Protecting Workers from Sun Exposure

Safety Meeting Packet

Everyone experiences some amount of exposure to the sun in their day-to-day activities. The nature of some employments, like construction and landscaping, involve primarily outdoor work which can lead to a greater exposure to the sun. Too much sun can be harmful to a person's skin and eyes. It is important to be aware of the hazards of continued sun exposure and how to minimize the sun's effects.

Risks

Sunlight contains ultraviolet (UV) radiation, which is divided into UVA and UVB rays. The main cause of skin cancer is ultraviolet light from the sun. UVA rays consist of up to 95% of the ultraviolet rays that reach Earth's surface and do not vary in intensity during the day. UVA rays penetrate the skin more deeply and are associated with skin aging and wrinkling.

UVB rays do not penetrate the skin as deeply and are the primary cause of sunburn and skin reddening. UVB rays are considered a significant factor in the development of skin cancer as well. Unlike UVA rays, UVB concentration varies during the day and is greater at higher altitudes.

UV exposure does not occur only on hot, sunny days. UV rays penetrate clouds, so although the risk may be reduced on a cloudy day, it is not eliminated. It can be easy to forget about sun exposure in the colder months, but it is known that snow and ice reflect up to 80% of the sun's UV rays, resulting in a higher intensity of sun exposure.

The Environmental Protection Agency (EPA) and National Weather Service (NWS) developed the UV Index in 1994 to notify the public of the daily expected level of UV exposure. It uses a numeric/color scale from 1-2 (Low/Green) to 11+ (Extreme/Violet) to easily identify the risk of exposure.

It is important to remember that just because there is no sunburn does not mean that there was no damage done to the skin. Being proactive is key.

Work Environment

There are several ways to protect against sun exposure. Implement a combination to maximize protection.

If possible, avoid working in the sun when UV rays are at their strongest, typically from 10AM until 4PM. Be aware of the daily UV Index value when identifying the amount of protection needed.

When scheduling work, consider moving tasks that would lead to the greatest exposure to the early morning or late afternoon. Rotating workers between tasks can help to limit exposure throughout the day.

Provide relief from the sun. Consider using tents or shelters for rest breaks or to cover the work area.

Bright surfaces, like concrete or metal, can reflect sunlight and increase total exposure. Consider covering bright or reflective surfaces or relocate them if they are not immediately needed.

Wearables

If sun exposure cannot be avoided, wearing appropriate protective gear, and applying sunscreen can help to minimize the risks involved.

Clothing

Wear clothing that is tightly-woven to block out the sun's rays. If it is possible to see through the fabric, it generally does not offer much protection.

Some clothing is designed for sun protection and may have an Ultraviolet Protection Factor (UPF). Unlike the Sun Protection Factor (SPF) rating for sunscreen, the UPF rating applies to both UVA and UVB rays. The UPF refers to the amount of UV rays that pass through the material. This means that a UPF of 25 allows 1/25th of UV rays to pass through. The UPF scale begins at 15 and has a high value of 50+ for fabrics that allow less than 2% of UV rays through.

When selecting headwear, a wide-brimmed hat offers more protection than a baseball cap by covering the ears, forehead, neck, eyes, and scalp.

Sunglasses

Not all sunglasses offer the same amount of protection. Select sunglasses that offer UV protection and block 99-100% of both UVA and UVB rays.

Sunscreen

Wear sunscreen that has a Sun Protection Factor (SPF) of 15 or greater. The SPF value refers to the amount of solar energy required to produce a sunburn. Unlike the UPF ratings for clothing, the SPF is not universal as the intensity of solar energy varies by time of day, altitude, and other factors. Although a higher SPF provides more protection, sunscreen does not offer 100% blockage of UV rays, making it important to implement other protection factors.

Re-apply sunscreen at least every two hours, or more frequently if there is heavy perspiration. The SPF rating only applies to UVB rays, making it important to read the label when purchasing sunscreen. Look for a broad-spectrum sunscreen that also provides UVA protection.

For additional information, review sun exposure resources provided by OSHA, www.osha.gov and NIOSH, www.cdc.gov/niosh.

Protecting Workers from Sun Exposure

Safety Meeting Attendance Acknowledgement

Company Name _____

Department / Division _____

Meeting Date & Time _____ _____ ☐ AM ☐ PM

Meeting Location _____

Name & Title of Individual Conducting Meeting _____

Key Meeting Discussion Points / Important Reminders:

-
-
-
-
-
-
-
-

Internal Procedures Reviewed:

-
-
-
-
-
-
-
-

By signing this document, you confirm your attendance at the meeting and acknowledge the issues addressed above!

Employees in Attendance		
(Print):	(Print):	(Print):
(Sign):	(Sign):	(Sign):
(Print):	(Print):	(Print):
(Sign):	(Sign):	(Sign):
(Print):	(Print):	(Print):
(Sign):	(Sign):	(Sign):
(Print):	(Print):	(Print):
(Sign):	(Sign):	(Sign):
(Print):	(Print):	(Print):
(Sign):	(Sign):	(Sign):
(Print):	(Print):	(Print):
(Sign):	(Sign):	(Sign):
(Print):	(Print):	(Print):
(Sign):	(Sign):	(Sign):

Employees not present: _____

Suggestions/Recommendations to improve workplace safety and health: _____

Actions Taken: _____

Manager/Supervisor: _____ Date: _____

Disclaimer:

The information provided above was assembled using multiple resources. However, these materials do not contain ALL the information available regarding the required safety standards under local, provincial, state, or federal law for your industry.