It is enacted by the General Assembly as follows:

SECTION 1. Title 28 of the General Laws entitled "LABOR AND LABOR RELATIONS" is hereby amended by adding thereto the following chapter:

CHAPTER 5.2
EXTREME TEMPERATURE WORKER PROTECTION ACT

28-5.2-1. Title.
The act shall be known and may be cited as the "Extreme Temperature Worker Protection Act."

28-5.2-2. Purpose.
(a) This chapter applies to employers in industries where employees are regularly exposed to extreme hot or cold working environments in indoor and outdoor settings, including, but not limited to, agriculture, construction, landscaping, warehouse, manufacturing, mail and package delivery, utilities, oil and gas operations, airport service workers, and food service workers. This chapter is supplemental to all related federal and industry specific standards. When the requirements under this chapter offer greater protection than related federal or industry-specific standards, an employer shall comply with the requirements of this chapter.

(b) Workers who are exposed to extreme heat or cold or work in extreme temperature environments may be at risk of heat or cold stress. Exposure to extreme heat can result in occupational illnesses, injuries and death, including heat stroke, heat exhaustion, heat cramps, or
heat rashes. Exposure to extreme cold can result in occupational illness, injuries and death, including hypothermia, frostbite, or trench foot. Each year, thousands of workers become sick from occupational heat and cold exposure, and too many of those illnesses result in fatalities. Employees new to working in the heat are most vulnerable. Nearly three (3) out of four (4) workers who die from heat-related causes die in their first week on the job.

(c) Under the Occupational Safety and Health Act of 1970, as amended, 29 U.S.C. § 651, employers are responsible for providing workplaces free of known safety and health hazards. This includes protecting workers from temperature-related hazards. Employers must evaluate the temperature and all contributing factors to heat and cold stress, including metabolic workloads, radiant and conductive heat sources, humidity, air movement, and wearing of protective equipment. Employers must then ensure a safe workplace by implementing a plan to reduce exposure to hazardous temperatures through providing paid rest breaks, adequate shade or warmth, adequate drinking water, training for supervisors and staff, and other key elements to protect workers.


As used in this chapter, the following words and phrases shall have the following meanings unless another meaning is clearly intended by the context.

(1) "Acclimatization" means the temporary physiological adaptation of the body to work in hot environments that occurs gradually. During an acclimatization period, a person should be exposed to no more than twenty percent (20%) of the usual duration of work in the hot environment on day one and no more than a twenty percent (20%) increase each day. Most people acclimatize within seven (7) to fourteen (14) workdays.

(2) "Administrative control" means a method to limit exposure to a hazard by adjustment of work procedures, practices, or schedules. Examples of administrative controls that may be effective at minimizing the risk of heat or cold illness in a particular work area include, but are not limited to: acclimatizing employees, rotating employees, scheduling work earlier or later in the day, organizing work location and tasks at certain times of the day to avoid direct sunlight, using work/rest schedules, reducing work intensity or speed, reducing work hours, and changing required work clothing.

(3) "Cold illness" means a serious medical condition resulting from the body's inability to cope with cold temperatures, and includes, but is not limited to, trench foot, frostbite, hypothermia, and chilblains.

(4) "Cool-down area" means an indoor or outdoor area that is blocked from direct sunlight and shielded from other high radiant heat sources and is either open to the air or provided with ventilation or cooling. One indicator that blockage is sufficient is when objects do not cast a shadow.
in the area of blocked sunlight. A cool-down area does not include a location where:

(i) Environmental risk factors defeat the purpose of allowing the body to cool; or

(ii) Employees are exposed to unsafe or unhealthy conditions; or

(iii) Employees are deterred or discouraged from accessing or using the cool-down area.

(5) “Drinking water” means fresh, pure, cool (less than seventy-five degrees (75°) Fahrenheit) potable water, provided free of charge to employees. The term includes electrolyte-replenishing beverages that do not contain caffeine.

(6) “Employee” means any person providing labor or services within the scope of this chapter for remuneration for a private entity or business within the state, without regard to an individual's immigration status, and shall include, but not be limited to, private and public sector workers, part-time workers, independent contractors, day laborers, farmworkers, and other temporary and seasonal workers. The term shall also include individuals working for staffing agencies, contractors or subcontractors on behalf of the employer at any individual worksite, as well as any individual delivering goods or transporting people at, to or from the worksite on behalf of the employer, regardless of whether delivery or transport is conducted by an individual or entity that would otherwise be deemed an employer under this chapter.

(7) “Employer” means any individual, partnership, association, corporation, limited liability company, business trust, legal representative, public entity, or any organized group acting as employer within the scope of this standard.

(8) “Engineering control” means the use of substitution, isolation, ventilation, and equipment modification to reduce exposure to heat illness related workplace hazards and job tasks. Examples of engineering controls that may be effective at minimizing the risk of heat illness in a particular work area include, but are not limited to, isolation of hot processes, isolation of employees from sources of heat, air conditioning, cooling fans, cooling mist fans, evaporative coolers (also called "swamp coolers"), natural ventilation where the outdoor temperature and heat index is lower than the indoor temperature and heat index, local exhaust ventilation, shielding from a radiant heat source, and insulation of hot surfaces.

(9) “Heat illness” means a serious medical condition resulting from the body's inability to cope with a particular heat load, and includes, but is not limited to, heat cramps, heat exhaustion, heat syncope, and heat stroke.

(10) “Indoor worksite” means any enclosed work vehicles and any space between a floor and a ceiling bound on all sides by walls except where noted in the definition of "outdoor worksite" below. A wall includes any door, window, retractable divider, garage door, or other physical barrier that is temporary or permanent, whether open or closed.
(11) “Indoor temperature stress threshold” means a heat stress threshold of eighty degrees (80°) Fahrenheit or more and a cold threshold of sixty degrees (60°) Fahrenheit or below. In cases of offices, schools, or other indoor temperature regulated environments, the indoor temperature shall fall between sixty-eight point five degrees (68.5°) and seventy-five degrees (75°) Fahrenheit when the outdoor temperature is below fifty-five degrees (55°) Fahrenheit, and when the outdoor temperature is above eighty-five degrees (85°) Fahrenheit, the indoor temperature shall fall between seventy-five degrees (75°) and eighty point five degrees (80.5°) Fahrenheit.

(12) “Outdoor worksite” means all employers with employees performing work in an outdoor environment. The term includes locations such as sheds, tents, greenhouses, or other structures where work activities are conducted inside, but the temperature is not managed by devices that reduce heat or cold exposure and aid in heating or cooling, such as air conditioning systems or heaters. Having only fans and humidifiers may still qualify worksites as outdoor. The term outdoor worksite does not apply to incidental exposure, which exists when an employee is required to perform a work activity outdoors for not longer than fifteen (15) minutes in any sixty (60) minute period.

(13) “Outdoors temperature stress threshold” means a heat stress threshold of eighty degrees (80°) Fahrenheit or more, and a cold threshold of sixty degrees (60°) Fahrenheit or below.

(14) “Personal protective equipment” or “PPE” means the protective gear, uniforms, and clothing, to withstand temperatures at or exceeding the stress thresholds. Where feasible engineering controls and administrative controls are not sufficient to reduce and maintain the temperature and heat index to below eighty-seven degrees (87°) Fahrenheit when employees are present or the temperature to below eighty-two degrees (82°) Fahrenheit where employees wear clothing that restricts heat removal or work in high radiant heat areas, personal heat protective equipment shall be used to minimize the risk of heat illness, except to the extent that the employer demonstrates that use of such equipment is infeasible.

(15) “Preventative cool-down rest” means a rest taken in a cool-down area to prevent overheating.

(16) “Temperature” means the temperature measured by a globe thermometer, which is a type of apparent temperature used to estimate the effect of temperature, humidity, wind speed (wind chill), and visible and infrared radiation (usually sunlight) on humans. The globe thermometer may not be shielded from direct exposure to radiant heat while the globe temperature is being measured.

(17) “Union representative” means a recognized or certified collective bargaining agent representing a group of employees, as defined in this section.

(18) “Heat wave” means any day in which the predicted high temperature for the day will
be at least ten degrees (10°) Fahrenheit higher than the average high daily temperature in the
preceding five (5) days.

(19) "Cold wave" means any day in which there is a rapid fall in temperature within a
twenty-four (24) hour period requiring substantially increased protection to agriculture, industry,
commerce and social activities.

28-5.2-4, Temperature protection standards – Heat-stress specific standards.

(a) Heat-stress specific standards. The employer shall fulfill the following requirements
when employees are in an outdoor or indoor worksite and experiencing conditions at or exceeding
a heat stress threshold of eighty or more degrees (80°) Fahrenheit:

(1) The employer shall develop a written program to mitigate heat-related illnesses and
injuries experienced by employees,

(i) The written program shall identify and incorporate work processes and external factors
that increase the likelihood of heat-related illness, including, but not limited to, increased metabolic
workloads, radiant and conductive heat sources, increased humidity, decreased air movement; and
wearing of protective equipment.

(ii) Every employer shall provide and display a thermometer for employee use at all
workplaces to monitor the temperature indoors, outdoors and in vehicles.

(iii) Employers shall identify and implement engineering controls, and administrative
controls before relying on personal protective equipment.

(iv) The written program shall include information on education and training.

(v) The written program shall include emergency response plans, procedures and relevant
worksite contacts in case of an emergency. The written program shall be updated at least annually,
when major work conditions change, and when a heat-related incident occurs.

(b) Access to hydration. The employer shall provide access to drinking water located as
close as practical to where employees are working. If drinking water is not plumbed or otherwise
continuously supplied, it shall be provided in sufficient quantity at the beginning of the shift, a
minimum of one quart of drinking water per hour. Frequent drinking of water shall be encouraged.

(c) Rest. The employer shall require and encourage preventative cool down breaks of no
less than ten (10) minutes, in addition to the time needed to access the cool-down area, as needed
in the shade for outdoor work or a cooler indoor breakroom for indoor workers.

(1) Employees who take a preventative cool-down rest shall be monitored and asked about
symptoms of heat illness.

(2) Employees shall be encouraged to remain in the cool down area and not be ordered
back to work until any signs or symptoms of heat illness have been abated.
(3) The preventative cool-down rest period required by this section may be provided concurrently with any other meal or rest period required by policy, rule or law if the timing of the preventative cool-down rest period coincides with the otherwise required meal or rest period. Except when such a rest period coincides with the existing unpaid meal break, the preventative cool-down rest period is a work assignment and shall be compensated accordingly.

(d) Medical monitoring. Employers shall closely monitor temperatures using a globe thermometer and implement their workplace heat stress plan when temperatures exceed eighty degrees (80°) Fahrenheit. If an employee exhibits signs or reports symptoms of heat illness, the employer shall immediately provide appropriate first aid or emergency response.

(e) Access to shade. (1) Shade shall be made available when the temperature exceeds eighty degrees (80°) Fahrenheit and shall be as close to the worksite as possible while employees are present. The amount of shade present shall be at least enough to accommodate the number of employees on recovery or rest periods with at least four square feet (4ft²) per resting employee.

(2) Where feasible, work must be performed in the shade.

(3) When the temperature does not exceed eighty degrees (80°) Fahrenheit, the employer shall provide timely access to shade upon an employee's request.

(4) Access to shade shall not exceed the temperature of the worksite and, for example, may extend to a hot motor vehicle.

(f) Personal protective equipment. Employers shall provide the necessary protective equipment at no cost to the employee.

(g) Vehicle standards. Employees who spend more than sixty (60) minutes in vehicles each day or whose worksite is considered a vehicle shall have adequate air conditioning available inside such vehicle maintained according to the manufacturer's instructions to keep temperatures below eighty degrees (80°) Fahrenheit.

(h) Worker acclimatization. Employers shall provide time for acclimatization of new and returning employees.

(1) New employees and existing employees newly assigned to heat work or absent from heat work for more than seven (7) days shall only work twenty percent (20%) of their normal duration on their first day and gradually increase work duration over a two (2) week period.

(2) All employees shall be closely observed by a supervisor or designee during a heat wave. A heat wave will automatically trigger provisions under high heat procedures.

(i) High heat procedures. The employer shall implement high heat procedures when the temperature equals or exceeds ninety degrees (90 °) Fahrenheit or when a heat wave is experienced.
(1) The employer shall ensure that the employee takes a minimum ten (10) minute net preventative cool-down rest period every two (2) hours.

(2) The preventative cool-down rest period required by this section may be provided concurrently with any other meal or rest period required by state law if the timing of the preventative cool-down rest period coincides with a required meal or rest period. Except when such a rest period coincides with the existing unpaid meal break, the preventative cool-down rest period is a work assignment and shall be compensated accordingly.

(3) When the temperature equals or exceeds one hundred degrees (100°) Fahrenheit, the employer shall ensure that the employee takes a minimum ten (10) minute net preventative cool-down rest period every hour. The preventative cool-down rest period required by this section may be provided concurrently with any other meal or rest period required by state law if the timing of the preventative cool-down rest period coincides with a required meal or rest period. Except when such a rest period coincides with the existing unpaid meal break, the preventative cool-down rest period is a work assignment and shall be compensated accordingly.

(j) Communication.

(1) Ensuring that effective communication by voice, observation, or electronic means is maintained in order that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable.

(2) Observing employees for alertness and signs or symptoms of heat illness. The employer shall ensure effective employee observation/monitoring by implementing one or more of the following: Supervisor or designee observation of twenty (20) or fewer employees, or mandatory buddy system, or regular communication with sole employee such as by radio or cellular phone, or other equally effective means.

(k) Emergency response procedures.

(1) Employers shall implement effective emergency response procedures for when a worker experiences any stage of heat related illness, including communication protocols and clear and precise directions to work locations for transient, field and solo workers.

(2) Employers shall identify and communicate the appropriate onsite emergency contact for workers and supervisors and ways to communicate with offsite supervisors and emergency medical personnel.

(3) If a supervisor observes, or any employee reports, any signs or symptoms of heat illness in an employee, the supervisor shall take immediate action commensurate with the severity of the illness.
(4) Employers shall contact emergency medical services and, if necessary, transport employees to a place where they can be reached by an emergency medical provider.

(5) Workers who need first aid onsite and emergency response/removal from work due to heat-related illness shall be considered on-duty with full compensation.

28-5.2-5. Temperature protection standards -- Cold-stress specific standards.

(a) The employer shall fulfill the following requirements when employees are in an outdoor or indoor worksite and experiencing conditions at or exceeding the cold threshold of sixty degrees (60°) Fahrenheit or below.

(1) The employer shall develop a written program to mitigate cold-related illnesses and injuries experienced by employees.

(2) The written program shall identify and incorporate work processes and external factors that increase the likelihood of cold-related illness. Worker training on cold-related illness prevention, recognition, and reporting, ensured access to warm liquids, warm areas for use during break periods, and wind-protective clothing based on wind speed, and prompt medical attention to workers who show signs of cold-related illness or injury, schedules designed to reduce the time workers spend in the cold environment and reduce the physical demands during cold exposure, and medical monitoring to ensure worker health and protection.

(3) Every employer shall provide and display a thermometer for employee use at all workplaces to monitor the temperature indoors, outdoors and in vehicles.

(4) Employers shall identify and implement engineering controls, and administrative controls before relying on personal protective equipment.

(5) The written program shall include information on education and training. The written program shall include emergency response plans, procedures and relevant worksite contacts in case of an emergency. The written program shall be updated at least annually, when major work conditions change, and when a cold-related incident occurs.

(b) Access to hydration. The employer shall provide access to drinking water located as close as practical to where employees are working. If drinking water is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the shift, a minimum of one quart of drinking water per hour per employee. Warm beverages shall be provided for every employee accessible in warm-up areas. Frequent drinking of water and warm beverages shall be encouraged.

(c) Rest. The employer shall require and encourage preventative breaks at the duration of not less than ten (10) minutes, in addition to the time needed to access the warm-up area, in a warm area as needed for outdoor work or a warm breakroom for indoor workers.
(1) Employees who take a preventative warm-up rest shall be monitored and asked about symptoms of cold stress.

(2) Employees shall be encouraged to remain in the warm-up area and not be ordered back to work until any signs or symptoms of cold stress have been abated.

(3) The preventative warm-up rest period required by this section may be provided concurrently with any other meal or rest period required by policy, rule or law if the timing of the preventative warm-up rest period coincides with the otherwise required meal or rest period. Except when such a rest period coincides with the existing unpaid meal break, the preventative warm-up rest period is a work assignment and shall be compensated accordingly.

(d) Medical monitoring. Employers shall closely monitor temperatures and implement their workplace cold stress plan when temperatures are below sixty degrees (60°) Fahrenheit. If an employee exhibits signs or reports symptoms of cold stress, the employer shall immediately provide appropriate first aid or emergency response.

(e) Access to warmth.

(1) A warm location for breaks shall be made available when the temperature is below sixty degrees (60°) Fahrenheit. When the outdoor temperature in the work area is below sixty degrees (60°) Fahrenheit, the employer shall have and maintain one or more areas with adequate warmth at all times while employees are present. The size of the warm location shall be at least enough to accommodate the number of employees on recovery or rest periods, with at least four square feet (4ft²) available per resting employee. The rest location shall be located as close as practicable to the areas where employees are working.

(2) When the outdoor temperature in the work area is not below sixty degrees (60°) Fahrenheit, employers shall provide warmth pursuant to this section or provide timely access upon an employee's request. Employees shall be allowed and encouraged to take a preventative warm-up rest break when they feel the need to do so to protect themselves from cold stress.

(f) Personal protective equipment. Employers shall provide the necessary protective equipment at no cost to the employee and take into account risk factors for worker heat load due to wearing PPE, even in cold conditions.

(g) Vehicle standards. Employees who spend more than sixty (60) minutes in vehicles each day or whose worksite is considered a vehicle shall have adequate heating available inside the vehicle maintained according to the manufacturer's instructions to keep temperatures above sixty degrees (60°) Fahrenheit.

(h) Cold wave procedures.

(1) The employer shall ensure that the employee takes a minimum ten (10) minute net
preventative warm-up rest period every two (2) hours. The preventative warm-up rest period required by this section may be provided concurrently with any other meal or rest period required by state law if the timing of the preventative warm-up rest period coincides with a required meal or rest period. Except when such a rest period coincides with the existing unpaid meal break, the preventative warm-up rest period is a work assignment and shall be compensated accordingly.

(2) The employer shall ensure that if an employee's skin, clothing or PPE gets wet, they are immediately removed from the work area and taken to a warm-up area to have the wet clothing or PPE removed and are not to return to work until dry or the wet items have been replaced.

(3) The employer shall provide appropriate PPE to ensure ears, face, hands and feet are protected in cold waves.

28-5.2-6. Communication.

(a) The employer shall be responsible for:

(1) Ensuring that effective communication by voice, observation, or electronic means is maintained in order that employees at the work site can contact a supervisor when necessary. An electronic device, such as a cell phone or text messaging device, may be used for this purpose only if reception in the area is reliable; and

(2) Observing employees for alertness and signs or symptoms of cold illness. The employer shall ensure effective employee observation/monitoring by implementing one or more of the following:

   (i) Supervisor or designee observation of twenty (20) or fewer employees; or

   (ii) Mandatory buddy system; or

   (iii) Regular communication with sole employee such as by radio or cellular phone, or other equally effective means.


(a) Employers shall implement effective emergency response procedures for when a worker experiences any stage of cold related illness, including communication protocols and clear and precise directions to work locations for transient, field, and solo workers.

(b) Employers shall identify and communicate the appropriate onsite emergency contact for workers and supervisors and ways to communicate with offsite supervisors and emergency medical personnel.

(c) If a supervisor observes, or any employee reports, any signs or symptoms of cold illness in an employee, the supervisor shall take immediate action commensurate with the severity of the illness.

(d) Employers shall contact emergency medical services and, if necessary, transport
employees to a place where they can be reached by an emergency medical provider.

(e) Workers who need first aid onsite and emergency response/removal from work due to cold-related illness shall be considered on-duty with full compensation.

28-5.2-8. Education and training.

(a) The employer shall provide a free, effective training program to employees during working hours that includes at a minimum:

(1) The risk factors, signs and symptoms of cold stress and heat illness and the necessary medical responses;

(2) Indoor and outdoor temperature stress thresholds;

(3) The employer's procedures to monitor temperature and humidity conditions and how workers can participate in the monitoring process, and procedures and appropriate contact for when conditions change;

(4) The appropriate engineering and administrative control measures instituted to address temperature and humidity according to the standard, including the importance of rest breaks;

(5) The purpose, importance, and methods of acclimatization pursuant to the employer's procedures;

(6) Examples of personal protective equipment such as hats, gloves, winter coats, cooling rags, ice vests, and sunscreen;

(7) The importance and description of the additional physiological burden caused by personal protective equipment and how the employer will factor this additional burden into worker heat load, and methods for properly donning and doffing PPE;

(8) Medical monitoring provisions and employee access to records;

(9) Emergency response procedures including communication procedures and appropriate contacts for workers and supervisors during each step of the response;

(10) The procedures and importance of workers and supervisors reporting acute and delayed onset symptoms, illness to employers; and

(11) That this reporting is free from retaliation.

(b) The training set forth in this section shall be administered by the employer at the time of hiring and no less than annually for employees and supervisors. Training material that is appropriate in content and vocabulary to the educational level, literacy, and language of employees shall be used. The training shall provide an opportunity for interactive questions and answers with a person who is knowledgeable in the subject matter as it relates to the workplace that the training addresses and who is also knowledgeable in the employer's procedures.

(c) Refresher training and retraining should be provided as needed. To increase
effectiveness, repeat training as needed and hold short tailgate meetings before each workday.

Circumstances where retraining is required include, but are not limited to, situations where:

1. In advance of when the hot or cold season occurs or is anticipated to occur; and
2. When there is a heat or cold wave.

(d) Copies of the employer’s written program shall be made available to employees, government officials and employee representatives within one business day upon request at no cost.

28-5.2.9. Recordkeeping.

(a) Every employer shall collect and maintain data and records as required on all temperature-related illnesses and fatalities which occur at an outdoor or indoor worksite.

(b) Employers shall additionally make such reports available to any employee, government office, or employee representative within one business day upon request at no cost.

(c) Every employer shall be subject to fines for not adhering to the mandatory recordkeeping and written program protocols.

28-5.2.10. Anti-retaliation.

(a) Employers shall develop a clear system and appropriate points of contact for workers to report hazardous working conditions and heat- and cold-related injury and illness.

(b) Employers shall be considered in violation of this section where any employee is retaliated or discriminated against for raising concerns and reporting incidents, illness and injury.

SECTION 2. This act shall take effect upon passage.
This act would direct employers to take certain actions to protect their employees who are exposed to extreme hot and cold temperatures.

This act would take effect upon passage.