HB 805, Employment health and safety standards; heat illness prevention.

Chief Patron: Delegate Jeion A, Ward

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56 57 **HOUSE BILL NO. 805** Offered January 8, 2020 Prefiled January 7, 2020

A BILL to amend the Code of Virginia by adding a section numbered 40.1-44.2, relating to the protection of employees; standards for heat illness prevention.

Patrons—Ward and Kory

Referred to Committee on Labor and Commerce

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 40.1-44.2 as follows: § 40.1-44.2. Standards for heat illness prevention.

A. As used in this section:

"Acclimatization" means the gradual, temporary adaptation of the body to work in the heat when a

person is exposed to heat.

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

"Heat illness" means a serious medical condition resulting from the body's inability to cope with a

particular heat load and includes heat cramps, heat exhaustion, heat syncope, and heat stroke.

"Heat wave" means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least 10 degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

"Landscaping" means providing landscape care and maintenance services or installing trees, shrubs, plants, lawns, or gardens, or providing these services in conjunction with the design of landscape plans. "Landscaping" includes the construction, installation, or maintenance of walkways, retaining walls, decks, fences, ponds, and similar structures.

"Oil and gas extraction" means operating or developing oil and gas field properties, exploring for crude petroleum or natural gas, mining or extracting of oil or gas, or recovering liquid hydrocarbons

from oil or gas field gases.

"Personal risk factors for heat illness" means factors such as an individual's age, degree of acclimatization, health, water consumption, and use of prescription medications that affect the body's water retention or other physiological responses to heat.

"Potable water" means water that is suitable for drinking purposes found in Occupational Safety and

Health Administration (OSHA) standard 29 C.F.R. 1910.141(a)(2).

"Rest period" means a cool-down period made available to an employee to prevent heat illness.

"Shade" means the complete blockage of direct sunlight that allows the body to cool. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and does not deter or discourage access or use.

- B. The Safety and Health Codes Board shall adopt regulations establishing reasonable standards as provided in this section that are designed to protect employees from heat illness while engaged in outdoor work. This section applies to the control of risk of occurrence of heat illness. These standards shall apply to all indoor and outdoor places of employment, and to all employers that come within the auspices of the Virginia Occupational Safety and Health (VOSH) Program, except that only employers engaged in the following industries shall be required to comply with the standards established pursuant to subsection E:
 - 1. Agriculture;
 - 2. Construction; 3. Landscaping;
 - 4. Oil and gas extraction; or
- 5. Transportation or delivery of agricultural products, construction materials, or other heavy materials, including furniture, lumber, freight, cargo, cabinets, and industrial or commercial materials, except for employment that consists of operating an air-conditioned vehicle and does not include loading or unloading.
 - C. Such standards shall require each employer to provide water as follows:
- 1. Employees shall be given access, at no cost to themselves, to drinking water in quantities sufficient to maintain adequate levels of hydration at varying levels of heat, using a baseline of one cup

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of cool water per 15 to 20 minutes, as well as electrolytes if employees are sweating for more than two hours.

- 2. The water shall be located as close as practicable to the areas where employees are working.
- 3. Employers may begin the shift with smaller quantities of water if effective procedures are established for replenishment during the shift as needed.
- 4. The water provided shall be filtered, fresh, pure, suitably cool, and shall be provided to employees free of charge.
 - 5. The frequent drinking of water, as described in subdivision I 1 c (3), shall be encouraged.
- 6. The water shall be located as close as practicable to the areas where employees are working and shall not in any event be farther than 400 feet walking distance from an employee's work area.
- D. Such standards shall require each employer to provide access to shade or climate controlled environment as follows:
- 1. When the temperature in the work area exceeds 80 degrees Fahrenheit, the employer shall ensure there are one or more areas with shade or climate-controlled environment provided and maintained at all times while employees are present that are either open to the air or provided with ventilation or cooling. The amount of shade or climate-controlled environment provided shall be at least enough to accommodate the number of employees on rest periods so that they can sit in a normal posture fully in the shade or climate-controlled environment without having to be in physical contact with each other. The shade or climate-controlled environment shall be located as close as practicable to the areas where employees are working. Subject to the same specifications, the amount of shade or climate-controlled environment present during meal periods shall be at least enough to accommodate the number of employees on the meal period who remain onsite.
- 2. When the temperature in the work area does not exceed 80 degrees Fahrenheit, employers shall either provide shade or a climate-controlled environment in accordance with subdivision 1 or provide timely access to shade or a climate-controlled environment upon an employee's request.
- 3. Employees shall always be allowed and encouraged to take a cool-down rest period in the shade or climate-controlled environment for preventative measures, including but not limited to protecting themselves from overheating. An individual employee who takes a preventative cool-down rest (i) shall be asked if he or she is experiencing symptoms of heat illness; (ii) shall be encouraged to remain in the shade or climate-controlled environment; and (iii) shall not be ordered back to work until any signs or symptoms of heat illness have abated, but in no event less than five minutes in addition to the time needed to access the shade or climate-controlled environment.
- 4. Notwithstanding the provisions of subdivisions 1 and 2, except for employers in the agricultural industry, cooling measures other than shade or climate-controlled environment, including the use of misting machines, may be provided in lieu of shade if the employer is able to demonstrate that these measures are at least as effective as shade in allowing employees to be cooled.
- E. Such standards shall require each employer, when the temperature equals or exceeds 90 degrees Fahrenheit, to implement high-heat procedures that:
- 1. Ensure that employees are able to contact their supervisor by any effective communication vehicle when necessary.
- 2. Require effectively observing and monitoring employees for signs or symptoms of heat illness by implementing two or more of the following:
 - a. Supervisor or designee observation of 20 or fewer employees;
 - b. Mandatory buddy system;
 - c. Regular communication with sole employee such as by radio or cellphone; or
 - d. Other effective means of observation.
- 3. Designate one or more employees on each worksite as authorized to call for emergency medical services, and if no designated employees are available, allowing other employees to call on their behalf.
 - 4. Require reminding employees throughout the work shift to stay properly hydrated.
- 5. For employees employed in agriculture, conduct pre-shift meetings before the commencement of work to review the high heat procedures, encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary.
 - F. Such standards shall require each employer to provide rest periods as follows:
- 1. An employer shall provide rest periods away from the hot environment that should range in duration from 15 to 45 minutes per hour, depending on the workplace temperature and worker activity level. At certain wet bulb globe temperatures, work must be stopped entirely.

 2. If an employer fails to provide a rest period in accordance with this subsection, the employer
- 2. If an employer fails to provide a rest period in accordance with this subsection, the employer shall pay the employee one additional hour of pay at the employee's regular rate of compensation for each workday that a required rest period is not provided.
- G. Such standards shall require each employer to implement effective emergency response procedures pursuant to which the employer shall:
 - 1. Ensure that effective communication by voice, observation, or electronic means is maintained so

that employees at the worksite can contact a supervisor or emergency medical services when necessary. An electronic device, such as a cellphone or text messaging device, may be used for this purpose only if reception in the area is reliable.

2. Respond to signs and symptoms of possible heat illness if a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee. The supervisor shall take immediate action commensurate with the severity of the illness, including but not limited to first aid measures and how emergency medical services will be provided. If they are the employee is exhibiting signs of symptoms severe enough to indicate heat illness, the employee shall not be sent home without being offered onsite first aid or provided with emergency medical services.

H. Such standards shall require that all employees who commence employment in high-heat environments, or who will be working in hotter conditions than usual such as during a heat wave, be gradually acclimatized to the work over a period of between seven and 14 days.

- I. Such standards shall require each employer to provide effective training that is:
- 1. For employees:

- a. In a language the supervisor or employee understands;
- b. Provided to each supervisor and non-supervisory employee before the employee begins work that may reasonably result in exposure to the risk of heat illness; and
 - c. On the following topics:
- (1) The environmental and personal risk factors that contribute to or may increase the susceptibility to heat-related illness, including, but not limited to, medical conditions, water consumption, alcohol use, use of medications that affect the body's response to the heat, and burden caused by personal protective equipment;
- (2) The employer's procedures for complying with the requirements of this standard, including the employer's responsibility to provide water, shade or climate controlled environment, cool-down rests, and access to first aid as well as the employees' right to exercise their rights under this standard without retaliation;
- (3) The importance of frequent consumption of water, up to four cups per hour, when the work environment is above 80 degrees and employees are likely sweating more than usual;
 - (4) The importance of acclimatization;
- (5) The different types of heat illness, the common signs and symptoms of heat illness, and appropriate first aid and emergency responses to the different types of heat illness;
- (6) The importance of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in coworkers; and
- (7) The employer's procedures for responding to signs or symptoms of possible heat illness, including how emergency medical services will be contacted and provided should they become necessary; and
 - 2. For supervisors:
- a. Provided to supervisors prior to supervising employees performing work that may reasonably result in exposure to the risk of heat illness; and
 - b. On the following topics:
 - (1) The topics required to be provided to employees listed in subdivision 1 c;
- (2) The procedures the supervisor is required to follow to implement the applicable provisions in this section;
- (3) The procedures the supervisor is require to follow when an employee exhibits signs or reports symptoms consistent with possible heat illness, including emergency response procedures; and
- (4) The procedures for moving or transporting an employee to a place where the employee can be reached by an emergency medical service provider, if necessary.
- J. The standards established pursuant to this section shall take into consideration the NIOSH Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments published by the National Institute for Occupational Safety and Health in 2016.
- K. The rules and regulations adopted by the Safety and Health Codes Board pursuant to this section shall be enforced as specified in §§ 40.1-49.3 through 40.1-49.7.
- L. It is a violation of § 40.1-51.2:1 to discharge or discriminate in any other manner against employees for exercising their rights under this or any other provision offering occupational safety and health protection to employees.
- (M. A person may bring in an appropriate court of the Commonwealth (i) an action based on a violation of this section or the regulations hereunder to enjoin such a violation, (ii) an action to recover actual monetary loss from such a violation, or to receive \$500 in damages for each such violation, whichever is greater, or (iii) both such actions,

SB 411, Employment health and safety standards; heat illness prevention, definition.

Chief Patron: Senator Ghazala F. Hashmi

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SENATE BILL NO. 411 Offered January 8, 2020 Prefiled January 7, 2020

A BILL to amend the Code of Virginia by adding a section numbered 40.1-44.2, relating to the protection of employees; standards for heat illness prevention.

Patron—Hashmi

Referred to Committee on Commerce and Labor

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 40.1-44.2 as follows: § 40.1-44.2. Standards for heat illness prevention.

A. As used in this section:

"Acclimatization" means the gradual, temporary adaptation of the body to work in the heat when a

person is exposed to heat.

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

"Heat illness" means a serious medical condition resulting from the body's inability to cope with a

particular heat load and includes heat cramps, heat exhaustion, heat syncope, and heat stroke.

"Heat wave" means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least 10 degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

"Landscaping" means providing landscape care and maintenance services or installing trees, shrubs, plants, lawns, or gardens, or providing these services in conjunction with the design of landscape plans. "Landscaping" includes the construction, installation, or maintenance of walkways, retaining walls, decks, fences, ponds, and similar structures.

"Oil and gas extraction" means operating or developing oil and gas field properties, exploring for crude petroleum or natural gas, mining or extracting of oil or gas, or recovering liquid hydrocarbons

from oil or gas field gases.

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

"Potable water" means water that is suitable for drinking purposes found in Occupational Safety and

Health Administration (OSHA) standard 29 C.F.R. 1910.141(a)(2).

"Rest period" means a cool-down period made available to an employee to prevent heat illness.

"Shade" means the complete blockage of direct sunlight that allows the body to cool. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and does not deter or discourage access or use.

"Temperature" means the dry bulb temperature in degrees Fahrenheit obtainable by using a thermometer to measure the outdoor temperature in an area where there is no shade.

- B. The Safety and Health Codes Board shall adopt regulations establishing reasonable standards as provided in this section that are designed to protect employees from heat illness while engaged in outdoor work. This section applies to the control of risk of occurrence of heat illness. These standards shall apply to all outdoor places of employment, except that only employers engaged in the following 46 industries shall be required to comply with the standards established pursuant to subsection E:
 - 1. Agriculture;
 - 2. Construction;
 - 3. Landscaping;
 - 4. Oil and gas extraction; or
 - 5. Transportation or delivery of agricultural products, construction materials, or other heavy materials, including furniture, lumber, freight, cargo, cabinets, and industrial or commercial materials, except for employment that consists of operating an air-conditioned vehicle and does not include loading or unloading.
 - C. Such standards shall require each employer to provide water as follows:
 - 1. Employees shall be permitted to have access to potable drinking water at all times.
 - 2. The water shall be located as close as practicable to the areas where employees are working.

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3. Where drinking water is not plumbed or otherwise continuously supplied, it must be provided in sufficient quantity, from the beginning to the end of the work shift, to supply at least one quart of drinking water per employee per hour.

4. Employers may begin the shift with smaller quantities of water if effective procedures are

established for replenishment during the shift as needed.

5. The water provided shall be filtered, fresh, pure, suitably cool, and shall be provided to employees

free of charge.

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6. The frequent drinking of water, as described in subdivision I 1 c (3), shall be encouraged. The water shall be located as close as practicable to the areas where employees are working and shall not in any event be farther than 400 feet walking distance from an employee's work area.

D. Such standards shall require each employer to provide access to shade as follows:

1. When the outdoor temperature in the work area exceeds 80 degrees Fahrenheit, the employer shall ensure there are one or more areas with shade provided and maintained at all times while employees are present that are either open to the air or provided with ventilation or cooling. The amount of shade provided shall be at least enough to accommodate the number of employees on rest periods, so that they can sit in a normal posture fully in the shade without having to be in physical contact with each other. The shade shall be located as close as practicable to the areas where employees are working. Subject to the same specifications, the amount of shade present during meal periods shall be at least enough to accommodate the number of employees on the meal period who

2. When the outdoor temperature in the work area does not exceed 80 degrees Fahrenheit, employers shall either provide shade in accordance with subdivision 1 or provide timely access to shade upon an

employee's request.

3. Employees shall always be allowed and encouraged to take a cool-down rest period in the shade for preventative measures, including but not limited to protecting themselves from overheating. An individual employee who takes a preventative cool-down rest (i) shall be asked if the employee is experiencing symptoms of heat illness; (ii) shall be encouraged to remain in the shade; and (iii) shall not be ordered back to work until any signs or symptoms of heat illness have abated, but in no event less than five minutes in addition to the time needed to access the shade.

4. Notwithstanding the provisions of subdivisions 1 and 2, except for employers in the agricultural industry, cooling measures other than shade, including the use of misting machines, may be provided in lieu of shade if the employer is able to demonstrate that these measures are at least as effective as shade in allowing employees to be cooled.

E. Such standards shall require each employer, when the temperature equals or exceeds 90 degrees

Fahrenheit, to implement high-heat procedures that:

- 1. Ensure that employees are able to contact their supervisor by any effective communications vehicle when necessary.
- 2. Require effectively observing/monitoring employees for signs or symptoms of heat illness by implementing two or more of the following:

a. Supervisor or designee observation of 20 or fewer employees;

b. Mandatory buddy system;

c. Regular communication with sole employee such as by radio or cellphone; or

d. Other effective means of observation.

3. Designate one or more employees on each worksite as authorized to call for emergency medical services, and if no designated employees are available, allowing other employees to call on their behalf.

4. Require reminding employees throughout the work shift to stay properly hydrated.

5. For employees employed in agriculture, conduct pre-shift meetings before the commencement of work to review the high heat procedures, encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary.

F. Such standards shall require each employer to provide rest periods as follows:

1. An employer shall authorize, permit, and ensure that all employees take a rest period of five minutes for every hour worked. An employer shall not require an employee to work during a rest period. A rest period shall be counted as hours worked, for which there shall be no deduction from

2. When temperatures reach 90 degrees or above, the employer shall ensure that the employee takes a minimum five-minute rest period every half hour.

- 3. If an employer fails to provide a rest period in accordance with this subsection, the employer shall pay the employee one additional hour of pay at the employee's regular rate of compensation for each workday that a required rest period is not provided.
- G. Such standards shall require each employer to implement effective emergency response procedures pursuant to which the employer shall:
 - 1. Ensure that effective communication by voice, observation, or electronic means is maintained so

that employees at the worksite can contact a supervisor or emergency medical services when necessary. An electronic device, such as a cellphone or text messaging device, may be used for this purpose only if reception in the area is reliable.

2. Respond to signs and symptoms of possible heat illness if a supervisor observes, or any employee reports, any signs or symptoms of heat illness in any employee. The supervisor shall take immediate action commensurate with the severity of the illness, including but not limited to first aid measures and how emergency medical services will be provided. If they are the employee is exhibiting signs of symptoms severe enough to indicate heat illness, the employee shall not be sent home without being offered onsite first aid or provided with emergency medical services.

H. Such standards shall require each employer to provide for acclimatization as follows:

- 1. All employees shall be closely observed by a supervisor during a heat wave. For purposes of this subdivision only, "heat wave" means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least 10 degrees Fahrenheit higher than the average high daily temperature in the preceding five days.
- 2. An employee who has been newly assigned to a high heat area shall be closely observed by a supervisor or designee for the first 14 days of the employee's employment.
 - I. Such standards shall require each employer to provide effective training that is:

1. For employees:

 a. In a language the supervisor or employee understands;

b. Provided to each supervisor and non-supervisory employee before the employee begins work that may reasonably result in exposure to the risk of heat illness; and

c. On the following topics:

- (1) The environmental and personal risk factors that contribute to or may increase the susceptibility to heat-related illness, including, but not limited to, medical conditions, water consumption, alcohol use, use of medications that affect the body's response to the heat, and burden caused by personal protective equipment;
- (2) The employer's procedures for complying with the requirements of this standard, including the employer's responsibility to provide water, shade, cool-down rests, and access to first aid, as well as the employees' right to exercise their rights under this standard without retaliation;
- (3) The importance of frequent consumption of water, up to four cups per hour, when the work environment is above 80 degrees and employees are likely sweating more than usual;

(4) The importance of acclimatization;

- (5) The different types of heat illness, the common signs and symptoms of heat illness, and appropriate first aid and emergency responses to the different types of heat illness;
- (6) The importance of immediately reporting to the employer, directly or through the employee's supervisor, symptoms or signs of heat illness in themselves, or in coworkers; and
- (7) The employer's procedures for responding to signs or symptoms of possible heat illness, including how emergency medical services will be contacted and provided should they become necessary; and
 - 2. For supervisors:
- a. Provided to supervisors prior to supervising employees performing work that may reasonably result in exposure to the risk of heat illness; and

b. On the following topics:

- (1) The topics required to be provided to employees listed in subdivision 1 c;
- (2) The procedures the supervisor is required to follow to implement the applicable provisions in this section;
- (3) The procedures the supervisor is require to follow when an employee exhibits signs or reports symptoms consistent with possible heat illness, including emergency response procedures; and
- (4) The procedures for moving or transporting an employee to a place where the employee can be reached by an emergency medical service provider, if necessary.
- J. The standards established pursuant to this section shall take into consideration the NIOSH Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments published by the National Institute for Occupational Safety and Health in 2016.
- K. The rules and regulations adopted by the Safety and Health Codes Board pursuant to this section shall be enforced as specified in §§ 40.1-49.3 through 40.1-49.7.
- L. It is a violation of § 40.1-51.2:1 to discharge or discriminate in any other manner against employees for exercising their rights under this or any other provision offering occupational safety and health protection to employees.

Department of Planning and Budget 2020 Fiscal Impact Statement

1.	Bill Number	: SB41	. 1							
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	Second House		In Committee		Substitute		Enrolled			
2.	Patron:	Hashmi								
3.	Committee: Commerce and Labor									
4.	Title: Employment health and safety standards; heat illness prevention.									
5.	Summary: This bill requires the Safety and Health Codes Board to adopt regulations establishing reasonable standards designed to protect employees from heat illness. The measure directs the standards to require employers to provide water, shade, rest periods, training, and emergency response procedures. The standards are also directed to require employers in certain industries to implement high-heat procedures when the temperature is 90 degrees Fahrenheit or warmer. The measure requires employers to pay employees one additional hour of pay at his regular compensation for each workday that it fails to provide the employee with five-minute rest period every hour or every half hour if the temperature is 90 degrees Fahrenheit or warmer.									
6.	Budget Amendment Necessary: No.									
7.	Fiscal Impact Estimates: Preliminary, see item 8.									
8.	Fiscal Implications: It is anticipated that this bill will result in a fiscal impact to the Department of Labor and Industry (DOLI), which can be absorbed within existing resources. DOLI indicates that this bill will result in expenditures associated with the Safety and Health Codes Board adopting heat illness prevention regulations, education efforts to inform the regulated community of such new standards, and enforcement of the regulations.									
9.	Specific Age	ncy or I	Political Subdi	visio	ons Affected:	Depa	artment of Labor and Industry.			
10.	. Technical Amendment Necessary: No.									
11.	1. Other Comments: None.									

HB 1610, Employment health and safety standards; heat illness prevention.

Chief Patron: Delegate Martha M. Mugler

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Impact Statement: https://lis.virginia.gov/cgibin/legp604.exe?201+oth+HB1610F122+PDF

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20103161D **HOUSE BILL NO. 1610**

Offered January 16, 2020

A BILL to amend the Code of Virginia by adding a section numbered 40.1-44.2, relating to the protection of employees; standards for heat illness prevention.

Patron—Mugler

Referred to Committee on Labor and Commerce

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 40.1-44.2 as follows: § 40.1-44.2. Standards for heat illness prevention.

A. As used in this section:

"Acclimatization" means the gradual, temporary adaptation of the body to work in the heat when a

person is exposed to heat.

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

"Heat illness" means a serious medical condition resulting from the body's inability to cope with a

particular heat load and includes heat cramps, heat exhaustion, heat syncope, and heat stroke.

"Heat wave" means any day in which the predicted high temperature for the day will be at least 80 degrees Fahrenheit and at least 10 degrees Fahrenheit higher than the average high daily temperature in the preceding five days.

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

"Shade" means blockage of direct sunlight. One indicator that blockage is sufficient is when objects do not cast a shadow in the area of blocked sunlight. Shade is not adequate when heat in the area of shade defeats the purpose of shade, which is to allow the body to cool. Shade may be provided by any natural or artificial means that does not expose employees to unsafe or unhealthy conditions and that does not deter or discourage access or use.

"Temperature" means the dry bulb temperature in degrees Fahrenheit obtainable by using a thermometer to measure the outdoor temperature in an area where there is no shade. While the temperature measurement must be taken in an area with full sunlight, the bulb or sensor of the thermometer should be shielded from direct contact by sunlight, for example, with the hand or some other object, while taking the measurement.

B. The Safety and Health Codes Board shall adopt regulations establishing reasonable standards designed to protect employees from heat illness while engaged in outdoor work. Such standards shall require each employer:

1. When the temperature equals or exceeds 80 degrees Fahrenheit, to:

- a. Provide employees with access to potable drinking water that is fresh, pure, suitably cool, and provided to employees free of charge. The water shall be located as close as practicable to the areas where employees are working. Where drinking water is not plumbed or otherwise continuously supplied, it shall be provided in sufficient quantity at the beginning of the work shift to provide one quart per employee per hour for drinking for the entire shift. Employers may begin the shift with smaller quantities of water if they have effective procedures for replenishment during the shift as needed to allow employees to drink one quart or more per hour. The frequent drinking of water shall be encouraged; and
- b. While employees are present, maintain one or more areas with shade at all times that are either open to the air or provided with ventilation or cooling. The amount of shade present shall be at least enough to accommodate the number of employees on recovery or rest periods, so that they can sit in a normal posture fully in the shade without having to be in physical contact with each other. The shade shall be located as close as practicable to the areas where employees are working. Subject to the same specifications, the amount of shade present during meal periods shall be at least enough to accommodate the number of employees on the meal period who remain onsite. Employees shall be allowed and encouraged to take a preventative cool-down rest in the shade when they feel the need to do so to protect themselves from overheating. Such access to shade shall be permitted at all times while employees are present. An individual employee who takes a preventative cool-down rest (i) shall be

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monitored and asked if he is experiencing symptoms of heat illness; (ii) shall be encouraged to remain in the shade; and (iii) shall not be ordered back to work until any signs or symptoms of heat illness have abated, but in no event less than five minutes in addition to the time needed to access the shade. If an employee exhibits signs or reports symptoms of heat illness while taking a preventative cool-down rest or during a preventative cool-down rest period, the employer shall provide appropriate first aid or emergency response. If an employer can demonstrate that it is infeasible or unsafe to have a shade structure, or otherwise to have shade present on a continuous basis, the employer may utilize alternative procedures for providing access to shade if the alternative procedures provide equivalent protection. Except for employers in the agricultural industry, cooling measures other than shade, such as the use of misting machines, may be provided in lieu of shade if the employer can demonstrate that these measures are at least as effective as shade in allowing employees to cool;

2. When the temperature equals or exceeds 95 degrees Fahrenheit, to:

a. Ensure that effective communication by voice, observation, or electronic means is maintained so that employees at the worksite 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. The employer shall ensure effective employee observation or monitoring by implementing one or more of the following:

(1) Observation by a supervisor or his designee of 20 or fewer employees;

(2) Mandatory buddy system;

 (3) Regular communication with sole employee such as by radio or cellular phone; or

(4) Other effective means of observation;

b. Designate one or more employees on each worksite as authorized to call for emergency medical services and allow other employees to call for emergency services when no designated employee is available;

c. Remind employees throughout the work shift to drink plenty of water;

d. Conduct pre-shift meetings before the commencement of work to review the high heat procedures, encourage employees to drink plenty of water, and remind employees of their right to take a cool-down rest when necessary; and

e. Ensure that the employee takes a minimum paid 10-minute net preventative cool-down rest period every two hours. The preventative cool-down rest period may be provided concurrently with any other meal or rest period provided by the employer if the timing of the preventative cool-down rest period coincides with a required meal or rest period, thus requiring no additional preventative cool-down rest period in an eight-hour workday. If the workday will extend beyond eight hours, then an additional preventative cool-down rest period will be required at the conclusion of the eighth hour of work, and if the workday extends beyond 10 hours, then another preventative cool-down rest period will be required at the conclusion of the tenth hour;

3. To implement effective emergency response procedures that (i) ensure that effective communication by voice, observation, or electronic means is maintained so that employees at the worksite can contact a supervisor or emergency medical services when necessary and (ii) respond to signs and symptoms of possible heat illness, including first aid measures and how emergency medical services will be provided;

4. During a heat wave, to ensure that its employees are closely observed by a supervisor or his designee;

5. To provide its employees with effective training in the following topics before the employee begins work that should reasonably be anticipated to result in exposure to the risk of heat illness:

a. The environmental and personal risk factors for heat illness, as well as the added burden of heat load on the body caused by exertion, clothing, and personal protective equipment;

b. The employer's procedures for complying with the requirements of this standard, including, but not limited to, the employer's responsibility to provide water, shade, cool-down rests, and access to first aid;

c. The importance of frequent consumption of small quantities of water, up to four cups per hour, when the work environment is hot and employees are likely to be sweating more than usual in the performance of their duties;

d. The concept, importance, and methods of acclimatization;

e. The different types of heat illness, the common signs and symptoms of heat illness, appropriate first aid and emergency responses to the different types of heat illness, and the potentially rapid progress of heat illness from mild symptoms and signs to serious and life-threatening illness;

f. The importance to employees of immediately reporting to the employer, directly or through the

employee's supervisor, symptoms or signs of heat illness in themselves, or in coworkers;

g. The employer's procedures for responding to signs or symptoms of possible heat illness, including how emergency medical services will be provided should they become necessary;

h. The employer's procedures for contacting emergency medical services, and if necessary, for transporting employees to a point where they can be reached by an emergency medical service provider; and

- a. The information required to be provided by subdivision 5; b. The procedures the supervisor is to follow to implement the applicable provisions of this section;
- c. The procedures the supervisor is to follow when an employee exhibits signs or reports symptoms consistent with possible heat illness, including emergency response procedures; and
 - d. How to monitor weather reports and how to respond to hot weather advisories; and
- 7. To establish, implement, and maintain an effective heat illness prevention plan. The plan shall be in writing in both English and the language other understood by the majority of the employees and shall be made available at the worksite to employees and to representatives of the Division upon request. The heat illness prevention plan shall, at a minimum, contain:
 - a. Procedures for the provision of water and access to shade;
- b. The high heat procedures;

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- c. Emergency response procedures; and
- d. Acclimatization methods and procedures.
 - C. The rules and regulations adopted by the Safety and Health Codes Board pursuant to this section shall be enforced as specified in §§ 40.1-49.3 through 40.1-49.7.

Department of Planning and Budget 2020 Fiscal Impact Statement

1.	Bill Number: HB1610								
	House of Origi	in 🖂	Introduced		Substitute		Engrossed		
	Second House		In Committee		Substitute		Enrolled		
2.	Patron:	Mugler							
3.	Committee:	Labor aı	nd Commerce						
4.	Title: Employment health and safety standards; heat illness prevention.								
5.	Summary: This bill requires the Safety and Health Codes Board to adopt regulations establishing reasonable standards designed to protect employees from heat illness while engaged in outdoor work. The measure directs the standards to require employers to provide water, shade, 10-minute rest periods, training, observation or monitoring, and emergency response procedures and to adopt and maintain a heat illness prevention plan.								
6.	Budget Amendment Necessary: No.								
7.	Fiscal Impact Estimates: Preliminary, see item 8.								
8.	Fiscal Implications: It is anticipated that this bill will result in a fiscal impact to the Department of Labor and Industry (DOLI), which can be absorbed within existing resources. DOLI indicates that this bill will result in expenditures associated with the Safety and Health Codes Board adopting heat illness prevention regulations, education efforts to inform the regulated community of such new standards, and enforcement of the regulations.								
9.	Specific Age	ncy or I	Political Subdi	ivisio	ons Affected:	Depa	artment of Labor and Industry.		
10.	Technical A	mendm	ent Necessary	: No) .				
11.	Other Comr	nents: 1	None.						

HB 1785, Employment health and safety standards; heat illness prevention.

Chief Patron: Delegate Jeion A, Ward

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Statutory Text: https://lis.virginia.gov/cgi-bin/legp604.exe?211+ful+HB1785+pdf

Impact Statement: https://lis.virginia.gov/cgibin/legp604.exe?211+oth+HB1785F122+PDF

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HOUSE BILL NO. 1785

Offered January 13, 2021

Prefiled December 31, 2020

A BILL to amend the Code of Virginia by adding a section numbered 40.1-44.2, relating to employment health and safety standards; heat illness prevention.

Patrons—Ward and Kory

Referred to Committee on Labor and Commerce

Be it enacted by the General Assembly of Virginia:

1. That the Code of Virginia is amended by adding a section numbered 40.1-44.2 as follows: § 40.1-44.2. Standards for heat illness prevention.

A. As used in this section, "heat illness" means a serious medical condition resulting from the body's inability to cope with a particular heat load and includes heat cramps, heat exhaustion, heat syncope, and heat stroke.

B. The Safety and Health Codes Board shall adopt regulations establishing standards as provided in this section that are designed to protect employees from heat illness in indoor and outdoor work.

C. This section applies to the control of risk of occurrence of heat illness. These standards shall apply to all indoor and outdoor places of employment and to all employers that come within the jurisdiction of the Virginia Occupational Safety and Health (VOSH) Program.

D. The standards established pursuant to this section shall take into consideration Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments published by the National Institute for Occupational Safety and Health (NIOSH).

E. Such standards shall contain requirements for provision of drinking water, access to shade or climate-controlled environments, rest periods, effective emergency response procedures, acclimatization to working in heat, training to employees and supervisors, and other standards related to heat illness protection.

F. In addition to any penalties provided by this title, and without regard to any exhaustion of alternative administrative remedies provided for in this title, an employee may bring in an appropriate court of the Commonwealth (i) an action based on a violation of this section or the regulations hereunder to enjoin such a violation, or to receive \$500 in damages for each such violation, whichever is greater, or (ii) both such actions in clause (i). An employee who brings suit and prevails under this section shall be entitled to reasonable attorney fees and costs. If the court finds that the employer knowingly violated the standards, the court shall award the employee an amount equal to triple the amount of damages due under clause (ii) and reasonable attorney fees and costs.

Department of Planning and Budget 2021 Fiscal Impact Statement

1.	Bill Number: HB1785								
	House of Origi	in 🖂	Introduced		Substitute		Engrossed		
	Second House		In Committee		Substitute		Enrolled		
2.	Patron:	Ward							
3.	Committee: Labor and Commerce								
4.	Title: Employment health and safety standards; heat illness prevention.								
5.	Summary: Requires the Safety and Health Codes Board to adopt regulations establishing standards designed to protect employees from heat illness, defined in the bill. The measure authorizes an employee to bring an action based on a violation of such standards in which injunctive relief and monetary damages may be sought.								
6.	Budget Amendment Necessary: No.								
7.	Fiscal Impact Estimates: Preliminary. See item 8.								
8.	Fiscal Implications: It is anticipated that any fiscal impact on the Department of Labor and Industry (DOLI) as a result of this bill can be absorbed within existing resources. According to DOLI, the Safety and Health Codes Board has responsibility for adopting such a regulation. Any expenditure impact associated with the development of such a regulation community education, and enforcement can be absorbed by DOLI.								
9.	Specific Agency or Political Subdivisions Affected: Department of Labor and Industry; Courts								
10.	Technical A	mendm	ent Necessary	: No					
11.	Other Com	ments: 1	None.						

SB 1358, Employment health and safety standards; heat illness prevention.

Chief Patron: Senator Ghazala F. Hashmi

https://lis.virginia.gov/cgi-bin/legp604.exe?211+sum+SB1358

Statutory Text: https://lis.virginia.gov/cgi-bin/legp604.exe?211+ful+SB1358+pdf

Impact Statement: https://lis.virginia.gov/cgibin/legp604.exe?211+oth+SB1358F122+PDF

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SENATE BILL NO. 1358 Offered January 13, 2021

Prefiled January 12, 2021

A BILL to amend the Code of Virginia by adding a section numbered 40.1-44.2, relating to employment health and safety standards; heat illness prevention.

Patron—Hashmi

Referred to Committee on Commerce and Labor

Be it enacted by the General Assembly of Virginia: 1. That the Code of Virginia is amended by adding a section numbered 40.1-44.2 as follows: § 40.1-44.2. Standards for heat illness prevention.

A. As used in this section, "heat illness" means a serious medical condition resulting from the body's inability to cope with a particular heat load and includes heat cramps, heat exhaustion, heat syncope, and heat stroke.

B. The Safety and Health Codes Board shall adopt regulations establishing standards as provided in this section that are designed to protect employees from heat illness in indoor and outdoor work.

C. This section applies to the control of risk of occurrence of heat illness. These standards shall apply to all indoor and outdoor places of employment and to all employers that come within the jurisdiction of the Virginia Occupational Safety and Health (VOSH) Program.

D. The standards established pursuant to this section shall take into consideration Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments published by the National Institute for Occupational Safety and Health (NIOSH).

E. Such standards shall contain requirements for provision of drinking water, access to shade or climate-controlled environments, rest periods, effective emergency response procedures, acclimatization to working in heat, training to employees and supervisors, and other standards related to heat illness protection.

F. In addition to any penalties provided by this title, and without regard to any exhaustion of alternative administrative remedies provided for in this title, an employee may bring in an appropriate court of the Commonwealth (i) an action based on a violation of this section or the regulations hereunder to enjoin such a violation, or to receive \$500 in damages for each such violation, whichever is greater, or (ii) both such actions in clause (i). An employee who brings suit and prevails under this section shall be entitled to reasonable attorney fees and costs. If the court finds that the employer knowingly violated the standards, the court shall award the employee an amount equal to triple the amount of damages due under clause (ii) and reasonable attorney fees and costs.

Department of Planning and Budget 2021 Fiscal Impact Statement

1.	Bill Number: SB1358								
	House of Origin		Introduced		Substitute		Engrossed		
	Second House		In Committee		Substitute		Enrolled		
2.	Patron: H	Iashmi							
3.	Committee: Commerce and Labor								
4.	Title: Employment health and safety standards; heat illness prevention.								
5.	Summary: Requires the Safety and Health Codes Board to adopt regulations establishing standards designed to protect employees from heat illness, defined in the bill. The measure authorizes an employee to bring an action based on a violation of such standards in which injunctive relief and monetary damages may be sought.								
6.	Budget Amendment Necessary: No.								
7.	Fiscal Impact Estimates: Preliminary. See item 8.								
8.	Fiscal Implications: It is anticipated that any fiscal impact on the Department of Labor and Industry (DOLI) as a result of this bill can be absorbed within existing resources. According to DOLI, the Safety and Health Codes Board has responsibility for adopting such a regulation. Any expenditure impact associated with the development of such a regulation community education, and enforcement can be absorbed by DOLI.								
9.	Specific Agency or Political Subdivisions Affected: Department of Labor and Industry; Courts								
10.	10. Technical Amendment Necessary: No.								
11.	11. Other Comments: As introduced, this bill is a companion to HB1785.								