

SENATE No. 1219

The Commonwealth of Massachusetts

PRESENTED BY:

Rebecca L. Rausch

To the Honorable Senate and House of Representatives of the Commonwealth of Massachusetts in General Court assembled:

The undersigned legislators and/or citizens respectfully petition for the adoption of the accompanying bill:

An Act to establish a standard for prevention of heat illness in outdoor public sector workers.

PETITION OF:

NAME:

Rebecca L. Rausch

DISTRICT/ADDRESS:

Norfolk, Worcester and Middlesex

SENATE No. 1219

By Ms. Rausch, a petition (accompanied by bill, Senate, No. 1219) of Rebecca L. Rausch for legislation to establish a standard for prevention of heat illness in outdoor public sector workers. Labor and Workforce Development.

The Commonwealth of Massachusetts

**In the One Hundred and Ninety-Third General Court
(2023-2024)**

An Act to establish a standard for prevention of heat illness in outdoor public sector workers.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

1 SECTION 1. Chapter 149 of the General Laws is hereby amended by inserting after
2 section 203 the following new section:-

3 Section 204. (a) As used in this section, the following words shall have the following
4 meanings unless the context clearly requires otherwise:

5 “Acclimatization”, temporary adaptation of the body to work in the heat that occurs
6 gradually when a person is exposed to it. Acclimatization peaks in most people within four to
7 fourteen days of regular work for at least two hours per day in the heat.

8 “Heat Illness”, a serious medical condition resulting from the body's inability to cope
9 with a particular heat load, and includes heat cramps, heat exhaustion, heat syncope and heat
10 stroke.

11 “Environmental risk factors for heat illness”, working conditions that create the
12 possibility that heat illness could occur, including air temperature, relative humidity, radiant heat
13 from the sun and other sources, conductive heat sources such as the ground, air movement,
14 workload severity and duration, protective clothing and personal protective equipment worn by
15 employees.

16 “Landscaping”, providing landscape care and maintenance services and/or installing
17 trees, shrubs, plants, lawns, or gardens, or providing these services in conjunction with the
18 design of landscape plans and/or the construction (i.e., installation) of walkways, retaining walls,
19 decks, fences, ponds, and similar structures, except for employment by an employer who
20 operates a fixed establishment where the work is to be performed and where drinking water is
21 plumbed.

22 “Outdoor worker”, any worker engaged in landscaping, outdoor construction related
23 activities, or any other work-related activity that occurs outside of a building for 30 minutes or
24 longer on any single day.

25 “Personal risk factors for heat illness”, factors such as an individual's age, degree of
26 acclimatization, health, water consumption, alcohol consumption, caffeine consumption, and use
27 of prescription medications that affect the body's water retention or other physiological responses
28 to heat.

29 “Shade”, blockage of direct sunlight. One indicator that blockage is sufficient is when
30 objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in
31 the area of shade defeats the purpose of shade, which is to allow the body to cool. For example, a
32 car sitting in the sun does not provide acceptable shade to a person inside it, unless the car is

33 running with air conditioning. Shade may be provided by any natural or artificial means that does
34 not expose employees to unsafe or unhealthy conditions and that does not deter or discourage
35 access or use.

36 “Temperature”, the dry bulb temperature in degrees Fahrenheit obtainable by using a
37 thermometer to measure the outdoor temperature in an area where there is no shade. While the
38 temperature measurement must be taken in an area with full sunlight, the bulb or sensor of the
39 thermometer should be shielded while taking the measurement, e.g., with the hand or some other
40 object, from direct contact by sunlight.

41 “Workplace Safety and Health Program”, The Massachusetts Workplace Safety and
42 Health Program (WSHP) recognized as an OSHA State Plan in August 2022. WSHP enforces
43 occupational safety and health regulations in public sector workplaces, including: state, county,
44 and municipal workplaces; public schools, colleges, universities, and quasi-government
45 agencies, such as water districts and transportation. Federal OSHA continues to have jurisdiction
46 over the private sector.

47 (b) Employees shall have access to potable drinking water that is fresh, pure, suitably
48 cool, and provided to employees free of charge. The water shall be located as close as practicable
49 to the areas where employees are working. Where drinking water is not plumbed or otherwise
50 continuously supplied, it shall be provided in sufficient quantity at the beginning of the work
51 shift to provide one quart per employee per hour for drinking for the entire shift. Employers may
52 begin the shift with smaller quantities of water if they have effective procedures for
53 replenishment during the shift as needed to allow employees to drink one quart or more per hour.

54 (c) (1) Shade shall be present when the temperature exceeds 80 degrees Fahrenheit. When
55 the outdoor temperature in the work area exceeds 80 degrees Fahrenheit, the employer shall have
56 and maintain one or more areas with shade at all times while employees are present that are
57 either open to the air or provided with ventilation or cooling. The amount of shade present shall
58 be at least enough to accommodate the number of employees on recovery or rest periods, so that
59 they can sit in a normal posture fully in the shade without having to be in physical contact with
60 each other. The shade shall be located as close as practicable to the areas where employees are
61 working. Subject to the same specifications, the amount of shade present during meal periods
62 shall be at least enough to accommodate the number of employees on the meal period who
63 remain onsite.

64 (2) Shade shall be available when the temperature does not exceed 80 degrees Fahrenheit.
65 When the outdoor temperature in the work area does not exceed 80 degrees Fahrenheit
66 employers shall either provide shade as per subsection (d)(1) or provide timely access to shade
67 upon an employee's request.

68 (3) Employees shall be allowed and encouraged to take a preventative cool-down rest in
69 the shade when they feel the need to do so to protect themselves from overheating. Such access
70 to shade shall be permitted at all times. An individual employee who takes a preventative cool-
71 down rest (A) shall be monitored and asked if he or she is experiencing symptoms of heat illness;
72 (B) shall be encouraged to remain in the shade; and (C) shall not be ordered back to work until
73 any signs or symptoms of heat illness have abated, but in no event less than 5 minutes in addition
74 to the time needed to access the shade.

75 (4) If an employee exhibits signs or reports symptoms of heat illness while taking a
76 preventative cool-down rest or during a preventative cool-down rest period, the employer shall
77 provide appropriate first aid or emergency response according to subsection (e) of this section.

78 Exceptions to subsections (c)(1) and (c)(2):

79 (1) Where the employer can demonstrate that it is infeasible or unsafe to have a shade
80 structure, or otherwise to have shade present on a continuous basis, the employer may utilize
81 alternative procedures for providing access to shade if the alternative procedures provide
82 equivalent protection.

83 (2) Cooling measures other than shade (e.g., use of misting machines) may be provided in
84 lieu of shade if the employer can demonstrate that these measures are at least as effective as
85 shade in allowing employees to cool.

86 (d) Emergency Response Procedures. The Employer shall implement effective
87 emergency response procedures including:

88 (1) Ensuring that effective communication by voice, observation, or electronic means is
89 maintained so that employees at the work site can contact a supervisor or emergency medical
90 services when necessary. An electronic device, such as a cell phone or text messaging device,
91 may be used for this purpose only if reception in the area is reliable. If an electronic device will
92 not furnish reliable communication in the work area, the employer will ensure a means of
93 summoning emergency medical services.

94 (2) Responding to signs and symptoms of possible heat illness, including but not limited
95 to first aid measures and how emergency medical services will be provided.

96 (A) If a supervisor observes, or any employee reports, any signs or symptoms of heat
97 illness in any employee, the supervisor shall take immediate action commensurate with the
98 severity of the illness.

99 (B) If the signs or symptoms are indicators of severe heat illness (such as, but not limited
100 to, decreased level of consciousness, staggering, vomiting, disorientation, irrational behavior or
101 convulsions), the employer must implement emergency response procedures.

102 (C) An employee exhibiting signs or symptoms of heat illness shall be monitored and
103 shall not be left alone or sent home without being offered onsite first aid and/or being provided
104 with emergency medical services in accordance with the employer's procedures.

105 (3) Contacting emergency medical services and, if necessary, transporting employees to a
106 place where they can be reached by an emergency medical provider.

107 (4) Ensuring that, in the event of an emergency, clear and precise directions to the work
108 site can and will be provided as needed to emergency responders.

109 (e) Acclimatization to high heat during heat waves.

110 (1) All employees shall be closely observed by a supervisor or designee during a heat
111 wave. For purposes of this section only, "heat wave" means any day in which the predicted high
112 temperature for the day will be at least 80 degrees Fahrenheit and at least ten degrees Fahrenheit
113 higher than the average high daily temperature in the preceding five days. The observation shall
114 continue for the duration of the heat wave or for 14 days, whichever is shorter.

115 (2) When a worker starts on a job during a heat wave, the worker shall be closely
116 observed for the duration of the heat wave or for 14 days from the date of arrival, whichever
117 period is shorter.

118 (f) Training.

119 (1) Employee training. Effective training in the following topics shall be provided to each
120 supervisory and non-supervisory employee before the employee begins work that should
121 reasonably be anticipated to result in exposure to the risk of heat illness:

122 (A) The environmental and personal risk factors for heat illness, as well as the added
123 burden of heat load on the body caused by exertion, clothing, and personal protective equipment.

124 (B) The employer's procedures for complying with the requirements of this standard,
125 including, but not limited to, the employer's responsibility to provide water, shade, cool-down
126 rests, and access to first aid as well as the employees' right to exercise their rights under this
127 standard without retaliation.

128 (C) The importance of frequent consumption of small quantities of water, up to 4 cups
129 per hour, when the work environment is hot and employees are likely to be sweating more than
130 usual in the performance of their duties.

131 (D) The concept, importance, and methods of acclimatization pursuant to the employer's
132 procedures under subsection (h)(4).

133 (E) The different types of heat illness, the common signs and symptoms of heat illness,
134 and appropriate first aid and/or emergency responses to the different types of heat illness, and in

135 addition, that heat illness may progress quickly from mild symptoms and signs to serious and life
136 threatening illness.

137 (F) The importance to employees of immediately reporting to the employer, directly or
138 through the employee's supervisor, symptoms or signs of heat illness in themselves, or in co-
139 workers.

140 (G) The employer's procedures for responding to signs or symptoms of possible heat
141 illness, including how emergency medical services will be provided should they become
142 necessary.

143 (H) The employer's procedures for contacting emergency medical services, and if
144 necessary, for transporting employees to a point where they can be reached by an emergency
145 medical service provider.

146 (I) The employer's procedures for ensuring that, in the event of an emergency, clear and
147 precise directions to the work site can and will be provided as needed to emergency responders.
148 These procedures shall include designating a person to be available to ensure that emergency
149 procedures are invoked when appropriate.

150 (2) Supervisor training. Prior to supervising employees performing work that should
151 reasonably be anticipated to result in exposure to the risk of heat illness effective training on the
152 following topics shall be provided to the supervisor:

153 (A) The information required to be provided by section (h)(1) above.

154 (B) The procedures the supervisor is to follow to implement the applicable provisions in
155 this section.

156 (C) The procedures the supervisor is to follow when an employee exhibits signs or
157 reports symptoms consistent with possible heat illness, including emergency response
158 procedures.

159 (D) How to monitor weather reports and how to respond to hot weather advisories.

160 (g) Heat Illness Prevention Plan. The employer shall establish, implement, and maintain
161 an effective heat illness prevention plan. The plan shall be in writing in both English and the
162 language understood by the majority of the employees and shall be made available at the
163 worksite to employees and to representatives of the Department of Labor Standards upon
164 request. The Heat Illness Prevention Plan may be included as part of the employer's Illness and
165 Injury Prevention Program required by section 3203, and shall, at a minimum, contain:

166 (1) Procedures for the provision of water and access to shade.

167 (2) The high heat procedures referred to in subsection (d).

168 (3) Emergency Response Procedures in accordance with subsection (e).

169 (4) Acclimatization methods and procedures in accordance with subsection (f).

170 SECTION 2. Not later than January 1, 2025, the Department of Labor Standards shall
171 adopt and implement the requirements in Section 1 as the state standard for the prevention of
172 heat illness in outdoor workers covered under the Workplace Safety and Health Program.
173 Employers shall have 6 months from the date the standard is adopted before compliance is
174 enforced.