

# NIGERIAN METEOROLOGICAL AGENCY

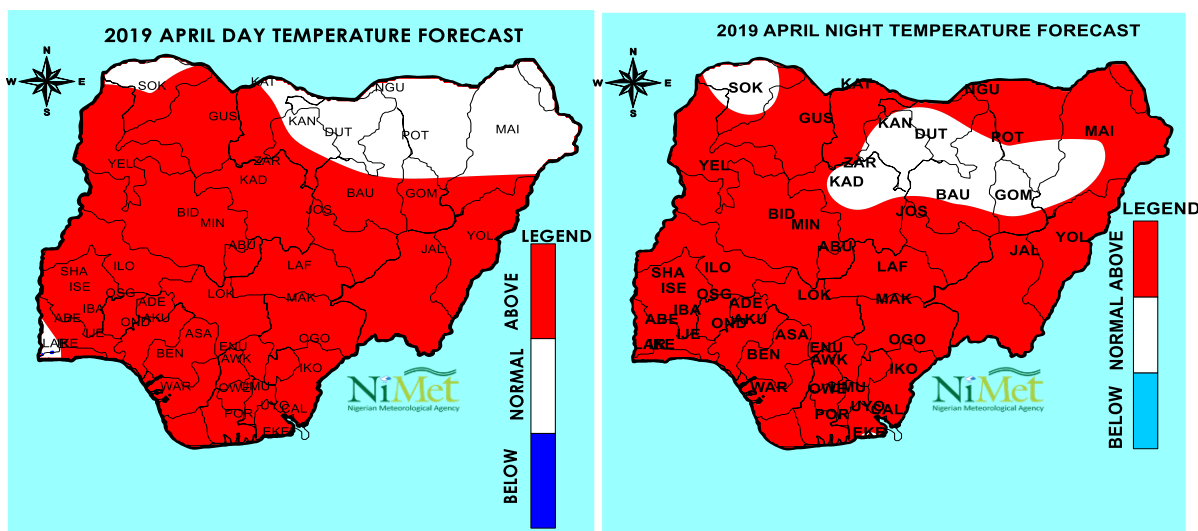
## CLIMATE AND HEALTH



### Temperature Outlook and Warning Advisory for the Months of April and May 2019

**April 2019** - The day-time temperatures as predicted by the **Nigerian Meteorological Agency**, for the month of April 2019, shows above normal temperatures in most places across the country. Maximum temperature values are likely to be above normal in most southern, central and northern cities of the country as highlighted in fig 1. This period is largely expected to be the warmest in the year because of the diurnal and periodic surge in the incursion of the southwesterly trade winds which will invariably accentuate the potential latent heat capacity of water vapor, an important contributor to urban heat quotient. However, places around Lagos Island, Nguru, Kano, Dutse, Potiskum and Maiduguri are likely to remain within normal temperature ranges not exceeding 0.2°C.

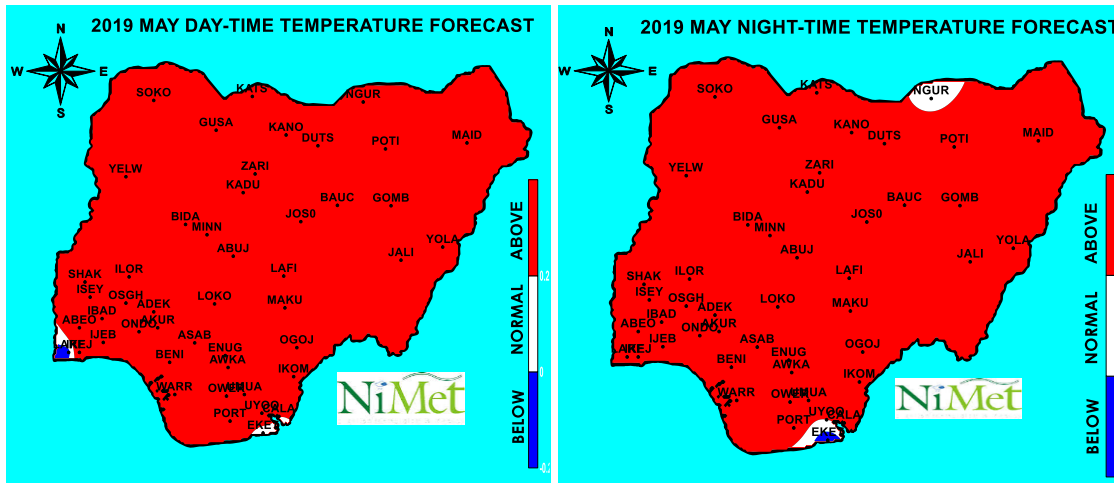
Fig. 2 shows night-time temperature forecast for the month of April, 2019. Night-time temperatures are expected to be normal over Sokoto, Kano, Zaria, Kaduna, Bauchi, Dutse and Gombe. Other parts of the country are expected to have warmer-than-normal night time temperatures.



**Figures 1 & 2: Predicted day and night-time temperature departure from normal for the month of April, 2019**

**May 2019** - Temperature predictions for May, 2019 show warmer-than-normal temperature conditions for the entire country except for Lagos and Eket that are expected to observe normal to colder-than-normal conditions during the month (fig 3). Night-time temperatures for the month of May 2019 are expected to be lower than normal over Eket, while the environs of Eket and Nguru are likely to experience normal

night-time temperature conditions. The rest of the country is predicted to have above normal night time temperatures (fig 4).



**Figures 3 & 4: Predicted day and night-time temperature departure from normal for the month of May, 2019**

Figures 1- 4 shows that more hot days and nights are expected over the country in the months of April and May, 2019.

Hot weather that lasts for several days, often referred to as “a heatwave” can have significant impact on our health. The impacts of heatwaves can be great and sometimes catastrophic. Therefore, the public is advised to:

- a) Drink plenty of water, even if you don't feel thirsty.
- b) Minimize going out in the sun if possible.
- c) Don't leave anyone in a parked car.
- d) Avoid extreme physical exertion.
- e) Have cool baths or showers, and splash yourself with cool water.
- f) Check in on others especially those most at risk in the heat e.g. the elderly, the young and people with medical conditions who may be less able to look after themselves.

In the table below are some of the illnesses caused by excessive heat, their symptoms and management.

<i>Medical condition</i>	<i>Signs and symptoms/mechanism</i>	<i>Management</i>
Heat rash	Small, red, itchy papules appear on the face, neck, upper chest, under breast, groin and scrotum areas. This can affect any age but is prevalent in young children. Infection with Staphylococcus can occur. It is attributed to heavy sweating during hot and humid weather	Rash subsides with no specific treatment. Minimize sweating by staying in an air-conditioned environment, taking frequent showers and wearing light clothes. Keep the affected area dry. Topical antihistamine and antiseptic preparations can be used to reduce discomfort and prevent secondary infection.
Heat edema	Edema of the lower limbs, usually ankles, appears at the start of the hot season. This is attributed to heat induced peripheral	Treatment is not required as edema usually subsides following acclimatization. Diuretics are not advised.

	vasodilatation and retention of water and salt	
Heat syncope	This involves brief loss of consciousness or orthostatic dizziness. It is common in patients with cardiovascular diseases or taking diuretics before acclimatization takes place. It is attributed to dehydration, peripheral vasodilatation and decreased venous return resulting in reduced cardiac output	The patient should rest in a cool place and be placed in a supine position with legs and hips elevated to increase venous return. Other serious causes of syncope need to be ruled out.
Heat cramps	Painful muscular spasms occur, most often in the legs, arms or abdomen, usually at the end of sustained exercise. This can be attributed to dehydration, loss of electrolytes through heavy sweating and muscle fatigue	Immediate rest in a cool place is advised. Stretch muscles and massage gently. Oral rehydration may be needed, using a solution containing electrolytes. Medical attention should be sought if heat cramps are sustained for more than one hour.
Heat exhaustion	Symptoms include intense thirst, weakness, discomfort, anxiety, dizziness, fainting and headache. Core temperature may be normal, subnormal or slightly elevated (less than 40°C). Pulse is thread, with postural hypotension and rapid shallow breathing. There is no alteration of mental status. This can be attributed to water and/or salt depletion resulting from exposure to high environmental heat or strenuous physical exercise	Move the patient to a cool, shaded room or air-conditioned place. The patient should be undressed. Apply cold wet sheet or spray cold water and use fan if available. Lay the patient down and raise his or her legs and hips to increase venous return. Start oral hydration. If nausea prevents oral intake of fluids, consider intravenous hydration. If hyperthermia is above 39°C or impaired mental status or sustained hypotension occurs, treat as heatstroke and transfer the patient to hospital.
Life-threatening heatstroke	Exposure to heat stress (heatwave, summer season and/or strenuous exercise). Body temperature rapidly increases to greater than 40°C and is associated with central nervous system abnormalities, such as stupor, confusion or coma. Hot, dry skin, nausea, hypotension, tachycardia and tachypnea are often present	Measure core temperature (rectal probe): if > 40°C, move to a cooler place, remove clothing, initiate external cooling: cold packs on the neck, axillae and groin, continuous fanning (or keep ambulance windows open) while skin is sprayed with water at 25–30°C. Position an unconscious patient on his or her side and clear airway to minimize risk of aspiration. Administer oxygen 4 l/min and isotonic crystalloid (normal saline) solution. Transfer rapidly to an emergency department.

**Source:** adapted and updated from Bouchama and Knochel (2002) and Knochel and Reed (1994) in Matthies et al., 2008; WHO, 2009)

NB: This is not a prescription. Please contact your doctor if symptoms persists.