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**CLIMATE AND HEALTH BULLETIN FOR THE MONTH OF SEPTEMBER
2026**



1.0. HIGHLIGHTS OF THE CLIMATE AND HEALTH BULLETIN FOR SEPTEMBER 2026

Rainfall: Overall cumulative rainfall will increase during the month of September, with totals ranging from 324.5 mm to 706.5mm.

Highest rainfall: South and southwestern regions (Grand Cape Mount, Bomi, Montserrado, Margibi, Grand Bassa and Rivercess counties) are anticipated to experience the highest rainfall.

Lowest Rainfall: Maryland, Grand Kru, River Gee, Grand Gedeh and parts of Nimba county are anticipated to experience the lowest rainfall during the month under review.

Relative Humidity: Forecasted between 87.0% and 90.9% relative humidity is expected. High humidity will be concentrated in parts of Grand Cape Mount, Bomi, Bong, Nimba, Grand Gedeh and Rivergee counties, while parts of Montserrado, Margibi, Sinoe, Grand Kru, and Maryland will experience lower relative humidity.

Temperatures:

Maximum (27.0°C – 29.2°C): the highest is anticipated Gbapolu, Grand Cape Mount, Bomi and Grand Gedeh counties while, the lowest is expected Margibi, Grand Bassa, Sinoe, Grand Kru counties.

Minimum (20.8°C-25.7°C): the highest is anticipated along the coastal area while the lowest is anticipated in the northern side of the country.

Mean (24.3°C-26.3°C): the lowest is anticipated in the northern parts of the country including: Lofa, Gbarpolu, Bong, and Nimba, counties while the highest is anticipated along the coastal belt.

Malaria Risk: Malaria cases are expected to increase along the coastal belt. The combination of rain, high humidity, and warm temperatures creates ideal mosquito breeding conditions. The highest incidence is expected along the coastal belt (Margibi, Grand Bassa, Rivercess, Sinoe, Grand Kru, and Maryland counties).

Malaria Vigilance: The anticipated climatic conditions during September 2026, characterized by increased rainfall, high relative humidity, and favorable temperatures, are expected to create conducive environments for mosquito breeding and survival.

Medication Stability: Expected temperature and humidity levels may compromise the shelf life, stability, and efficacy of sensitive medical supplies across Liberia.

Medical advisory for SEPTEMBER 2026

Based on the foretasted climatic conditions for September 2026, which favor increased mosquito breeding and the spread of vector-borne diseases, medical personnel, individuals, and stakeholders in the health sector are advised to take the following precautionary measures.

Use Prophylaxis & Prevention: Travel with antimalarial medication when visiting high-risk areas, ensure vulnerable groups adhere to prescribed prophylaxis, and sleep under insecticide-treated nets (ITNs).

Eliminate Vector Breeding: Clear stagnant water and improve community sanitation to destroy mosquito breeding grounds.

Seek Early Care: Promptly visit recognized health facilities if experiencing symptoms like fever, chills, headache, or fatigue.

Protect Medical Supplies: Store all pharmaceuticals in cool, dry places to prevent heat and humidity degradation.

Strengthen Surveillance: Boost community awareness and report suspected cases early to support public health interventions.

2.0 GENERAL OUTLOOK FOR 1ST TO 31TH SEPTEMBER 2026

2.1 Rainfall Amount

In **September 2026**, rainfall is expected to increase across the country, with total monthly rainfall expected to range from **352.2mm to 706.5mm**. Grand Cape Mount, Bomi, Montserrado, Margibi, Grand Bassa and Rivercess counties are expected to experience the highest rainfall amount. Nevertheless, Maryland, Grand Kru, River Gee, Grand Gedeh and parts of Nimba County are expected to record the lowest rainfall totals during the same period (Figure 1).

2.2 Relative Humidity (RH)

In September 2026, high average relative humidity is expected to increase in parts of Grand Cape Mount, Bomi, Bong, Nimba, Grand Gedeh and Rivergee counties are expected to experience high relative humidity. Nevertheless, parts of Montserrado, Margibi, Sinoe, Grand Kru, and Maryland are predicted to experience low relative humidity during this period. Average relative humidity during the month is forecasted to range between 88.1% and 90.5% (Figure 2).

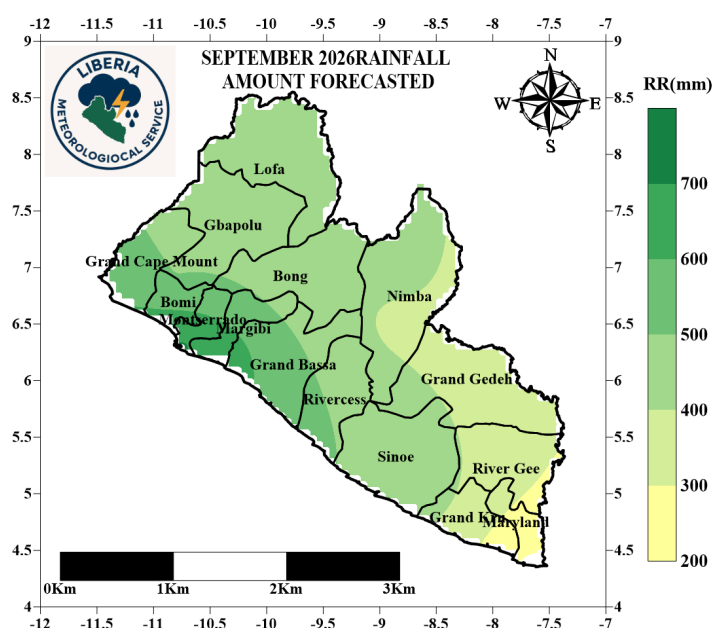


Figure 1: Rain forecasts for September 2026

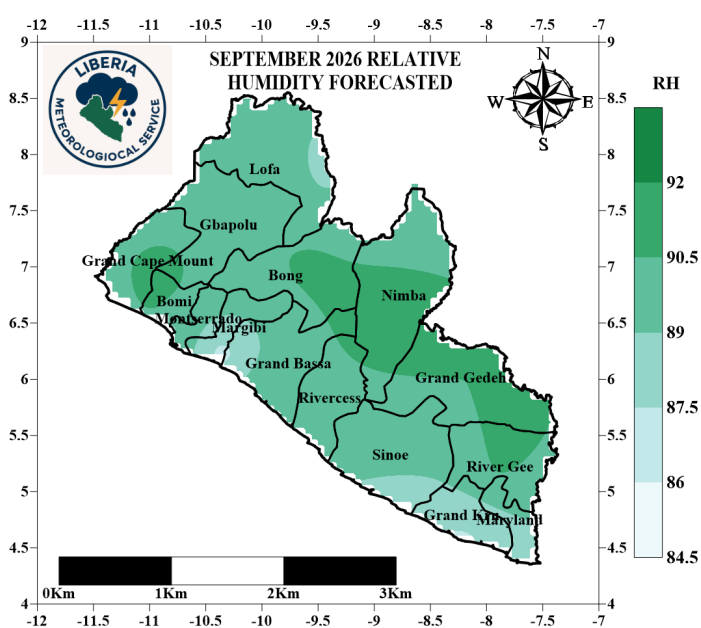


Figure 2: RH forecasts for September 2026

2.3 Maximum Temperature

Maximum temperature in September 2026 is anticipated to range between **27.0°C to 29.2°C** across the Country. Gbapolu, Grand Cape Mount, Bomi and Grand Gedeh counties are anticipated to experience high maximum temperature. Margibi, Grand Bassa, Sinoe, Grand Kru counties are anticipated to experience low maximum temperature (figure 3). However, moderate maximum temperature is expected in the other parts of the country (figure 3).

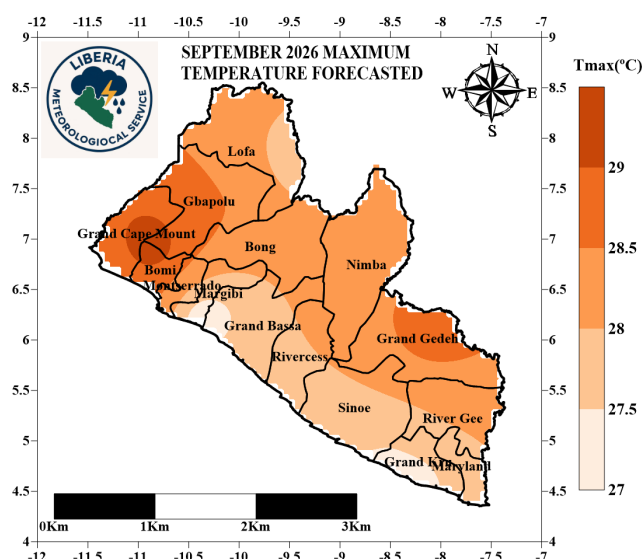


Figure 3: Tmax forecasts for September 2026

2.4 Minimum (Nighttime) Temperature: In September 2026 minimum temperature across the country is anticipated to range between **20.8°C** and **25.7°C**. The highest minimum temperature is anticipated to occur along the coastal region including counties such as Maryland, Grand Kru, Sinoe, Rivercess, Grand Bassa, Margibi, Montserrado, Bomi and Grand Cape Mount counties while the lowest minimum temperature is expected in Lofa County. The other parts of the country are anticipated to experience moderate minimum temperature (figure 4).

2.5 Mean Temperature : The forecasted mean air temperature across various locations in the country for September 2026 is expected to range between **24.3°C** and **26.3°C**. Lofa and parts Gbapolu, Bong and Nimba counties are anticipated to experience relatively lower mean temperatures, while higher mean temperature is anticipated parts of Grand Cape, Bomi, Montserrado, Margibi and Grand Bassa counties. However, the remaining parts of the country are forecast to experience moderate mean temperatures (Figure 5).

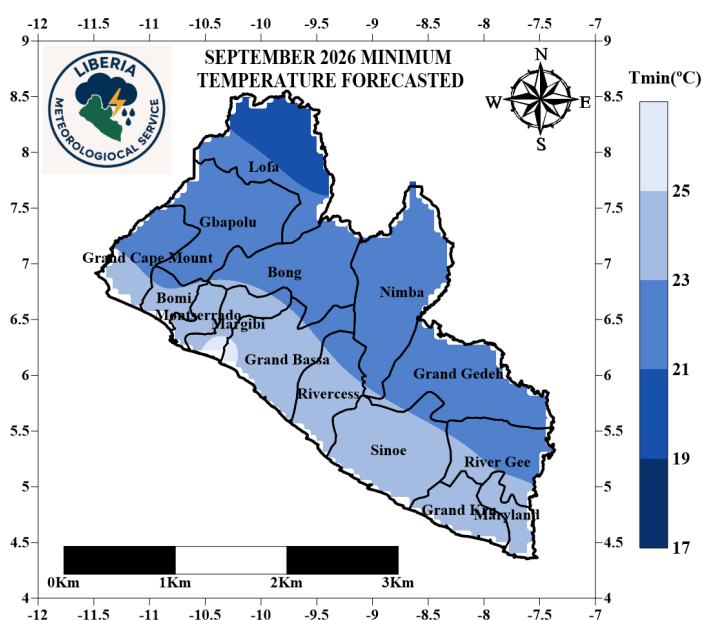


Figure 4: Tmin forecasts for September 2026

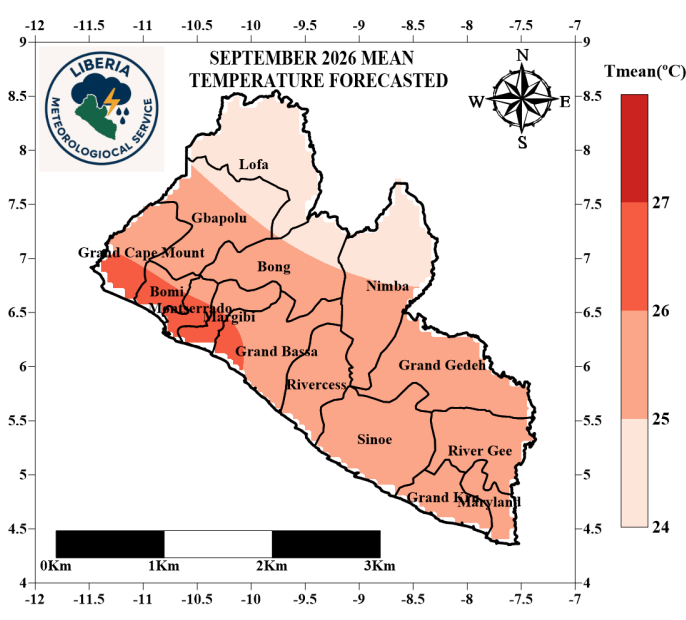


Figure 5: Ave. Temp forecasts for September 2026

3.0 Malaria Case

The predicted malaria case for various locations across the country for the month of September 2026 is expected to range between 3.8 to 10.4% cases per one hundred persons. The highest malaria cases are anticipated in parts of Margibi, Grand Bassa, Rivercess, Sinoe, Grand Kru and Maryland counties while lowest malaria cases are expected in Lofa Gbapolu, Bong and Nimba counties. The other parts of the Country are expected to experience moderate increase in malaria cases during the month under review (Figure 6).

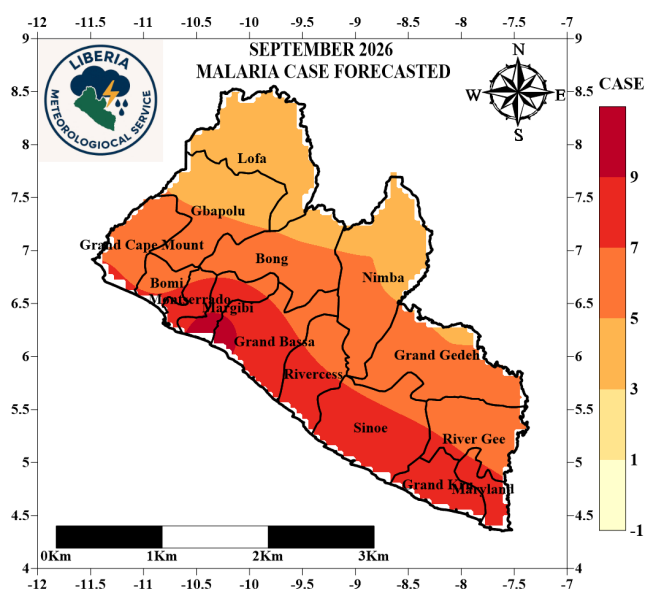


Figure 6: Malaria case forecasts for September 2026

4.0 DISEASE VIGILANCE (MALARIA)

The anticipated weather conditions during the month of September 2026, characterized by increased rainfall, high relative humidity, and favorable temperatures, are expected to create conducive environments for mosquito breeding and survival. Consequently, there is a moderate and high likelihood of increased malaria transmission across the country during the month.

Malaria vigilance is expected to be high in most parts of the Country while Lofa, and parts of Gbapolu, Bong and Nimba counties are expected to experience moderate impact. Health authorities, communities, and households are encouraged to strengthen preventive and control measures, including the proper use of insecticide-treated mosquito nets, environmental sanitation, and the timely diagnosis and treatment of suspected malaria cases.

Continuous monitoring of weather and environmental conditions, coupled with enhanced public health awareness campaigns, will be essential in reducing the potential impacts of malaria during this period (Figure 7).

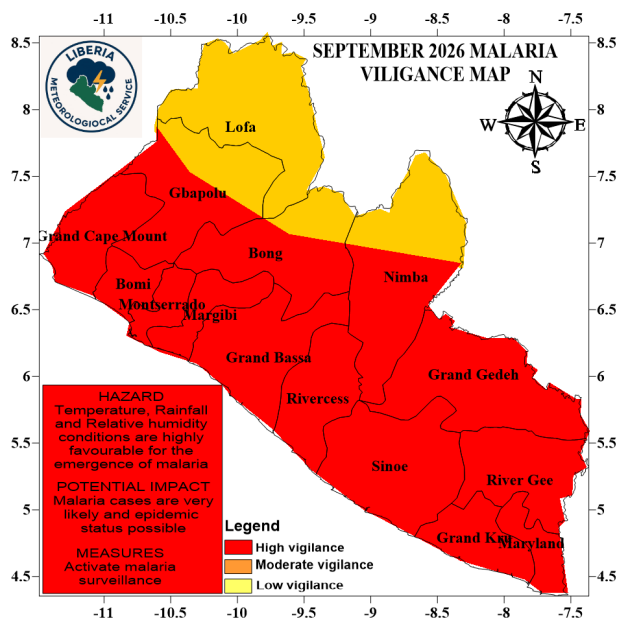


Figure 7: Malaria Vigilance for September 2026

4.1 Malaria threshold, epidemic characteristics and Advisory

	Climate Conditions	Hazard	Potential Impacts	Advisory/Measures
	Temperature between 25°C and 32°C. Relative humidity greater than 80%. Rainfall greater than 80 mm.	High probability of occurrence of malaria cases.	(i) Malaria could be fatal if not treated promptly and properly. (ii) Procurement of drugs for the treatment of malaria is expensive and therefore has adverse impacts on the financial resources of individuals and government.	As much as possible, avoid mosquito bites by using insecticide-treated mosquito nets, fumigating the environment frequently, and clearing drainages and stagnant water around homes.
	Temperature between 20°C and 25°C. Relative humidity between 70% and 80% Rainfall greater than or equal to 80 mm	Moderate probability of occurrence of malaria cases.	(iii) Malaria is usually accompanied by headache, fever, and body aches. These health conditions impact negatively on the patient's daily life.	Early diagnosis and treatment should be emphasized.
	Temperature between 18°C and 20°C Relative humidity between 60% and 70% Rainfall 80 mm	Low probability of occurrence of malaria cases.	(iv) Malaria patients usually feel sick with high fever and shivering chills. As a result, malaria patients cannot undertake normal economic and social activities.	To reduce the risk of contracting malaria, pregnant women are encouraged to take essential precautions such as using mosquito nets coated with pesticides when sleeping and taking anti-malaria prophylaxis.
	Temperature is less than 18°C or greater than 32°C; Relative humidity is less than 60%; Rainfall is less than 80 mm.	The occurrence of Malaria cases is unlikely.		

5.0 Medication Instability

5.1 Medication Instability for September 2026

The forecasted temperature and relative humidity conditions for **September 2026** may affect the stability, efficacy, and shelf life of certain drugs and medical supplies across Liberia. Elevated temperatures and high humidity levels can accelerate the degradation of temperature and moisture-sensitive pharmaceutical products, particularly where storage conditions are inadequate.

Based on the predicted weather conditions, a **moderate level of vigilance** is recommended nationwide regarding the storage, handling, and transportation of medicines and other health commodities. Health facilities, pharmacies, warehouses, and supply chain managers are encouraged to ensure compliance with recommended storage standards to maintain the quality and effectiveness of pharmaceutical products throughout the month.

Continuous monitoring of temperature and humidity conditions, along with adherence to proper storage practices, will be essential to minimize weather-related risks to drug and medication stability across the country (Figure 8).

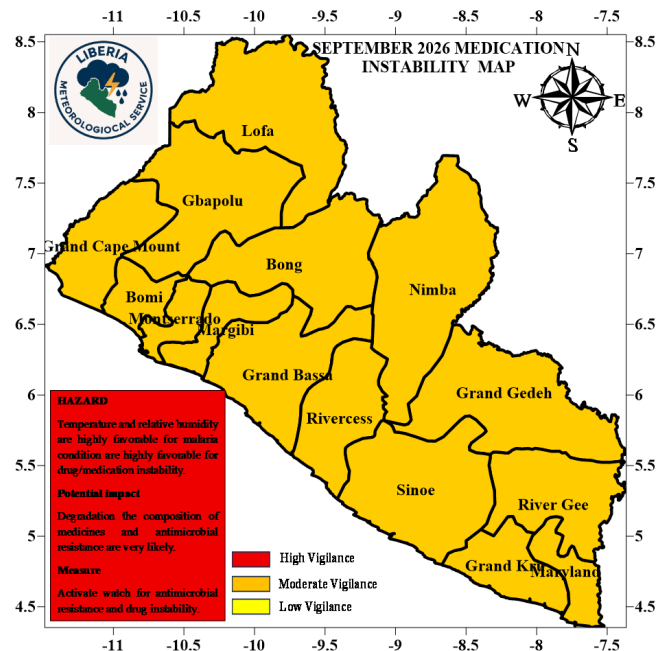


Figure 8: Medication Instability for September 2026

5.2 Medication Instability threshold, potential impacts and Advisory

	Climate Condi- tions	Hazard	Potential Impacts	Advisory/Measures
	Maximum tem- perature is greater than 30°C and, Relative humidi- ty is greater than 75%.	These condi- tions are con- sidered unsafe and unfavora- ble or incondu- cive for the storage of medicines.	(i) Drugs September lose their potency. Consequently, pa- tients treated with such medications are not likely to recover or respond to treat- ment as desired. (ii) Microorganisms that cause some dis- eases September de- velop antimicrobial resistance (AMR). (iii) Recovery of pa- tients will be retarded when they are treated with antibiotics that have been exposed to weather conditions that affect their stabil- ity.	In areas with high med- ication instability vigi- lance thresholds, there is a need for greater caution when moving and storing medica- tions. Medicines should al- ways be stored and transported using facili- ties with controlled temperature and humid- ity.

	Maximum temperature is greater than 30°C and Relative humidity is less than 75%. OR Maximum temperature < 30°C and Relative humidity > 75%.	The predicted temperatures and relative humidity are likely to cause depreciation in the quality of medicines.	Microorganisms that cause diseases are likely to develop antimicrobial resistance (AMR) when patients are treated with antibiotics that have lost their potency due to exposure to weather conditions that affect their stability.	Temperature and humidity monitoring systems for transporting and storing medicines are advised.
	Maximum temperature is between 25°C and 30°C; Relative humidity is between 70% and 75%.	Unconducive weather conditions tend to shorten the shelf life of medicines and could affect their overall potency.		Medical professionals should also advise patients on the proper storage of their medications to avoid degradation and loss of potency.

6.0 Heat Index

6.1 Heat Index for SEPTEMBER 2026

During the forecast period, Normal to cautionary heat index conditions are expected to prevail across the country. The north and part of the central region regions are anticipated to observe normal heat index while the other parts of the country is expected to experience caution heat index.

The heat index during the period under review is forecasted to range between **24°C and 29°C**. While these conditions generally pose a low to moderate risk, individuals in the southern regions are advised to take appropriate precautions, particularly during periods of prolonged outdoor activity, to minimize the potential effects of heat stress and dehydration (Figure 9).

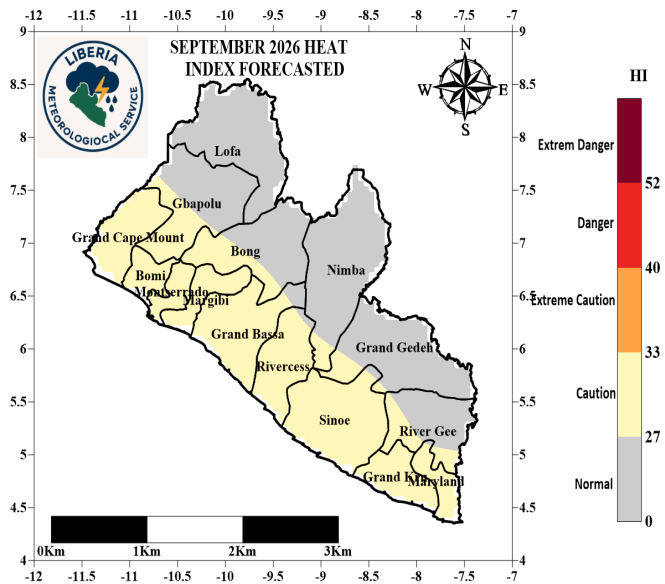


Figure 9: Heat Index for September 2026

6.2 Heat Index threshold, potential impacts and Advisory

	Climate Conditions	Hazard	Potential Impacts	Advisory/Measures
	Heat Index between 40°C and 52°C	The danger and extreme danger of heat stress are probable.	People in the affected areas are likely to be more susceptible to heat stroke, exhaustion, loss of concentration, and possible damage to the brain, liver, and heart, which September lead to fainting.	Use shades when engaging in outdoor activities to avoid direct exposure to heat from the sun.
	Heat Index between 33°C and 39°C	Moderate probability of heat stress.	Persistent and increased respiration rates can lead to exhaustion and fainting.	Work and other outdoor activities should be carried out when the intensity of solar radiation is not severe.
	Heat Index between 27°C and 32°C	A low probability of heat stress is likely.	Thirst, loss of appetite, and fatigue. It September lead to other abnormal health conditions such as heat rash.	Reduce physically demanding labour when the weather is hot.