The Network for Public Health Law

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ENVIRONMENT, CLIMATE AND HEALTH

Fact Sheet

Law and Policy Considerations for Workforce Protections from Extreme Heat.

Introduction

Extreme heat is the number one cause of weather-related death in the United States. It is also an increasing cause of concern for indoor and outdoor workers, who must toil through excessive heat in outdoor settings such as agricultural and construction work, and indoor settings that lack air conditioners, such as warehouses and factories. The Network's Law and Policy Pathways to Community Centered Protection from Extreme Heat includes a number of legal and policy opportunities to protect individuals and workers from the health risks of extreme heat. One of those pathways recommends that states or localities enact worker heat protections, such as the opportunity to acclimatize to extreme heat, mandated breaks, access to shade and water, and safety training to mitigate heat stroke and other injuries from extreme heat.

"Deaths and illnesses associated with heat exposure are a continuing public health concern as climate change results in longer, hotter, and more frequent episodes of extreme heat."
Morbidity and Mortality Weekly Report, April 2024

In early July 2024, Occupational Safety and Health Administration (OSHA) OSHA issued a draft proposed standard that, if enacted through the federal rule making process, will apply to most federal employees, private employers and employees, and state and local employees in states with state approved plans. While there are currently no federal standards requiring employers to provide specific worker protections in the face of extreme heat, the federal OSHA requires employers[1] - under a general duty clause – to provide a "place of employment [] free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees." Some states and localities have enacted, or are in the process of enacting, laws and policies protecting workers from heat related illnesses and death. On the other hand, some states are enacting preemptive laws to prevent implementation of local protections for workers – like Florida's 2024 law preventing local governments from establishing heat exposure requirements. Worker protection laws are essential to protecting health as climate change will increase the number and severity of extreme heat days.

This resource outlines federal, state, and local legal and policy protections for indoor and outdoor workers; and barriers to protecting this workforce, including legal methods like preemption – a legal method used by a higher level of government

to limit the authority of a lower level of government – that can be used by some to override existing or potential local protections.

Introduction

Heat is the number one cause of weather-related deaths in the U.S., with 2023 setting the record for U.S. heat deaths, and heat related illnesses - including heat stroke, heat rash, preterm birth, respiratory and cardiovascular complications, renal failure, kidney stones - accounted for more than 110,000 emergency room visits in 2023, and has consistently accounted for more than 65,000 emergency room visit per year over the past decade. The length of the heatwave season in the United States has increased by 30 days (from 40-70 days), and the average number of heatwaves has doubled since 1980. As we continue to navigate a world impacted by climate change we can anticipate an increase in the severity and frequency of heat waves.

Just like other climate-related emergencies, not all individuals and communities will be impacted in the same way. Discriminatory policies have made some areas more susceptible to the health impacts of climate change – today formerly redlined areas have more impervious surfaces and fewer green spaces, and can be 12.6º hotter than non-redlined neighborhoods. Individuals in urban heat islands, people without air conditioning or other cooling systems, and individuals over age 65 are more susceptible to extreme heat, as are infants, children, people with asthma or heart disease, and pregnant people.

Workers in industries such as manufacturing, agriculture, construction, landscaping, trash collecting, and other outdoor jobs are particularly at risk of health impacts from extreme heat. Workforce inequities mean people of color in these occupations often face disproportionate risks – Hispanic people accounted for about 1/3 of heat related deaths between 2010 and 2020, but make up only 17% of the United States population.

Law and Policy Developments

As some workers are, and will continue to be, at increased risk for heat related illnesses and death due to occupational exposures, law and policy solutions can help counteract the health risks associated with extreme heat. Some examples of current (and anticipated) federal, state, and local worker heat safety protections are detailed below, along with laws and policies that create real, or potential, barriers to achieving safety for workers experiencing extreme heat.

Federal

OSHA has started the process to develop rules to protect workers from extreme heat, and as this resource was nearly complete, OSHA released a proposed standard. The proposed standard includes several measures to protect workers from extreme heat, including a heat injury and illness prevention plan, protective measures required when heat reaches initial or high heat thresholds, detailed initial and yearly training for employees and supervisors, and heat illness and emergency planning and response. If the proposed standard is adopted without changes, covered employers will be required to implement these measures at no cost to employees, and to pay a normal rate of pay when compliance requires employee time.

Heat Injury and Illness Prevention Plan

The proposed standard would require employers to seek the input of non-managerial employees and their representatives, as they develop and implement the required site-specific heat injury and illness prevention plan (HIIPP).

The HIIPP must be available in languages employees understand and be implemented and monitored by a designated heat safety coordinator. The HIIPP must include:

- the types of work activities the plan covers;
- policies and procedures necessary to comply with the proposed standard;
- the heat metric used to monitor compliance;
- policies and procedures to protect employees who wear vapor-impermeable clothing;
- an emergency response plan with emergency phone numbers; an individual designated to ensure the heat emergency procedures are invoked when necessary; ways to contact and transport employees to emergency medical services; directions to the worksite; and procedures for responding to an employee experiencing signs and symptoms of heat related illness; and
- a monitoring plan for indoor work areas where employees may be exposed to heat above the heat thresholds identified in the standard.

Heat Triggers and Required Protective Measures

Under the proposed standard, covered employers would be required to monitor heat conditions at outdoor and indoor work areas using the heat index[2] or wet bulb globe temperature (WBGT)[3] to determine whether the initial or high heat requirements are triggered.[4]

Initial Heat Trigger

When employees are exposed to temperatures of at least 80°F, or the WBGT equal to the NIOSH-recommended heat stress alert limits for unacclimatized workers, the proposed standard requires employers to:

- provide radiant heat reduction measures, air conditioning, or more air movement, in indoor work areas;
- provide break area(s) with air conditioning or increased air movement for indoor workers;
- provide accessible break area(s) with shade or air conditioning for outdoor workers;
- provide enough cool water for all employees to easily access 1 quart of drinking water per hour;
- allow and encourage paid rest breaks if needed to prevent overheating; and
- maintain, and regularly utilize, a means of two-way communication with employees.

High Heat Trigger

In addition to the above, when employees are exposed to temperatures of at least 90°F, or the WBGT equal to the NIOSH-recommended heat stress exposure limits for acclimatized workers, the proposed standard would require covered employers to:

- provide a 15-minute paid rest break[5],
- provide observation for signs and symptoms of heat-related illness via a mandatory buddy system or by a supervisor or heat safety coordinator;

- provide notification of the importance of drinking water, employee rights to take needed rest breaks, how to seek help, and emergency procedures; and
- post warning signs in indoor work areas that regularly exceed 120°F.

Acclimatization

Under the proposed standard, covered employers would be required to implement acclimatization protocols that allow new employees, and employees returning to work after at least 14 days away, who are exposed to temperatures at or above the initial heat triggers during their first week at, or back to, work, to adapt to heat exposure at work over time. The protocol must either include a plan that incorporates all measures required when high heat triggers are met (including initial heat measures) during that first week, or gradual acclimatization. Gradual acclimatization restricts new employees to heat exposure duration not more than 20% of the normal work shift heat exposure duration on the first day, 40% on the second day, 60% on the third day, and 80% on the fourth day of work; and restricts returning employees to not more than 50% of a normal work shift heat exposure duration during the first day of work, 60% on the second day of work, and 80% on the third day of work. These procedures are not required if the employer can show that the employee consistently worked under the same or similar conditions within the prior 14 days.

Heat Illness Emergency Response

Under the proposed standard, when an employee experiences the signs and symptoms of heat-related illness – including headache, nausea, weakness, dizziness, elevated body temperature, muscle cramps, and muscle pain or spasms – the employer must relieve the employee from duty, monitor them, offer on-site first aid or medical services, and provide a means to reduce their body temperature.

When an employee experiences symptoms of a heat emergency – such as loss of consciousness with high body temperature, staggering, vomiting, acting irrationally or disoriented, having convulsions or a raised heart rate after resting – an employer must take immediate actions to reduce their body temperature, contact emergency medical services, relieve them from duty, monitor them, and offer on-site first aid or medical services.

Who Must Comply

The proposed standard would apply to all employers and employees in the construction, maritime, agriculture, and general industry sectors, *except* firefighters, emergency response teams, emergency medical services, technical search and rescue, teleworkers, and employees exposed to heat less than 15 minutes an hour, and sedentary indoor workers who only occasionally stand, walk, or lift objects less than 10 pounds. OSHA standards generally do not apply to workers that are self-employed, immediate family members of farm employers, or workplace hazards regulated by another federal agency – such as the Mine Safety and Health Administration, the Department of Energy, or the Coast Guard. The proposed standard also will not apply to state and local government employees in the 23 states, the District of Columbia, and 3 U.S. territories not covered under an OSHA approved state plan.[6]

What Happens Next?

Additional information about the proposed standard can be found here. There are several time-consuming steps that OSHA must complete before a worker heat standard would be implemented. OSHA must provide an opportunity for the public to submit written comments suggesting revisions to the rule or supporting adoption of the rule as is. OSHA may also hold a public hearing to collect verbal comments. OSHA must then consider all written and verbal public comments and develop a final standard. Any final standard would then need to be published. After publication the proposed standard provides employers 150 days to comply with requirements, and states with OSHA approved plans would have 6 months to adopt standards that are at least as effective as the federal standard. While the proposed federal standard is a

substantial step toward worker protection, some states and localities may be able to take more immediate action as the proposed rule continues to move through the federal rulemaking process, and state and local governments in states without OSHA approved state plans may wish to adopt policies to protect their employees from extreme heat.

Despite the lack of final heat specific safety requirements, OSHA can enforce its general duty clause and personal protective equipment (PPE) standards in the context of heat exposure hazards while the proposed standard is pending. Other OSHA standards may provide heat exposure protections in certain situations.

- OSHA's general duty clause requires employers to "furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees";
- OSHA's personal protective equipment standards require employers to assess potential hazards and provide, use, and maintain appropriate "[p]rotective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers … wherever it is necessary by reason of hazards of processes or environment…"
- OSHA's standards for sanitation workers require employers to provide access to potable water for employees; and
- OSHA's standards for construction workers require employers to "instruct each employee in the recognition and avoidance of unsafe conditions."

OSHA also maintains a Heat Illness Prevention webpage that lists employer responsibilities and information for workers. Recently, OSHA sent a notice of citations to a Florida employer for violations of the general duty clause because "employees were not protected from the hazard of high heat while performing jobs [sic] duties." The employer was cited for not reporting a worker-related incident resulting in inpatient hospitalization and death. The letter includes abatement requirements and a monetary penalty.

On Feb. 9, 2024 several state attorneys general (New York, Arizona, Colorado, Connecticut, Illinois, Maine, Maryland, Massachusetts, New Jersey, Pennsylvania, and the District of Columbia) filed a "Petition for Emergency Temporary Standard for Occupational Health Exposure for Farmworkers and Construction Workers" with OSHA. The petition seeks issuance of an emergency temporary standard for occupational heat exposure beginning May 1, 2024 under 29 USC § 655(c), Section 6(c), which requires OSHA to promulgate an emergency temporary standard if it finds 1) workers are exposed to a grave danger in the workplace, and 2) an emergency standard is necessary to protect workers from such danger.

A similar petition was filed in 2023 and denied by OSHA. In its denial. OSHA cited to its current rulemaking for heat injury and illness prevention in outdoor and indoor settings. OSHA also noted that its National Heat Emphasis Program (NEP) created "a nationwide enforcement mechanism for OSHA to proactively inspect indoor and outdoor workplaces for health –related hazards" allowing OSHA to "launch heat-related inspections on high-risk worksites before workers suffer preventable injuries, illnesses, or fatalities." OSHA's denial letter also noted that California, Oregon, and Washington had issued emergency standards under state law and states are not prohibited from doing the same.

Other federal resources that provide information on extreme heat risks include:

- National Integrated Heat Health Information System
- National Weather Service Heat Risk Forecast Tool

- CDC Heat Health Guidance for Healthcare Professionals
- CDC Heat Risk Dashboard from the CDC
- OSHA National Emphasis Program on Outdoor and Indoor Heat-Related Hazards

State

Just five states — California, Colorado, Washington, Minnesota and Oregon — have adopted heat protections for workers at the time this resource was published. These laws vary in the scope and extent of protections. Some statewide protections apply to a limited number of industries, and other apply only to specific sets of workers. For example, Minnesota's protection only applies to indoor workers and Colorado's only protects workers in the agricultural industry.

Some common elements of these statewide worker protection laws and policies are:

- acclimatization procedures,
- access to water and shade,
- opportunities for breaks when temperatures reach certain levels,
- emergency procedures, and
- heat illness prevention plans.

Other states working to develop statewide heat protections using state administrative authority or legislative action, include Nevada, Maryland, Massachusetts, New York, and New Jersey. And in late June 2024, California adopted heat protections for most indoor workers.

Local

Localities, including cities and counties can also adopt protections for their own employees or workers in the community. For example, Austin adopted an ordinance requiring 10 minute rest breaks for every 4 hours of work for construction workers. In 2024 two cities in Arizona – Phoenix and Tucson - adopted worker protection ordinances requiring city contractors to use heat safety plans to protect outdoor workers from heat related injury and illness. The City of Phoenix will require language in its contracts requiring such a plan, which must include provision of cool drinking water, needed breaks, access to shade and or air conditioning, air conditioning in vehicles, acclimatization and training on heat injury and illness. The City of Tucson contract language is similar, but also required that those plans include written notice of the requirements to contractor employees and signage.

However, localities should be aware of recent efforts to prevent implementation of local ordinances protecting workers from extreme heat – state laws preempting local requirements.

Eye on Preemption

Often local governments can develop more innovative law and policy solutions to tough problems and have the ability to tailor those solutions to the specific needs of their communities. The ability of cities and counties to enact policies that protect communities from the health impacts of climate change is critical, as cities and counties can more immediately assess how climate change is impacting their community and the types of solutions that will be most durable and protective for their community. However, some states – namely Texas and Florida – are using preemption to limit that innovation.

At its core, preemption occurs when a higher level of government eliminates or limits the authority of a lower level of government, but there are different types of preemption.

Types of Preemption

Floor or Ceiling Preemption

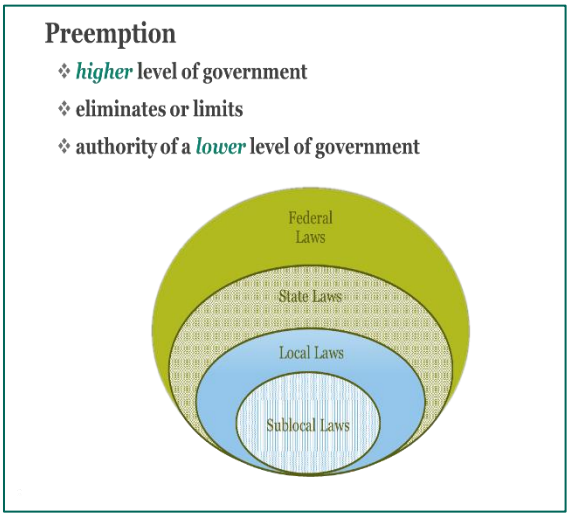
Preemptive laws can set a floor or a ceiling on local policy development. Higher levels of government utilize floor preemption to establish minimum standards that allow lower levels of government to be more stringent. For example, the Clean Water Act is a federal law that creates minimum standards and expressly reserves the rights of states to enact greater protections for their waters. These types of laws can create flexibility to deal with local issues and foster local innovation. On the other hand, higher levels of government utilize ceiling preemption to establish maximum standards or prevent local governments from requiring anything more than is required by the higher level of government. Ceiling preemption is premised on the idea of uniformity and equal treatment but may limit local innovation and action.

Implied or Express Preemption

Preemption can be express or implied. Express preemption is fairly easy to identify because the preemptive law specifically states that its provisions and requirements prevent the lower-level government law or policy - this would include language like “may not enact, “exclusive or sole authority,” “no more stringent than,” “consistent with.” Express preemption may also include a savings clause specifically authorizing lower governments to act in specific situations using language such as “does not preempt greater protections,” or “shall not be construed to restrict.”

Implied preemption can be tricky to identify because language explaining the preemptive effect of the law is not specifically included in the law. This type of preemption can occur when:

- the higher level of government “occupies the field,” leaving lower levels of government without any authority to act on the subject.
- two laws are in conflict, making it impossible for the lower level of government to comply with both its own policy and the higher level of government’s policy, or
- where compliance with the local government’s laws frustrate the purpose of state or federal laws.



Preemption Plus

Preemption plus is terminology sometimes used to describe a preemptive law that creates repercussions for local authorities that act in conflict or inconsistently with the higher level of government’s law. These repercussions could take the form of fines, or loss of funding, or even authorization for a private lawsuit against public officials.

Preemption of Worker Protections from Extreme Heat

Texas and Florida recently enacted laws preempting local worker protections from extreme heat. The result may be similar, but each state established preemption differently. Texas preempted local laws and policies regulating fields occupied by the state’s Labor Code including breaks, employee benefits, scheduling practices, and other practices that exceed state or federal law – but the Texas law did not specifically mention extreme heat. Florida took a narrower approach – enacting a law specifically targeted at preventing cities and counties from “establish[ing], mandate[ing] or otherwise requir[ing] an employer, including an employer contracting to provide goods or services to the political subdivision, to meet or provide heat exposure requirements not otherwise required under state or federal law.” These laws have a powerful impact but would not override any final federal standard OSHA adopts to protect workers from extreme heat.

Texas

The Texas Regulatory Consistency Act, enacted in 2023 with the stated purpose of providing statewide consistency by making the state the exclusive regulator of commerce and trade, broadly preempts many local regulations that impact businesses and employees. The law expressly preempts implementation of local laws and policies in a number of fields by including preemptive language - "a municipality or county may not adopt, enforce, or maintain an ordinance, order, or rule regulating conduct in a field of regulations occupied by the provision of this code" - in the state's Agricultural Code, Business and Commerce Code, Finance Code, Insurance Code, Labor Code, Natural Resources Code, Occupations Code, and Property Code. In some cases, the preemption applies to the entire code, in others, the code includes limitations on the scope of the preemption. However, the law does not affect local authority to conduct a public awareness campaign, adopt a policy related to its employees, or negotiate terms of a collective bargaining agreement.

Persons (including an employer) injured (actual or threatened) by a local ordinance in violation of the law may file a lawsuit against the municipality or county asking the court to declare the ordinance invalid and prevent its implementation, as well as costs and reasonable attorney's fees.

The law is very broad and does specifically preempt municipal or county policies regulating conduct in the fields regulated by the state's Labor Code. The law specifies that fields occupied by the code include employment leave, hiring practices, breaks, employment benefits, scheduling practices and any other terms of employment that exceed or conflict with federal or state law. This has been interpreted by some as preventing implementation of local ordinances that provide workers with breaks to prevent heat-related illness. But the law is inexact and was found to be unconstitutional for a variety of reasons, including that the statute was unconstitutionally vague and violated Texas Constitutional provisions outlining the powers of local governments. The State of Texas has appealed that ruling, but the Court of Appeals has not yet issued a ruling.

Florida

Florida also recently enacted a law preempting political subdivisions - including counties, municipalities, departments, commissions, districts, boards, or other public bodies created by or under state law – from:

1) establishing, mandating or otherwise requiring an employer, including an employer contracting to provide goods or services to the political subdivision, to meet or provide heat exposure requirements not otherwise provided under state or federal law;
2) giving preference in a competitive solicitation (defined as an invitation to bid, a request for proposals, or an invitation to negotiate) based on the employer's heat exposure requirements or considering or seeking information about the employer's heat exposure requirements;
3) adopting or enforcing a requirement "regulating scheduling, including predictive scheduling, by a private employer" except as authorized or required by state or federal law or federal grant requirements.

The law defines *heat exposure requirement* as "a standard to control an employee's exposure to heat or sun, or to otherwise address or moderate the effect of such exposure," including, but not limited to:

- employee monitoring and protection
- water consumption
- cooling measures
- acclimation and recovery periods or practices
- posting or distributing notices or materials that inform employees how to protect themselves from heat exposure
- implementation and maintenance of heat exposure programs or training
- appropriate first-aid measure or emergency response related to heat exposure
- protections for employees who report that they have experienced excessive heat exposure

- reporting and recordkeeping requirements.

Importantly, the Florida law does not preempt political subdivisions from establishing heat protection requirements for direct employees of the political subdivision. And there does not appear to be anything in the law that would prohibit a political subdivision from posting information related to the risks of extreme heat, although the law does prevent a political subdivision from requiring other employers to post this information.

Preempted….Now What?

While political subdivisions in Texas and Florida retain their authority to establish heat requirements for their direct employees, there may also be opportunities to provide educational information or other measures that could mitigate the health effects of extreme heat, so long as those measure do not fall under the definition of a heat exposure requirement in Florida or fall within the fields preempted by the Texas Regulatory Consistency Act. Heat exposure measures that are voluntary or provided by a city or county may be permissible– for example there is nothing preventing educational programs provided by a city or county so long as those educational protections are not required to be provided by an employer other than the county. And there does not appear to be anything in the law that would prohibit cities and counties from posting or distributing information related to the risks of extreme heat, how individuals can protect themselves from extreme heat, protections for employees reporting harms experienced due to extreme heat exposure, or first-aid measures for heat exposure - although the Florida law does specifically prohibit ordinances that require other employers to post this information, and the Texas law preempts municipal and county laws and policies regulating fields of regulation occupied by the provision of the Labor Code.

Another possibility for highlighting heat protections for workers in Florida and Texas without running afoul of preemptive laws might be to develop or participate in a program recognizing an employer's voluntary efforts to protect employees from heat exposure. However, in Florida such a program could not be used to give preference or seek information related to heat exposure requirements as part of a competitive solicitation.

Nothing in either of these laws prevents Texas and Florida from adopting statewide standards to protect the workforce from the health impacts of extreme heat. And lastly, it is important to note that any final federal OSHA worker heat protection standard would be enforceable regardless of state laws preempting local ordinances.

Conclusion

While extreme heat is taking its toll on the health of indoor and outdoor workers, federal standards are in development and some states and local governments have adopted policies to protect workers from the health impacts of extreme heat. However, local governments should be aware that two states recently preempted local government regulations protecting workers from extreme heat. Advocates for protecting the health of workers from extreme heat at either the state or local level may need to be prepared to respond to arguments in favor of statewide preemption. Local governments and the private sector may also wish to continue to consider voluntary programs and protections for workers, and states should continue to develop statewide protections.

As the federal OSHA proposed worker protection standard moves through the rulemaking process, there will be opportunities to engage in the rulemaking process. The federal proposed standard, and evidence in the rulemaking record, could also provide support, or a model, for statewide standards. Any final federal OSHA worker heat protection standard would be enforceable as applied to private employers and employees regardless of state laws preempting local ordinances.

This document was developed by Betsy Lawton, J.D., Deputy Director, Climate and Health. The Network for Public Health Law promotes public health through non-partisan educational resources and technical assistance. This document is provided for informational purposes only and does not constitute legal advice or legal representation. Neither provision of this document nor any communications with the Network for Public Health Law and its staff create an attorney-client relationship. For legal advice, please contact your attorney.

https://www.networkforphl.org/resources/law-and-policy-considerations-for-workforce-protections-from-extreme-heat/July, 2024

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[1] OSHA standards apply to all federal employees and private employees, either directly in states without approved state plans, or under an OSHA approved state plan that must be at least as stringent as federal standards. State and local government employees are not covered by Federal OSHA, but are covered under state approved OSHA plans in 27 states and 2 U.S. territories. The self-employed, immediate family members of farm employers, and workplace hazards regulated by another federal agency – such as the Mine Safety and Health Administration, the Department of Energy, or the Coast Guard - are not covered by OSHA.

[2] The heat index combines ambient temperature and humidity.
[3] The wet bulb globe temperature (WBGT) is a heat metric that accounts for temperature, humidity, radiant heat, and air movement.
[4] Alternatively, employers may assume that the temperature is above the high heat trigger and provide the required initial and high heat measures.
[5] The 15 minute break is exclusive of the time it takes to put on and take off PPE and the time it takes to walk to and from the break area (a meal may count as a rest break, even if it is not otherwise required by law to be paid).

[6] OSHA standards apply to all federal employees and private employees, either directly in states without approved state plans, or under an OSHA approved state plan that must be at least as stringent as federal standards. State and local government employees are not covered by Federal OSHA, but are covered under state approved OSHA plans in 27 states and 2 U.S. territories.