

Algoma University Animal Care Committee	
<b>#AU 0015 Sun Exposure</b>	
Issue date: June 2012	Last revised: May 2025

**1) Purpose**

To outline safe practices for minimizing harmful exposure to ultraviolet (UV) radiation from the sun, reducing the risk of heat-related illnesses, sunburn, skin cancer, and long-term skin damage for individuals working or spending extended time outdoors.

**2) Policy**

CCAC guidelines and regulations

**3) Responsibility**

Principal investigator (PI), their research staff, and their student investigators

This SOP applies to all employees, contractors, and volunteers whose duties require them to work outdoors during daylight hours. It is also applicable to individuals or groups planning outdoor activities.

PI/Supervisors/Managers: Ensure compliance with sun safety practices and provide necessary protective equipment and training. Monitor UV index. Ensure first aid and emergency protocols are in place. Communicate UV risk levels daily.

Students/Employees/Individuals: Follow all sun safety guidelines and report any symptoms of heat or sun-related illness.

Definitions

UV Radiation: Invisible rays from the sun that can cause skin damage.

UV Index (UVI): A scale from 0 to 11+ indicating the strength of sunburn-producing UV radiation.

SPF (Sun Protection Factor): A rating that indicates how well a sunscreen protects the skin from UVB rays.

**4) Training Required**

None

**5) Materials Required**

Broad Spectrum (UVA + UVB) Sunscreen/Sunblock

Protective Clothing

**6) Procedures**

Pre-Exposure Planning

1. Check the UV Index daily (e.g., via weather apps or national meteorological services).

Moderate risk: 3–5

High risk: 6–7

Very high/extreme risk: 8+

2. Schedule strenuous outdoor work for early morning or late afternoon when UV levels are lower.
3. Encourage use of shaded rest areas and provide cool drinking water.

#### Protective Measures

##### Clothing:

1. Wear long-sleeved shirts and long pants made from tightly woven fabric.
2. Use wide-brimmed hats that shade the face, ears, and neck.
3. UV-rated sunglasses to protect eyes.

##### Sunscreen:

1. Use broad-spectrum sunscreen with SPF 30 or higher.
2. Apply 20 minutes before sun exposure.
3. Reapply every 2 hours, or more often if sweating or after swimming.

##### Shade:

1. Use tents, canopies, or natural shade during breaks.
2. Limit time in direct sun between 10 a.m. and 4 p.m.
3. Hydration and Rest
4. Drink water frequently—approximately 1 cup (250 ml) every 15–20 minutes.
5. Avoid caffeinated or alcoholic beverages during extended outdoor activities.
6. Implement a buddy system to monitor for signs of heat illness or sunburn.

##### Signs of Overexposure and Response

1. Sunburn: Redness, pain, blisters. Treat with cool compresses, aloe vera, and avoid further sun.
2. Heat Exhaustion: Heavy sweating, dizziness, nausea. Move to shade, rehydrate, cool down.
3. Heat Stroke (medical emergency): Confusion, rapid pulse, unconsciousness. Call emergency services immediately. Begin cooling with ice packs, wet cloths, or a fan.
4. If there is mild skin redness, pain, or itchiness, apply cool compresses and avoid further sun exposure.
5. Seek medical attention if any of the following symptoms appear:

Blisters

Facial swelling

Fever or chills

Headache, confusion, or feeling of faintness

Signs of dehydration

REVISION HISTORY		
Revision #	Revision Date	Summary of Changes
1	November 2019	Modified
2	May 2024	Additional review by Algoma H&S Office
3	June 2025	Reformatting
4	May 2025	Department of Life, Health & Safety and Security, reviewed and provided comments and additions to SOP.

