

Bulletin for Heat-Health Early Warning in Senegal by ANACIM and the Ministry of Health

Source: USAID Climate Adaptation Support Activity (CASA) Case Study, June 2024

Overview: Why a Heat-Health Early Warning bulletin in Senegal

Extreme heat is rising fast in the Sahel — and Senegal's health system needed a way to anticipate it



45°C+

Record heat waves of 45°C for 3+ consecutive days in Senegal: 2013, 2016, 2018, 2023



1.5x

Faster temperature rise in the Sahel compared to the global average



2023

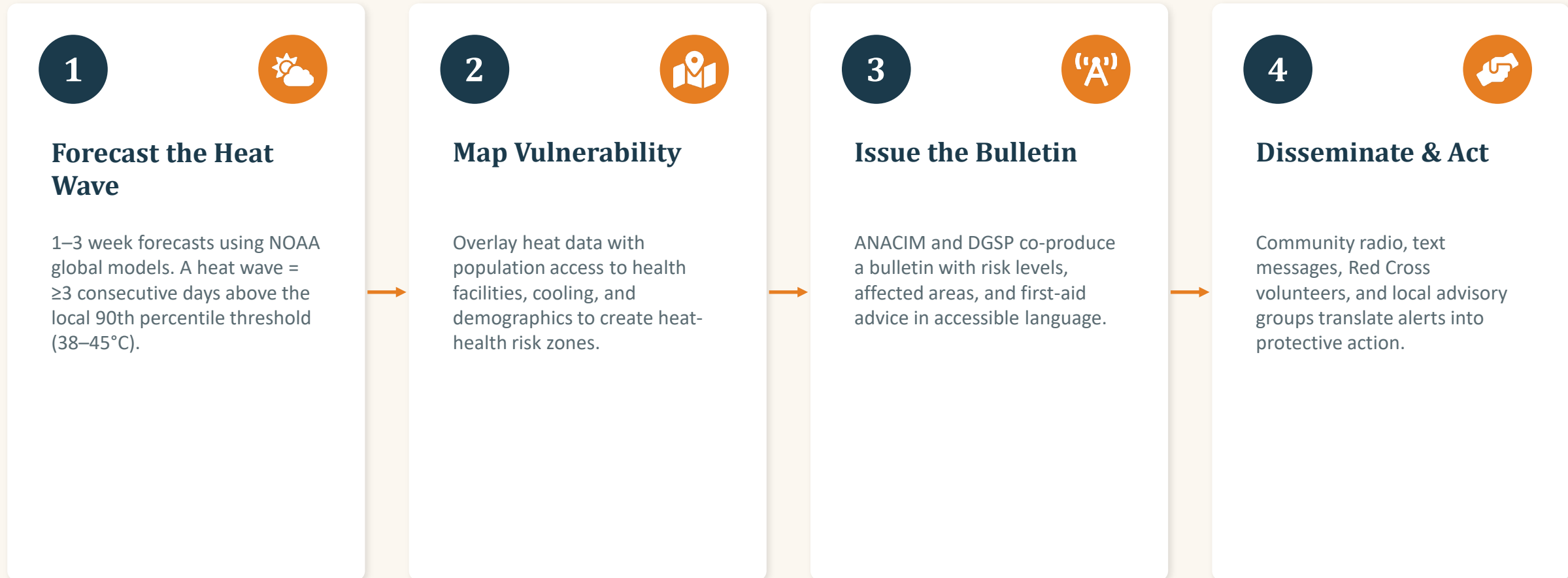
Year the HHEW pilot launched in Senegal, led by ANACIM and DGSP with NOAA support

Direct risks of extreme heat **include heat stroke, dehydration, gestational diabetes, low birth weight, and cardiovascular/respiratory disorders**, while indirectly straining hospitals and health services through increased hospitalizations and emergencies.

The pilot: NOAA funded and trained ANACIM meteorological staff and DGSP health professionals to co-produce a heat-health early warning (HHEW) bulletin, first rolled out in March 2023 in the Fatick region, central Senegal — testing forecasts, vulnerability mapping, and community communication channels.

The Approach: From Forecast to Community Action

A defined heat-wave trigger, vulnerability mapping, and a coordinated dissemination plan



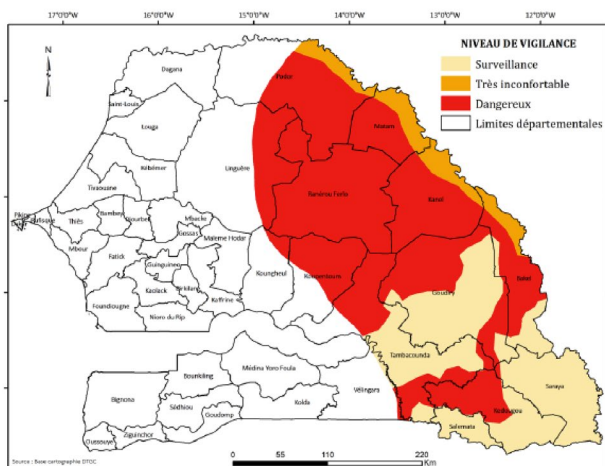
The Bulletin in Practice: A Worked Example

BULLETIN N°: 11

DATE DE DIFFUSION : 20 MAI 2026

PERIODE DE VALIDITE : DU 20 AU 26 MAI 2026

IMPACTS SANITAIRES DE LA VAGUE DE CHALEUR



Légende :

NIVEAU DE VIGILANCE	ALERTE	IMPACTS SANITAIRES
	Très dangereux Coup de forte chaleur possible	Aggravation possible des maladies cardio-vasculaires et pulmonaires
	Dangereux Coup de chaleur possible	Epuisement, syncope, déshydratation sévère, crampes
	Très inconfortable Attention aux personnes vulnérables	Déshydratation, étourdissements, maux de tête, vertiges
	Surveillance	Négligeable

LES PERSONNES LES PLUS VULNERABLES AUX VAGUES DE CHALEUR



Personnes âgées



Personnes handicapées ou dépendantes



Personnes souffrant de maladies chroniques



Femmes enceintes



Enfants et nourrissons

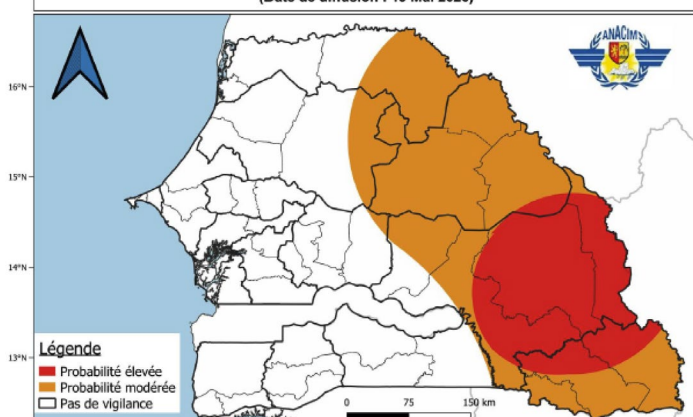
LES GESTES DE PREMIERS SECOURS

1. Essayez d'obtenir de l'aide si vous avez des vertiges, si vous vous sentez faible, angoissé, si vous ressentez une soif intense et des maux de tête ou des spasmes musculaires douloureux.
2. Placez-vous dans un endroit frais le plus vite possible et prenez votre température.
3. Buvez de l'eau pour vous réhydrater.
4. Un avis médical est requis si les crampes durent plus d'une heure. Consultez un médecin si vous ressentez des symptômes inhabituels ou si les symptômes persistent.

En cas de MALAISE ou d'URGENCE, appelez-le : 15 15

ANNEXE – RISQUES DE VAGUE DE CHALEUR

Carte de risque de vagues de chaleur pour la période du 20 au 26 mai 2026
(Date de diffusion : 19 Mai 2026)



Source: CNCS / ANACIM – Bulletin d'alerte précoce de vagues de chaleur pour la santé, Bulletin N° 11 (20–26 May 2026)

The Bulletin in Practice: A Worked Example

Illustrating the case study's HHEW bulletin output using a real CNCS / ANACIM heat alert (Bulletin No. 11, 20–26 May 2026)

Vigilance Levels & Health Impacts

Level	Health Impacts
Very Dangerous (dark red)	Possible worsening of cardiovascular & respiratory disease
Dangerous (red)	Exhaustion, fainting, severe dehydration, cramps
Very Uncomfortable (orange)	Dehydration, dizziness, headaches
Surveillance (pale yellow)	Negligible

Areas at risk (20–26 May 2026):

Saint-Louis (Podor), Matam (Matam, Ranérou, Kanel), Kaffrine (Koungheul), Tambacounda (Bakel, Goudiry, Koumpentoum, Tambacounda) and Kédougou (Saraya, Kédougou, Salémata) — temperatures of 43–45°C, with the highest risk in Kédougou and Tambacounda.

Most Vulnerable Groups



Older adults



People with disabilities



Pregnant women



Infants & young children



People with chronic illness

First Aid & Response

- Seek help for dizziness, weakness, anxiety, intense thirst, headache or muscle spasms
- Move to a cool place immediately and check temperature
- Rehydrate with water
- **Seek medical advice if cramps last over an hour — Emergency line: 15 15**

Lessons Learned from the Case Study

Key takeaways from the Fatick pilot for scaling heat-health early warning systems



Invest in Local Capacity

Meteorologists and health professionals need joint training to translate forecasts into operational heat-health risk products.



Make Warnings Actionable

Messages must be iterated, locally relevant, and delivered through trusted community channels — radio, Red Cross, women's groups.



Secure High-Level Support

Sharing hospitalization data with regional leadership (e.g. the Fatick governor) builds the political backing HHEW needs to endure.



Pilot, Learn, Scale

Starting small in Fatick — with structured feedback — created the evidence base needed for wider roll-out.



Look Beyond Human Health

Communities also care about livestock, crops and livelihoods — multisectoral collaboration strengthens relevance and uptake.



Multi-Channel Dissemination

Combining bulletins, SMS, community radio and door-to-door outreach reaches different population groups effectively.