



Safety Bulletin Number: **0000008**

Issued **July 15th, 2021** by Department of Labour and Advanced Education

Sun Safety - Risk of Overexposure to Ultraviolet Radiation (UV) for Outdoor Workers

Legal information

Employer duties under Nova Scotia law

Employers are required to take every precaution that is reasonable to protect the health and safety of its employees, under the Occupational Health and Safety Act and Regulations. Relevant legislation includes:

- Section 13 [Occupational Health and Safety Act](#)
- Section 9 and 12 [Occupational Safety General Regulations](#) (OSGR)

Employee duties under Nova Scotia law

Employees are required to use and wear the personal protective equipment provided by employers in accordance with the instruction and training provided (section 9, OSGR)

Hazard Summary

While we need some UV exposure to support production of vitamin D, outdoor workers are often *overexposed*. As a result, outdoor workers in Nova Scotia are at risk of developing skin cancer and other effects from overexposure to UV radiation.

Skin cancer is the most common type of cancer diagnosed in Canada ([Canadian Cancer Statistics 2014](#)). **It is important to protect outdoor workers from UV health effects every day.**

Chronic health effects develop from cumulative exposures, over time.

Health Effects

Degree of Damage	Possible UV Health Effects			
	Skin	Eyes	Immune system	Whole Body
Temporary	sunburn or tan	superficial burn	may reduce resistance to some viruses and infections	Body overheats resulting in Heat stress or Heat Stroke
Permanent	skin cancer	eye cancer		Death (See Heat Stress Bulletin)
	premature aging	cataracts		

Contributing Factors to UV overexposure:

- Occupations where employees work outside are up to 3.5 times more likely to develop skin cancer ([Sun Safety at Work](#))
- Contact with coal tar, pitch, asphalt, creosote, paraffin wax, petroleum products, and arsenic
- Reflections off glass, snow, water, sand, and concrete
- Exposure to photosensitizing chemicals, and medications

Controls for Overexposure to Ultraviolet Light

Less Effective		More Effective	
Personal Protective Equipment <ul style="list-style-type: none"> • Suitable clothing • Head and neck coverings • Sunscreen and lip balm (SPF 30+) • Eye protection for UVA & UVB 	Administrative Controls <p>Whenever possible, schedule outdoor work :</p> <ul style="list-style-type: none"> • Before 11am and after 3pm, during the summer • Work when the UV index is below 3 	Engineering Controls <ul style="list-style-type: none"> • Modify reflective surfaces • Work under a shade shelter 	Elimination or Substitution <ul style="list-style-type: none"> • Substitute photosensitizing chemicals

Contact for bulletin queries

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