

HOUSE No. 3995

The Commonwealth of Massachusetts

PRESENTED BY:

James J. O'Day

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 protect workers from extreme temperatures.

PETITION OF:

NAME:	DISTRICT/ADDRESS:	DATE ADDED:
<i>James J. O'Day</i>	<i>14th Worcester</i>	<i>1/16/2025</i>
<i>Tara T. Hong</i>	<i>18th Middlesex</i>	<i>4/3/2025</i>
<i>Steven Ultrino</i>	<i>33rd Middlesex</i>	<i>4/3/2025</i>
<i>David Henry Argosky LeBoeuf</i>	<i>17th Worcester</i>	<i>4/7/2025</i>
<i>Paul McMurtry</i>	<i>11th Norfolk</i>	<i>4/7/2025</i>
<i>Margaret R. Scarsdale</i>	<i>1st Middlesex</i>	<i>4/7/2025</i>
<i>James B. Eldridge</i>	<i>Middlesex and Worcester</i>	<i>5/20/2025</i>
<i>Paul R. Feeney</i>	<i>Bristol and Norfolk</i>	<i>6/18/2025</i>
<i>Christopher Hendricks</i>	<i>11th Bristol</i>	<i>6/18/2025</i>
<i>Mindy Domb</i>	<i>3rd Hampshire</i>	<i>6/20/2025</i>
<i>Danillo A. Sena</i>	<i>37th Middlesex</i>	<i>6/23/2025</i>
<i>Tackey Chan</i>	<i>2nd Norfolk</i>	<i>6/30/2025</i>
<i>Lindsay N. Sabadosa</i>	<i>1st Hampshire</i>	<i>7/27/2025</i>
<i>Natalie M. Higgins</i>	<i>4th Worcester</i>	<i>8/11/2025</i>
<i>Marjorie C. Decker</i>	<i>25th Middlesex</i>	<i>9/11/2025</i>

HOUSE No. 3995

By Representative O'Day of West Boylston, a petition (accompanied by bill, House, No. 3995) of James J. O'Day and Tara T. Hong relative to heat or cold stress. Labor and Workforce Development.

The Commonwealth of Massachusetts

**In the One Hundred and Ninety-Fourth General Court
(2025-2026)**

An Act to protect workers from extreme temperatures.

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

1 Chapter 149 of the General Laws is hereby amended by adding the following section:-

2 Section 204. (a) The general court hereby finds and declares that:

3 (i) Workers who are exposed to extreme heat or cold or work in extreme temperature
4 environments may be at risk of heat or cold stress.

5 (ii) Exposure to extreme heat can result in occupational illnesses, injuries and death,
6 including heat stroke, heat exhaustion, heat cramps or heat rashes.

7 (iii) Exposure to extreme cold can result in occupational illness, injuries and death,
8 including hypothermia, frostbite or trench foot.

9 (iv) Each year, thousands of workers become sick from occupational heat and cold
10 exposure, and too many of those illnesses result in fatalities.

11 (v) Employees new to working in the heat are most vulnerable—nearly 3 out of 4
12 workers who die from heat-related causes die in their first week on the job.

13 (vi) Under the federal Occupational Safety and Health Act, employers are responsible
14 for providing workplaces free of known safety and health hazards. This includes protecting
15 workers from temperature-related hazards including evaluating the temperature and all
16 contributing factors to heat and cold stress, metabolic workloads, radiant and conductive heat
17 sources, humidity, air movement and wearing of protective equipment. Employers must ensure a
18 safe workplace by implementing a plan to reduce exposure to hazardous temperatures through
19 providing paid rest breaks, adequate shade or warmth, adequate drinking water, training for
20 supervisors and staff and other key elements to protect workers.

21 (b) For the purposes of this section, the following words shall, unless the context clearly
22 requires otherwise, have the following meanings:-

23 "Acclimatization", the temporary physiological adaptation of the body to work in hot
24 environments that occurs gradually; provided that, during an acclimatization period, no person
25 shall be exposed to no more than 20 per cent of the usual duration of work in the hot
26 environment on day 1 and no more than a 20 per cent increase each day; and provided further,
27 that most people acclimatize within 7 to 14 workdays.

28 "Administrative control", a method to limit exposure to a hazard by adjustment of work
29 procedures, practices, or schedules. Examples of administrative controls that may be effective at
30 minimizing the risk of heat or cold illness in a particular work area include but are not limited to:
31 acclimatizing employees, rotating employees, scheduling work earlier or later in the day,
32 organizing work location and tasks at certain times of the day to avoid direct sunlight, using

33 work and rest schedules, reducing work intensity or speed, reducing work hours and changing
34 required work clothing.

35 "Cold illness", a serious medical condition resulting from the body's inability to cope
36 with cold temperatures including but not limited to trench foot, frostbite, hypothermia and
37 chilblains.

38 "Cold wave", any day in which there is a rapid fall in temperature within a 24-hour period
39 requiring substantially increased protection to agriculture, industry, commerce and social
40 activities.

41 "Cool-down area", an indoor or outdoor area blocked from direct sunlight and shielded
42 from other high radiant heat sources and is either open to the air or provided with ventilation or
43 cooling. One indicator that blockage is sufficient is when objects do not cast a shadow in the area
44 of blocked sunlight. A cool-down area does not include a location where: (i) environmental risk
45 factors defeat the purpose of allowing the body to cool; (ii) employees are exposed to unsafe or
46 unhealthy conditions; or (iii) employees are deterred or discouraged from accessing or using the
47 cool-down area.

48 "Drinking water", fresh, pure, cool potable water, less than 75 degrees Fahrenheit,
49 provided free of charge to employees. The term drinking water includes electrolyte-replenishing
50 beverages that do not contain caffeine.

51 "Employee", any person providing labor or services within the scope of this section for
52 remuneration for a private entity or business within the commonwealth, without regard to an
53 individual's immigration status including but not limited to private and public sector workers,
54 part-time workers, independent contractors, day laborers, farmworkers and other temporary and

55 seasonal workers. The term employee shall also include individuals working for staffing
56 agencies, contractors or subcontractors on behalf of the employer at any individual worksite, as
57 well as any individual delivering goods or transporting people at, to or from the worksite on
58 behalf of the employer, regardless of whether delivery or transport is conducted by an individual
59 or entity that would otherwise be deemed an employer under this section.

60 "Employer", any individual, partnership, association, corporation, limited liability
61 company, business trust, legal representative, public entity or any organized group acting as
62 employer within the scope of this section.

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

71 "Heat illness", a serious medical condition resulting from the body's inability to cope with
72 a particular heat load including but not limited to heat cramps, heat exhaustion, heat syncope and
73 heat stroke.

74 "Heat wave", any day in which the predicted high temperature for the day will be at least
75 10 degrees Fahrenheit higher than the average high daily temperature in the preceding 5 days.

76 "Indoor temperature stress threshold", a heat stress threshold of 80 or more degrees
77 Fahrenheit and a cold threshold of 60 or below degrees Fahrenheit. In cases of offices, schools or
78 other indoor temperature regulated environments, the indoor temperature shall fall between 68.5
79 and 75 degrees when the outdoor temperature is below 55 degrees, and when the outdoor
80 temperature is above 85 degrees, the indoor temperature shall fall between 75 and 80.5 degrees.

81 "Indoor worksite", any enclosed work vehicles and any space between a floor and ceiling
82 bound on all sides by walls except where noted in the definition of outdoor worksite. A wall
83 includes any door, window, retractable divider, garage door or other physical barrier that is
84 permanent, open or closed.

85 "Outdoor temperature stress threshold", a heat stress threshold of 80 or more degrees
86 Fahrenheit and a cold threshold of 60 or below degrees Fahrenheit.

87 "Outdoor worksite", all employers with employees performing work in an outdoor
88 environment. The term outdoor worksite includes locations such as sheds, tents, greenhouses or
89 other structures where work activities are conducted inside, but the temperature is not managed
90 by devices that reduce heat or cold exposure and aid in heating or cooling, such as air
91 conditioning systems or heaters; provided, that having only fans or humidifiers may still qualify
92 worksites as outdoor. The term outdoor worksite does not apply to incidental exposure, which
93 exists when an employee is required to perform a work activity outdoors for not longer than 15
94 minutes in any 60-minute period.

95 "Personal protective equipment" or "PPE", the protective gear, uniforms and clothing to
96 withstand temperatures at or exceeding the stress thresholds. Where feasible engineering controls
97 and administrative controls are not sufficient to reduce and maintain the temperature and heat

98 index to below 87 degrees Fahrenheit when employees are present or the temperature to below
99 82 degrees Fahrenheit where employees wear clothing that restricts heat removal or work in high
100 radiant heat areas, personal heat protective equipment shall be used to minimize the risk of heat
101 illness, except to the extent that the employer demonstrates that use of such equipment is
102 infeasible.

103 "Preventative cool-down rest", a rest taken in a cool-down area to prevent overheating.

104 "Temperature", the temperature measured by a globe thermometer, which is a type of
105 apparent temperature used to estimate the effect of temperature, humidity, wind speed and
106 visible and infrared radiation on humans. The globe thermometer may not be shielded from
107 direct exposure to radiant heat while the globe temperature is being measured.

108 "Union representative", a recognized or certified collective bargaining agent representing
109 a group of employees.

110 (c)(1) The employer shall fulfill the following requirements when employees are in an
111 outdoor or indoor worksite and experiencing conditions at or exceeding a heat stress threshold of
112 80 or more degrees Fahrenheit:

113 (i) The employer shall develop a written program to mitigate heat-related illnesses and
114 injuries experienced by employees. The written program shall identify and incorporate work
115 processes and external factors that increase the likelihood of heat-related illness including but not
116 limited to increased metabolic workloads, radiant and conductive heat sources, increased
117 humidity, decreased air movement and wearing of protective equipment. The written program
118 shall include information on education and training. The written program shall include
119 emergency response plans, procedures and relevant worksite contacts in case of an emergency.

120 The written program shall be updated at least annually, when major work conditions change, and
121 when a heat-related incident occurs.

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

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

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

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

134 (3) The employer shall monitor employees who take a preventative cool-down rest and
135 shall be asked about symptoms of heat illness. Employees shall be encouraged to remain in the
136 cool down area and not be ordered back to work until any signs or symptoms of heat illness have
137 been abated.

138 (4) The preventative cool-down rest period required by this section may be provided
139 concurrently with any other meal or rest period required by policy, rule or law if the timing of
140 the preventative cool-down rest period coincides with the otherwise required meal or rest period.

141 Except when such a rest period coincides with the existing unpaid meal break, the preventative
142 cool-down rest period is a work assignment and shall be compensated accordingly.

143 (5) Employers shall closely monitor temperatures using a globe thermometer and
144 implement their workplace heat stress plan when temperatures exceed eighty degrees Fahrenheit.
145 If an employee exhibits signs of reported symptoms of heat illness, the employer shall
146 immediately provide appropriate first aid or emergency response.

147 (6) Shade shall be made available when the temperature exceeds 80 degrees Fahrenheit
148 and shall be as close to the worksite as possible while employees are present. The amount of
149 shade present shall be at least enough to accommodate the number of employees on recovery or
150 rest periods with at least 4 square feet per resting employee.

151 (7) Where feasible, work shall be performed in the shade. When the temperature does not
152 exceed 80 degrees Fahrenheit, the employer shall provide timely access to shade upon an
153 employee's request. Access to shade shall not exceed the temperature of the worksite.

154 (8) Employers shall provide the necessary protective equipment at no cost to the
155 employee.

156 (9) Employees who spend more than 60 minutes in vehicles each day or whose worksite
157 is considered a vehicle shall have adequate air conditioning available inside such vehicle
158 maintained according to the manufacturer's instructions to keep temperatures below 80 degrees
159 Fahrenheit.

160 (10) Employers shall provide time for acclimatization of new and returning employees.

161 (11) New employees and existing employees newly assigned to heat work or absent from
162 heat work for more than 7 days shall only work 20 per cent of their normal duration on their first
163 day and gradually increase work duration over a 2-week period.

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

166 (13) The employer shall implement high heat procedures when the temperature equals or
167 exceeds 90 degrees Fahrenheit or when a heat wave is experienced.

168 (14) The employer shall ensure that the employee takes a minimum 10-minute
169 preventative cool-down rest period every 2 hours. The preventative cool-down rest period
170 required by this paragraph may be provided concurrently with any other meal or rest period
171 required by section 100 if the timing of the preventative cool-down rest period coincides with a
172 required meal or rest period. Except when such a rest period coincides with the existing unpaid
173 meal break, the preventative cool-down rest period is a work assignment and shall be
174 compensated accordingly.

175 (15) When the temperature equals or exceeds 100 degrees Fahrenheit, the employer shall
176 ensure that the employee takes a minimum 10-minute preventative cool-down rest period every
177 hour. The preventative cool-down rest period required by this subsection may be provided
178 concurrently with any other meal or rest period required by section 100 if the timing of the
179 preventative cool-down rest period coincides with a required meal or rest period. Except when
180 such a rest period coincides with the existing unpaid meal break, the preventative cool-down rest
181 period is a work assignment and shall be compensated accordingly.

182 (16) The employer shall ensure that effective communication by voice, observation or
183 electronic means is maintained so that employees at the worksite can contact a supervisor when
184 necessary. An electronic device, such as a cellphone or text messaging device, may be used for
185 this purpose only if reception in the area is reliable.

186 (17) The employer shall ensure effective employee observation and monitoring by
187 implementing 1 or more of the following: (i) supervisor or designee observation of 20 or fewer
188 employees; (ii) a mandatory buddy system; (iii) irregular communication with sole employee
189 such as by radio or cellular phone, or other equally effective means.

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

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

196 (20) If a supervisor observes, or any employee reports, any signs or symptoms of heat
197 illness in an employee, the supervisor shall take immediate action commensurate with the
198 severity of the illness.

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

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

203 (d)(1) The employer shall fulfill the following requirements when employees are in an
204 outdoor or indoor worksite and experiencing conditions at or exceeding the cold threshold of 60
205 or below degrees Fahrenheit:

206 (i) The employer shall develop a written program to mitigate cold-related illnesses and
207 injuries experienced by employees. The written program shall identify and incorporate work
208 processes and external factors that increase the likelihood of cold-related illness, worker training
209 on cold-related illness prevention, recognition and reporting, ensured access to warm liquids,
210 warm areas for use during break periods, and wind-protective clothing based on wind speed, and
211 prompt medical attention to workers who show signs of cold-related illness or injury, schedules
212 designed to reduce the time workers spend in the cold environment and reduce the physical
213 demands during cold exposure, and medical monitoring to ensure worker health and protection.
214 The written program shall include information on education and training. The written program
215 shall include emergency response plans, procedures and relevant worksite contacts in case of an
216 emergency. The written program shall be updated at least annually, when major work conditions
217 change, and when a heat-related incident occurs.

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

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

222 (2) The employer shall provide access to drinking water located as close as practical to
223 where employees are working. If drinking water is not plumbed or otherwise continuously
224 supplied, it shall be provided in sufficient quantity at the beginning of the shift, a minimum of 1

225 quart of drinking water per hour per employee. Warm beverages shall be provided for every
226 employee accessible in warm-up areas. Frequent drinking of water and warm beverages shall be
227 encouraged.

228 (3) The employer shall require and encourage preventative breaks at the duration of not
229 less than ten minutes, in addition to the time needed to access the warm-up area, in a warm area
230 as needed for outdoor work or a warm breakroom for indoor workers.

231 (4) Employees who take a preventative warm-up rest shall be monitored and asked about
232 symptoms of cold stress.

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

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

240 (7) Employers shall closely monitor temperatures and implement their workplace cold
241 stress plan when temperatures are below 60 degrees Fahrenheit. If an employee exhibits signs or
242 reports symptoms of cold stress the employer shall immediately provide appropriate first aid or
243 emergency response.

244 (8) A warm location for breaks shall be made available when the temperature is below 60
245 degrees Fahrenheit. When the outdoor temperature in the work area is below 60 degrees

246 Fahrenheit, the employer shall have and maintain 1 or more areas with adequate warmth at all
247 times while employees are present. The size of the warm location shall be at least enough to
248 accommodate the number of employees on recovery or rest periods, with at least 4 square feet
249 available per resting employee. The rest location shall be located as close as practicable to the
250 areas where employees are working.

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

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

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

261 (12) The employer shall ensure that the employee takes a minimum 10-minute
262 preventative warm-up rest period every 2 hours. The preventative warm-up rest period required
263 by this paragraph may be provided concurrently with any other meal or rest period required by
264 section 100 if the timing of the preventative warm-up rest period coincides with a required meal
265 or rest period. Except when such a rest period coincides with the existing unpaid meal break, the
266 preventative warm-up rest period is a work assignment and shall be compensated accordingly.

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

271 (14) Provide appropriate PPE to ensure ears, face, hands and feet are protected in cold
272 waves.

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

277 (16) Observing employees for alertness and signs or symptoms of cold illness. The
278 employer shall ensure effective employee observation and monitoring by implementing 1 or
279 more of the following: (i) supervisor or designee observation of 20 or fewer employees; (ii) a
280 mandatory buddy system; (iii) regular communication with sole employee such as by radio or
281 cellular phone or other equally effective means.

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

285 (18) Employers shall identify and communicate the appropriate onsite emergency contact
286 for workers and supervisors and ways to communicate with off-site supervisors and emergency
287 medical personnel.

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

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

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

295 (e)(1) The employer shall provide a free, effective training program to employees during
296 working hours that includes at a minimum:

297 (i) the risk factors, signs and symptoms of cold stress and heat illness and the necessary
298 medical responses;

299 (ii) indoor and outdoor temperature stress thresholds;

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

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

305 (v) the purpose, importance, and methods of acclimatization pursuant to the employer's
306 procedures;

307 (vi) examples of personal protective equipment such as hats, gloves, winter coats, cooling
308 rags, ice vests, sunscreen, etc.;

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

312 (viii) medical monitoring provisions and employee access to records;

313 (ix) emergency response procedures including communication procedures and
314 appropriate contacts for workers and supervisors during each step of the response; and

315 (x) the procedures and importance of workers and supervisors reporting acute and
316 delayed onset symptoms, illness to employers; and that this reporting is free from retaliation.

317 (2) Such training shall be administered by the employer at the time of hiring and no less
318 than annually for employees and supervisors. Training material that is appropriate in content and
319 vocabulary to the educational level, literacy and language of employees shall be used. The
320 training shall provide an opportunity for interactive questions and answers with a person who is
321 knowledgeable in the subject matter as it relates to the workplace that the training addresses and
322 who is also knowledgeable in the employer's procedures. The employer shall provide retraining
323 as needed. To increase effectiveness, the employer shall repeat training as needed and hold short
324 tailgate meetings before each workday. Circumstances where retraining is required include but
325 are not limited to situations where: (i) in advance of when the hot or cold season occurs or is
326 anticipated to occur; and (ii) when there is a heat or cold wave.

327 (3) Copies of the employers' written program and training materials required under this
328 section shall be made available to employees, government officials and employee representatives
329 within 1 business day upon request at no cost.

330 (f) Every employer shall collect and maintain data and records and make reports as
331 required on all temperature-related illnesses and fatalities which occur at an outdoor or indoor
332 worksite. Employers shall make such data, records and reports available to any employee,
333 government office or employee representative within 1 business day upon request at no cost.

334 (g) Every employer shall be subject to fines for not adhering to the mandatory record
335 keeping and written program protocols.

336 (h) Employers shall develop a clear system and appropriate points of contact for workers
337 to report hazardous working conditions and heat-and cold-related injury and illness. Employers
338 shall be considered in violation of this section where any employee is retaliated or discriminated
339 against for raising concerns and reporting incidents, illness and injury.