

S.153

Introduced by Senators Ram Hinsdale and Clarkson

Referred to Committee on

Date:

Subject: Labor; safety; Extreme Temperature Worker Protection Act

Statement of purpose of bill as introduced: This bill proposes to protect employees from occupational injury and illness due to exposure to extreme temperatures in the workplace and to require employers to develop and implement a protection plan.

An act relating to the creation of the Extreme Temperature Worker Protection Act

It is hereby enacted by the General Assembly of the State of Vermont:

Sec. 1. SHORT TITLE

This act may be cited as the “Extreme Temperature Worker Protection Act.”

Sec. 2. 21 V.S.A. chapter 3, subchapter 5A is added to read:

Subchapter 5A. Extreme Temperature Worker Protection

§ 240. PURPOSE

(a) Thousands of workers become sick from occupational exposure to extreme hot and cold temperatures each year, many of whom die.

1 (b) Nearly three out of four workers who die from exposure to extreme
2 temperatures in the workplace die in the first week of their employment before
3 they have had an opportunity to acclimatize to the conditions.

4 (c) Employers are required to provide workplaces free of known health and
5 safety hazards, and this includes protecting employees from temperature-
6 related hazards.

7 § 240a. DEFINITIONS

8 As used in this subchapter:

9 (1) “Acclimatization” means the body’s adaption to work in the heat as
10 a person is exposed to heat gradually over time, which reduces the strain
11 caused by heat stress and enables a person to work with less chance of heat
12 illness or injury.

13 (2) “Ambient temperature” means the temperature of the air surrounding
14 a body.

15 (3) “Cold-related injuries and illnesses” include chilblains, frostbite,
16 trench foot, and hypothermia. Symptoms of chilblains include redness,
17 itching, blistering, inflammation, and possible ulceration in severe cases.
18 Symptoms of frostbite include numbness, tingling or stinging, aching, and
19 bluish or pale, waxy skin. Symptoms of trench foot include reddening of the
20 skin, numbness, leg cramps, swelling, tingling pain, blisters or ulcers, bleeding
21 under the skin, and discoloration of the foot due to gangrene. Early symptoms

1 of hypothermia include shivering, fatigue, loss of coordination, confusion, and
2 disorientation. Late symptoms of hypothermia include no shivering, blue skin,
3 dilated pupils, slowed pulse and breathing, and loss of consciousness.

4 (4) “Employee” means any person engaged in service to an employer for
5 wages, salary, or other compensation, as well as individuals employed on the
6 worksite through a staffing agency, contractor, subcontractor, or delivery
7 service.

8 (5) “Employer” means a natural person, corporation, partnership, trust,
9 society, club, association, or other organization, including municipalities, the
10 State, and its instrumentalities.

11 (6) “Heat-related injuries and illnesses” include heat cramps, heat
12 exhaustion, heat syncope, and heat stroke.

13 (7) “Indoor” and “indoors” mean an area under a ceiling or overhead
14 covering that restricts airflow and has along its entire perimeter walls, doors,
15 windows, dividers, or other physical barriers that restrict airflow, whether open
16 or closed.

17 (8) “Outdoor” and “outdoors” mean an area that is not indoors.

18 (9) “Signs and symptoms of a heat emergency” include loss of
19 consciousness with excessive body temperature, which may or may not be
20 accompanied by vertigo, nausea, headache, cerebral dysfunction, or bizarre
21 behavior. A heat emergency could also include staggering, vomiting, acting

1 irrationally or disoriented, having convulsions, and continuing to have an
2 elevated heart rate despite resting.

3 (10) “Signs and symptoms of heat-related illness” include headache,
4 nausea, weakness, dizziness, elevated body temperature, muscle cramps, and
5 muscle pain or spasms.

6 (11) “Wet bulb globe temperature” means a heat metric that considers
7 ambient temperature, humidity, radiant heat from sunlight or artificial heat
8 sources, and air movement.

9 (12) “Work vehicle” means a car, truck, van, or other authorized means
10 of transporting vehicles or goods.

11 § 240b. APPLICATION

12 (a) This subchapter shall apply with respect to all employers, employees,
13 and employment in or at a workplace in the State of Vermont, except it shall
14 not apply to the following:

15 (1) work activities for which there is no reasonable expectation of
16 exposure at or above a wet bulb globe temperature of 80 degrees Fahrenheit or
17 a temperature below 60 degrees Fahrenheit;

18 (2) short duration employee exposures at or above 80 degrees
19 Fahrenheit or below 60 degrees Fahrenheit of 15 minutes or less in any 60-
20 minute period;

1 (3) organizations whose primary function is the performance of
2 firefighting or any emergency response activity already covered by State or
3 federal law or regulation;

4 (4) work activities performed in indoor work areas or work vehicles
5 where air-conditioning and heating systems consistently keep the ambient
6 temperature below 80 degrees Fahrenheit and above 60 degrees Fahrenheit;

7 (5) work performed from the employee's home or another remote
8 location of the employee's choosing; and

9 (6) sedentary work activities at indoor work areas that only involve
10 some combination of the following: sitting, occasional standing and walking
11 for brief periods or time, and occasional lifting of objects weighing less than
12 10 pounds.

13 (b) This subchapter shall not apply to employers whose employees all
14 exclusively perform activities described in subdivisions (a)(1) through (6) of
15 this section.

16 § 240c. EXTREME TEMPERATURE PREVENTION PLAN

17 (a) Employers must display a thermometer at each indoor and outdoor
18 worksite and in work vehicles to monitor the temperature. A thermometer that
19 measures the wet bulb globe temperature must be used when the workplace is
20 expected to be hot.

1 **(b) Employers must develop a written extreme temperature injury and**
2 **illness prevention plan with work-site-specific information. The plan must**
3 **include:**

4 **(1) a comprehensive list of the types of work activities covered by the**
5 **plan, information about the factors that can increase the likelihood of injury or**
6 **illness resulting from exposure to extreme temperatures in performing those**
7 **activities, and actions to be taken to reduce the likelihood of injury or illness;**

8 **(2) all policies and procedures necessary to comply with the**
9 **requirements of this subchapter;**

10 **(3) information on education and training; and**

11 **(4) emergency response procedures and contact information.**

12 **(c) The plan must be updated at least annually and whenever there is a**
13 **major change to work conditions. In addition, the effectiveness of the plan**
14 **must be evaluated and updated if necessary whenever a temperature-related**
15 **injury or illness results in death, medical treatment beyond first aid, absence**
16 **from work for several days, or loss of consciousness.**

17 **(d) The plan must be readily available to employees at each worksite.**

18 **§ 240d. HEAT INJURY AND ILLNESS PREVENTION**

19 **(a) The following steps shall be taken when the wet bulb globe temperature**
20 **at a worksite exceeds 80 degrees Fahrenheit:**

1 (1) The employer must provide an effective means of communication so
2 that employees can contact a supervisor when necessary to address concerns
3 about temperature-related working conditions and signs and symptoms of heat-
4 related illness or a heat emergency.

5 (2) The employer must provide access to potable water for drinking that
6 is:

7 (A) placed in locations readily accessible to the employee;

8 (B) suitably cool; and

9 (C) of sufficient quantity to provide access to one quart of drinking
10 water per employee per hour.

11 (3) The employer must provide an area where employees working
12 outdoors can take breaks sufficient in size to accommodate the number of
13 employees on break and provides:

14 (A) natural shade, such as from trees, or artificial shade, such as a
15 tent or pavilion, that is open to the outside air and blocks direct sunlight; or

16 (B) air-conditioning, such as in a building, trailer, or vehicle.

17 (4) For indoor worksites, the employer must provide a break area that:

18 (A) is air-conditioned or has increased air movement and, if
19 appropriate, dehumidification;

20 (B) can accommodate the number of employees on break; and

21 (C) is readily accessible.

1 (5) The employer must encourage employees to request preventative
2 cool-down breaks of not less than 10 minutes as needed. Employees who take
3 preventative cool-down breaks shall be monitored for symptoms of heat illness
4 and a heat emergency. If an employee exhibits signs or symptoms of heat-
5 related illness or a heat emergency, the employer shall provide appropriate first
6 aid or emergency response. Employees shall be encouraged to remain in the
7 cool-down area until any signs or symptoms of heat-related illness have
8 abated. If the preventative rest period coincides with an unpaid meal break, the
9 rest period will be considered a compensable work assignment.

10 (6) If the employer provides personal protective equipment to cool
11 employees, the employer must ensure the cooling properties of the equipment
12 are maintained at all times during use.

13 (7) Employers must provide work vehicles with functioning air-
14 conditioning that controls the temperature below 80 degrees Fahrenheit to
15 employees who spend more than 60 continuous minutes in a vehicle or whose
16 worksite is a vehicle.

17 (8) Employers must implement an acclimatization protocol for
18 employees new to the worksite and employees returning to the worksite
19 following an absence from work of more than 14 days. New and returning
20 employees shall be closely observed for signs and symptoms of heat-related
21 illness.

1 (A) The acclimatization protocol for new employees gradually
2 increases the duration of work so that the employee's exposure to temperatures
3 above 80 degrees Fahrenheit is restricted to not more than:

4 (i) 20 percent of a normal work shift exposure duration on the first
5 day;

6 (ii) 40 percent on the second day of work;

7 (iii) 60 percent on the third day of work; and

8 (iv) 80 percent on the fourth day of work.

9 (B) The acclimatization protocol for returning employees gradually
10 increases the duration of work so that the employee's exposure to temperatures
11 above 80 degrees Fahrenheit is restricted to not more than:

12 (i) 50 percent of a normal work shift exposure duration on the first
13 day;

14 (ii) 60 percent on the second day of work; and

15 (iii) 80 percent on the third day of work.

16 (b) When the wet bulb globe temperature at a worksite exceeds 90 degrees
17 Fahrenheit, in addition to the steps required by subsection (a) of this section,
18 the employer must provide employees with at least a 15-minute paid rest break
19 every two hours in the cool-down break area. If the rest period coincides with
20 an unpaid meal break, the rest period will be considered a compensable work
21 assignment.

1 (c) When the wet bulb globe temperature at a worksite exceeds 100 degrees
2 Fahrenheit, in addition to the steps required by subsection (a) of this section,
3 the employer must provide employees with at least a 10-minute paid rest break
4 every hour in the cool-down break area. If the rest period coincides with an
5 unpaid meal break, the rest period will be considered a compensable work
6 assignment.

7 (d) Employees taking a preventative cool-down break pursuant to
8 subsections (b) and (c) of this section shall be closely observed for signs and
9 symptoms of heat-related illness or a heat emergency by one of the following
10 methods:

11 (1) a mandatory buddy system in which co-workers observe each other;

12 (2) observation by a supervisor or designated observer, with not more
13 than 20 employees observed by one individual; or

14 (3) effective two-way communication with employees who work alone
15 at a worksite with contact occurring at least every two hours.

16 (e) On days when the wet bulb globe temperature at a worksite is forecast
17 to exceed 90 degrees Fahrenheit, the employer must notify employees of the
18 following:

19 (1) the importance of drinking plenty of water;

20 (2) the employee's right to take rest breaks if needed and as required by
21 this section;

1 (3) the signs and symptoms of heat-related illness and of a heat
2 emergency;

3 (4) how to seek help, including contact information for supervisors and
4 emergency medical personnel, and the procedures to be followed in an
5 emergency; and

6 (5) for mobile worksites, the location of break areas and drinking water.

7 § 240e. COLD INJURY AND ILLNESS PREVENTION

8 (a) The following steps shall be taken when the temperature at a worksite
9 falls below 60 degrees Fahrenheit:

10 (1) The employer must provide an effective means of communication so
11 that employees can contact a supervisor when necessary to address concerns
12 about temperature-related working conditions and signs and symptoms of cold-
13 related injuries and illness.

14 (2) The employer must provide access to potable water for drinking that
15 is:

16 (A) placed in locations readily accessible to the employee;

17 (B) suitably cool; and

18 (C) of sufficient quantity to provide access to one quart of drinking
19 water per employee per hour.

1 (3) The employer must provide an area where employees working
2 indoors and outdoors can take breaks sufficient in size to accommodate the
3 number of employees on break and provides access to:

4 (A) a warm and draft-free setting;

5 (B) warm beverages; and

6 (C) a place to change out of wet clothes.

7 (4) The employer must encourage employees to request preventative
8 warm-up breaks of not less than 10 minutes as needed. Employees who take
9 preventative warm-up breaks shall be monitored for symptoms of cold-related
10 illness and risk factors for cold stress. Risk factors for cold stress include wet
11 or damp clothing, inadequate clothing, and exhaustion. If an employee
12 exhibits signs or symptoms of cold-related illness, the employer shall provide
13 appropriate first aid or emergency response. Employees shall be encouraged to
14 remain in the warm-up area until any signs or symptoms of cold-related illness
15 have abated. If the preventative rest period coincides with an unpaid meal
16 break, the rest period will be considered a compensable work assignment.

17 (5) Employers must provide work vehicles with functioning heating that
18 controls the temperature above 60 degrees Fahrenheit to employees who spend
19 more than 60 continuous minutes in a vehicle or whose worksite is a vehicle.

20 (b) When the temperature at a worksite drops below 40 degrees Fahrenheit,
21 in addition to the steps required by subsection (a) of this section:

1 (1) The employer must provide employees with at least a 15-minute rest
2 break every two hours in the warm-up break area. If the rest period coincides
3 with an unpaid meal break, the rest period will be considered a compensable
4 work assignment.

5 (2) The employer must provide suitable personal protective equipment
6 to the employee to protect the employee's ears, face, hands, and feet. If the
7 employee's skin, clothing, or personal protective equipment is wet, the
8 employee must be immediately removed from the worksite, taken to a warm-
9 up area, and not return to the worksite until the wet items have dried or been
10 replaced. In considering the necessary protective equipment, employers must
11 take into account the risk factors for an employee's heat load when wearing
12 personal protective equipment in cold temperatures.

13 (c) Employees taking a warm-up break pursuant to subsection (b) of this
14 section shall be closely observed for signs and symptoms of cold-related illness
15 and risk factors for cold stress by one of the following methods:

- 16 (1) a mandatory buddy system in which co-workers observe each other;
17 (2) observation by a supervisor or designated observer, with not more
18 than 20 employees observed by one individual; or
19 (3) effective two-way communication with employees who work alone
20 at a worksite with contact occurring at least every two hours.

1 (d) On days when the temperature at a worksite is forecast to be below 30
2 degrees Fahrenheit, the employer must notify employees of the following:

3 (1) the employees' right to take rest breaks if needed and as required by
4 this section;

5 (2) the signs and symptoms of cold-related illness;

6 (3) how to seek help, including contact information for supervisors and
7 emergency medical personnel, and the procedures to be followed in an
8 emergency; and

9 (4) for mobile worksites, the location of break areas and drinking water.

10 § 240f. EMERGENCY RESPONSE PLAN

11 (a) The employer must develop and implement an emergency response plan
12 that includes:

13 (1) a list of emergency phone numbers;

14 (2) a description of how employees can contact a supervisor and
15 emergency medical services;

16 (3) a description of how to transport employees to a place where they
17 can be reached by an emergency medical provider;

18 (4) clear and precise directions to the worksite to be provided to an
19 emergency dispatcher; and

20 (5) procedures for responding to an employee experiencing signs and
21 symptoms of heat-related or cold-related illness.

1 (b) If an employee is experiencing signs and symptoms of heat-related or
2 cold-related illness, the employer must:

3 (1) relieve the employee from duty;

4 (2) monitor the employee;

5 (3) ensure the employee is not left alone; and

6 (4) offer first aid or medical services on-site.

7 (c) If an employee is experiencing a heat-related or cold-related emergency,
8 in addition to the actions set forth in subsection (b) of this section, the
9 employer must:

10 (1) take immediate action to reduce the employee's body temperature in
11 a heat emergency or increase the employee's body temperature in a cold
12 emergency before emergency medical services arrive; and

13 (2) contact emergency medical services immediately.

14 (d) Employees receiving first aid or medical services shall be considered to
15 be on duty for compensation purposes.

16 § 240g. EDUCATION AND TRAINING

17 (a) The employer must provide an effective education and training program
18 at no cost to employees that covers:

19 (1) temperature-related injuries and illnesses, including symptoms and
20 signs of each;

1 (2) risk factors for temperature-related injuries, including the
2 contributions of physical exertion, clothing, personal protective equipment, a
3 lack of acclimatization, and personal risk factors, such as age, health, alcohol
4 consumption, and use of certain medications;

5 (3) the importance of removing personal protective equipment that may
6 impair cooling during rest breaks in hot weather and wet or damp equipment in
7 cold weather;

8 (4) the importance of taking preventative rest breaks;

9 (5) the importance of drinking water and staying hydrated;

10 (6) the location of break areas and employer-provided water;

11 (7) the importance of reporting any signs and symptoms of temperature-
12 related illness the employee experiences or observes in co-workers;

13 (8) the employer's emergency response plan;

14 (9) how to access the employer's extreme temperature protection plan;
15 and

16 (10) the employee's right to the protections of this subchapter, including
17 protection from retaliation for exercising those rights.

18 (b) The training shall be provided to new employees upon hire and to all
19 employees at least annually. The training materials shall be available to
20 employees upon request.

1 (c) Supplemental training shall be provided whenever:

2 (1) an employee's job duties change, affecting the employee's exposure
3 to heat or cold;

4 (2) the employer's policies or procedures change;

5 (3) there is an indication that an employee has not retained the necessary
6 information; or

7 (4) there is an anticipated heat wave or significant drop in temperature.

8 (d) The employer must ensure that each supervisor responsible for
9 supervising employees exposed to extreme temperatures in the workplace
10 receives training on and understands:

11 (1) the topics outlined in subsection (a) of this section;

12 (2) the employer's policies and procedures for monitoring temperature
13 and humidity conditions and adjusting work protocols as necessary; and

14 (3) the procedures to be followed if an employee exhibits signs and
15 symptoms of a heat-related or cold-related illness.

16 (e) The training must be provided in a language and at a literacy level that
17 each employee understands, and employees must be given the opportunity to
18 ask questions and receive answers about the training.

19 (f) Employers are encouraged to solicit input from employees on
20 administrative controls and engineering controls that could be implemented to
21 limit exposure to temperature-related hazards in the workplace.

1 § 240h. EMPLOYEE RIGHTS

2 The provisions against discharge and retaliation in section 231 of this title
3 and the private right of action in section 232 of this title shall apply to this
4 subchapter.

5 Sec. 3. EFFECTIVE DATE

6 This act shall take effect on May 1, 2027.