

HEAT STRESS AND THE LEGAL IMPLICATION ON RIGHT TO SAFETY OF EMPLOYEES IN NIGERIA

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Abstract

There have been rising temperatures in Nigeria in recent years. During the periods of extreme temperatures, employees in Nigeria are required to work in hot indoor or outdoor environments. The temperature as reported in February, 2025 was above 40C. Working in hot environments that temperatures exceed 40C can lead to employees suffering heat related illness as a result of heat stress. Employees may even suffer severe health conditions from heat stress. The crucial nature of heat stress and its impact on the health of employees have necessitated this research to ascertain the legal implication of heat stress on rights to safety of employees in Nigeria. The doctrinal method of research was adopted in carrying out the research. It was found that there is no legislation that addresses heat stress in workplaces in Nigeria. It was also found that use of PPEs in hot environments increases the risk of heat stress. There is no regulation of PPE designs by the Nigerian Government. It was recommended that an Act should be enacted to stipulate heat relieving measures and employers' obligations. In addition, it was recommended that the government should regulate use of PPEs and its designs during heat periods.

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1.0 INTRODUCTION

Africa, Arab states, and Asia and the Pacific are more exposed to excessive heat in the world and 92.9 percent of the workforce in Africa are affected by heat.¹ Nigeria, a part of Africa is facing rising temperatures. On the 19th day of February, 2025, the Nigerian Meteorological Agency (NiMet) issued a heat warning which disclosed that Nigeria was hit by a heat wave.² The report contained advisories that clearly showed what individuals should do, such as drinking lots of water, cooling off in air- conditioned places, avoiding keeping children in closed parked vehicles, use of hats and sun shades, hydrating infants, use of light and breathable clothes reduction of strenuous, physical activity and awareness campaigns on heat related risks and preventive measures to be taken.³ This rising temperature and severe heat wave is mostly caused by climate change.⁴ Climate change increases the risk of heat stress.⁵ It was reported that the temperature in Nigeria that

¹ International Labour Organisation, 'More Workers than ever are Losing the Fight against Heat Stress' <<https://www.ilo.org/resources/news/more-workers-ever-are-losing-fight-against-heat-stress> > Accessed 21 September, 2025.

² Nigerian Meteorological Agency, 'Weather Warning for Heat Stress' <[https://www.nimet.gov.ng/downloader%3Ffile%3Dadmin/uploads/forecastbulletin/67b6f5f5a13cd_WEATHER%2520WARNING%2520FOR%2520HEAT%2520STRESS_19022025%2520\(1\).pdf](https://www.nimet.gov.ng/downloader%3Ffile%3Dadmin/uploads/forecastbulletin/67b6f5f5a13cd_WEATHER%2520WARNING%2520FOR%2520HEAT%2520STRESS_19022025%2520(1).pdf) > Accessed 22 September 2025.

³ Ibid.

⁴ Aminu Zubairu Surajo, 'Heat Stress and Outdoor Workers in Nigeria: An Examination of Risks and Coping Mechanisms' *Economics, Business, Accounting and Society Review* (2024) (3) (3) 230.

⁵ International Labour Organisation, 'Occupational Heat Stress: What do we know and what do we need to do?' <https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%2540arabstates/%2540ro-beirut/%2540ilo-qatar/documents/presentation/wcms_880727.pdf > Accessed 21 September 2025.

exceeded 40C in February, 2025 was likely caused by climate change induced by human activities.⁶

Heat stress can be caused by various factors such as: environmental factors (sun and humidity), clothing and the state of fitness of a person.⁷ A combination of these factors can cause an increased heat storage in a body of a person. The increased heat storage can lead to a heat stress that can in turn lead to heat related illness and injuries. Exhaustion, stroke and death can arise from heat and in some other cases, employees suffer diseases that affect the cardiovascular and respiratory system.⁸ The challenges employees face during heat wave has prompted a need for protection of an employee's right to safety. The International Labour Organisation (ILO) Director General was reported to have stated that:⁹ *As the world continues to grapple with rising temperatures, we must protect workers from heat stress year- round. Excessive heat is creating unprecedented challenges for workers world- wide year-round, and not only during periods of intense heatwaves.* The statement is a pointer that employees are to be protected from heat stress. This paper will assess the Nigerian law to ascertain whether the extant legal framework for the protection of the right to safety has been revised to address heat in workplaces in Nigeria.

2. CONCEPTUAL CLARIFICATIONS

2.1 Heat Stress

This is a condition that arises when a person is exposed to high temperatures that is coupled with increased humidity levels for a long

⁶ Solomon Elusoji, 'How Nigeria is Reeling from Extreme Heat Fuelled by Climate Change' <<https://www.carbonbrief.org/how-nigeria-is-reeling-from-extreme-heat-fuelled-by-climate-change>> Accessed 23 September, 2025.

⁷ Nigerian Meteorological Agency (n 2).

⁸ International Labour Organisation (n 5).

⁹ International Labour Organisation (n 1).

period of time.¹⁰ It also means excess heat received in the body of a person that can be tolerated without suffering an injury or damage in the body.¹¹ It has different symptoms which could be mild like a heat cramp or severe like a stroke. Some workers are more vulnerable to heat stress than others. It was stated that:¹²

Two people can work at the same job, under the same conditions, and while one will be affected by the heat, the other will not. Age, weight, degree of physical fitness, degree of acclimatization, metabolism, use of alcohol or drugs and a variety of medical conditions all affect a person's sensitivity to heat. Even the type of clothing must be considered. In addition, the measurement of a hot environment involves more than measuring the ambient air temperature—radiant heat, air movement, and relative humidity are all factors that must be determined.

When employees are exposed to high temperatures over a long period of time, heat stored in an employee's body may be stuck therein due to the body's inability to eliminate same because of heat stress or the type of clothing used by the person or heat from the surrounding environment.¹³ An employee's body may be overheated due to the rate of work done during the period that the temperature is high and in turn,

¹⁰ Wisconsin Department of Health Services, 'Warehouses and Heat Stress: What to Know' <<https://www.dhs.wisconsin.gov/publications/p03681.pdf>> Accessed 21 September 2025.

¹¹ International Labour Organisation (n 5).

¹² University of Michigan, 'Heat Stress' <<https://ehs.umich.edu/wp-content/uploads/2016/05/HeatStress.pdf>> Accessed 21 September, 2025.

¹³ World Health Organization, 'Heat and Health' <<https://www.who.int/news-room/fact-sheets/detail/climate-change-heat-and-health>> Accessed 23 September 2025.

the employee's body may produce more sweat. If the employee fails to hydrate often, the much sweat produced may lead to dehydration.

The type of clothing may affect an employee during an excessive heat period where the clothes restrict sweating. The heat is trapped in the body of the employee, thus preventing the body from cooling down. This is common in jobs that employees use heavy personal protective equipment such as water proof, gloves, boots, clothes that cover the upper body, lower body and face. Though the PPE are meant to save employees from physical work hazards, they increase the risk of heat stress in workplaces in Nigeria. The impact of heat stress on employee is not peculiar to Nigerian workers. In the United Kingdom, a survey was done among health care workers who wore PPE during the 2020 corona virus pandemic to ascertain the level of heat stress.¹⁴ The result revealed that the respondents experienced several symptoms of illnesses associated with heat.¹⁵ There is therefore a need to regulate the kinds of PPE to be worn during heat and the current PPE designs should be modified.

When heat stress affects the body, it can cause health conditions which may be mild or severe. These conditions include exhaustion, heatstroke, cardiovascular, respiratory and mental sickness.¹⁶ It may lead to a damage to the kidney or illnesses related to diabetes.¹⁷ These health

¹⁴ SL Davey, BJ Lee, T Robbins, H Randeva and CD Thake, 'Heat Stress and PPE during COVID- 19: Impact on Healthcare Workers' Performance, Safety and Well-being in NHS Settings' National Library of Medicine (2020) (7) <<https://www.sciencedirect.com/science/article/pii/S019567012030551> > Accessed 22 September 2025.

¹⁵ Ibid

¹⁶ Ibid.

¹⁷ Ibid.

conditions arise where the body system is put under pressure as it tries to control internal temperature.¹⁸

2.2 Employee

In Nigeria, worker and employee are used interchangeably. A worker is defined in the Labour Act¹⁹ as someone who has entered into a contract of employment with an employer to render manual or clerical services. This definition is restrictive as it does not cover employees who do not carry out manual or clerical work.

The Employees Compensation Act²⁰ defines an employee as any person employed by an employer on a continuous, part time, temporary, apprenticeship or casual basis and the person so employed include a domestic servant who is not related to the employer and such employee could be employed in the federal, state, or local governments and any of the government agencies and in the formal sectors in Nigeria. The meaning of employee in ECA is broader as it captures any category of workers employed by the employer.

2.3 Employer

An employer is a person who engages another person called an employee to render services to him or to any other person.²¹ The definition covers outsourced contract of employment in Nigeria. The National Industrial Court Act²² (NIC Act) on its part has defined an employer as a person or body corporate that has entered into a contract of employment to engage another person called the employee. The

¹⁸ Ibid.

¹⁹ Labour Act s 91.

²⁰ Employee Compensation Act Cap E7A LFN 2004 (As Updated) s 73.

²¹ Labour Act s 91.

²² NIC Act Cap N155 LFN 2004 as Updated to 31/12/2010 s 54.

definition does not capture outsourced contract of employment or apprentices.

The Employee Compensation Act (ECA)²³ defines an employer as a person, corporate body or the government that has entered into a contract of employment with an employee or an apprentice. The definition in ECA covers apprentices in Nigeria.

2.4 Climate Change

Climate change refers to a long-term shift in temperatures and weather patterns, primarily caused by nature or human activities.²⁴ Climate change envisages variations in rainfall, wind, season and general changes in weather.²⁵ Climate change affects health, economies and ecosystems. It can lead to increased flooding and desertification, threats to agriculture and food supply and water scarcity and health risks.

Human activity is the main cause of climate change.²⁶ This can be through burning fossil fuels (for electricity, heat and transportation), deforestation which reduces earth's ability to absorb carbon dioxide, industrial gases (release of various greenhouse gases) and agriculture.²⁷

²³ ECA s 73.

²⁴ World Health Organisation, 'Protecting Health from Climate Change' <[https://www.who.int/docs/default-source/wpro---documents/hae---regional-forum-\(2016\)/climatechange-factsheet-rfhe.pdf](https://www.who.int/docs/default-source/wpro---documents/hae---regional-forum-(2016)/climatechange-factsheet-rfhe.pdf) > Accessed 1 December 2025.

²⁵ Najmaldin Ezaldin Hassan, 'Global Warming: Causes, Impacts and Urgent Strategies for a Sustainable Future: A Review' *GSC Advanced Research and Reviews* (2024) (20) (3) 75 <<https://gsconlinepress.com/journals/gscarr/sites/default/files/GSCARR-2024-0338.pdf> > Accessed 1 December 2025.

²⁶ Osariemen Mayowa Imonitie and Obehi Omena Igbinoba, 'Causes and Consequences of Climate Change: A Theoretical Approach' *Journal of Academic Research in Economics* (2024) (16)(2) 378 <

²⁷ European Commission, 'Causes of Climate Change' <https://climate.ec.europa.eu/climate-change/causes-climate-change_en > Accessed 1 December 2025.

The effects of climate change are: rising global temperatures, rising sea levels, more extreme weather, loss of biodiversity and threats to food and water security.²⁸

3.1 LEGAL FRAMEWORK FOR HEAT STRESS IN NIGERIA

The discourse here is centred on laws that protect employees from heat stress in Nigeria. The core safety laws in this regard are: Factories Act,²⁹ and the Occupational Safety and Health Convention.³⁰ The Employee's Compensation Act³¹ will also be discussed.

3.1.1 Factories Act, 2004

The Factories Act is the principal legislation that protects the right to safety at work. The Act has provisions relating to health, safety and welfare of employees. The provisions that border on heat stress will be highlighted hereunder:

- a. **Ventilation:** The obligates employers to maintain adequate ventilation to secure fresh air.³² The Minister of Labour and Employment has the power to make regulations that specify the standard for ventilations in factories in Nigeria.³³
- b. **Overcrowding:** The Act prohibits overcrowding.³⁴ The space to be occupied by an employee in a workroom is required not to be less than 400 cubic feet.³⁵ The height shall not be less than nine feet from the floor to the lowest part of the ceiling or roofing

²⁸ Department of Environmental Conservation, 'Climate Change Effects and Impacts' <<https://dec.ny.gov/environmental-protection/climate-change/effects-impacts>> Accessed 1 December 2025.

²⁹ Cap F1 LFN 2004 (As updated).

³⁰ No. 155 of 1981.

³¹ ECA.

³² Factories Act s 9(1).

³³ Ibid s 9(2).

³⁴ Ibid s 8 (1).

³⁵ Ibid s 8(2).

material.³⁶ An inspector has the right to specify the number of persons that can stay in a workroom.³⁷

- c. **Provision of drinking water:** Employers have an obligation under the Act to provide sufficient clean drinking water. The water is to be provided and maintained at accessible points in the factory.³⁸ Availability of water can prevent dehydration during heat.
- d. **Protective Clothing:** Employers are to provide protective clothing where the nature of work requires excessive exposure to dangerous substances.³⁹

It is worth noting that the Act is applicable to only factories. Workplaces other than factories are not covered under the Act. It is also worthy of note that the Act does not contain temperature limits under which employees could work or refrain from working. Furthermore, there is no obligation on the part of the employers to monitor heat stress at work.

3.1.2 Employees Compensation Act, 2004

The Employee Compensation Act (ECA) is the law that governs compensation of employees in the public and private employments in Nigeria.⁴⁰ The objective of the Act is to provide an open and fair system that is guarantees and supports adequate compensation to employees. The law does not apply to members of the armed forces except persons employed in a civilian capacity in Nigeria.⁴¹

³⁶ Ibid s 8(3)

³⁷ Ibid s 8(5).

³⁸ Ibid s 40.

³⁹ Ibid s 47.

⁴⁰ ECA s 2(1).

⁴¹ Ibid s 2 (3).

The Act⁴² include diseases caused by extreme temperature as occupational diseases. The implication is that employees who suffer from heat related illness or death will get compensation under the Act. Though an employee may get compensation for the heat-related occupational diseases, an employee may choose an action in tort to claim compensation for the injury suffered where the employer is negligent. The law of employee compensation in Nigeria is subject to the doctrine of election.⁴³ An employee can get compensation under the Act or under the common law tort of negligence.

3.1.3 Occupational Safety and Health Convention No. 155 of 1981

This Convention was ratified by Nigeria on the 3rd day of May, 1994. It is an international treaty that its aim is to ensure that employees have a safe and healthy workplace. The Convention is applicable to all category of employees. However, member states with consultation with employer and employees' trade union may exclude the application of the Convention to some sectors such as the maritime, shipping or fishing which some severe consequence may arise.⁴⁴

Nigeria has an obligation under the Convention to formulate, implement and periodically review a national policy on occupational safety and occupational health in a workplace.⁴⁵ To this effect, a national policy was formulated by Nigeria to provide a framework for the protection of employees or other vulnerable persons with regards to occupational safety and health.⁴⁶

⁴² Ibid First Schedule, paragraph 1.2.7.

⁴³ *Lawrence v Rock View Hotel FESTAC & Ors* (2020) JELR 87525 (NICN).

⁴⁴ Occupational Safety and Health Convention Article 1.

⁴⁵ Ibid Article 4.

⁴⁶ National Policy on Occupational Safety and Health, 2006.

The Convention applies generally to health and safety of employees. Under this Convention, a national policy on heat stress can be made to mitigate the impacts of heat on the health of employees in workplaces in Nigeria. This is yet to be done despite the dangers heat has posed to indoor and outdoor employees who work daily in extreme weather conditions.

4. FINDINGS

It was found that:

- a. Nigeria does not have a legislation on heat stress or any policy on prevention of heat stress in workplaces.
- b. There is no regulation on use PPEs in hot outdoor/indoor environments by the Government in Nigeria.

5. RECOMMENDATIONS

It is hereby recommended that:

- a. An Act should be enacted to address heat in all workplaces In Nigeria. The Act should contain heat relieving measures such as provision of adequate ventilation in all enclosed workplaces, provision of rest periods and reduction of work hours during extreme weather conditions. The heat relieving measures should be mandatory heat safeguards that employers are required to implement in workplaces in Nigeria. The Act should set temperature limits in workplaces.
- b. The Nigerian Government should regulate the PPE designs for employees during heat periods in Nigeria.

6. CONCLUSION

In Nigeria, there is no statute or regulation that specifically addresses heat related injuries or death at work other the Factories Act that strictly regulates factories in Nigeria. However, heat related illnesses are

considered occupational diseases in ECA and affected employees will be entitled to compensation. Apart from the compensation under ECA, where the injury or death has arisen from the negligence of the employer, the employee or dependants of the deceased employees may sue for damages under the common law. This is because, the employer has the obligation to provide a safe workplace under common law. The current situation in Nigeria is not preventive. It does not address the root cause. There is only a remedy of compensation where an employee suffers harm.