create an entanglement hazard when working with a drill press or metal lathe.

Most regulatory agencies require that PPE not be used unless the employer has taken all the necessary measures in terms of engineering controls, work practices, administrative controls, and hygiene to control the hazard.

Finally, vigilance, diligence and adherence to these PPE precepts will lead to firstly, were safety and security for employees and secondly to a higher bottom line of the business.

Everything else is wrong.