Building on the 2025 national-level country data sheets developed by the Lancet Countdown on Health and Climate Change, this data sheet draws on findings from the **2026 report of the *Lancet* Countdown in Europe: *Narrowing the window for decisive health action*** to offer insight into how climate-related health risks and responses vary within countries.

LANCET COUNTDOWN: HEALTH AND CLIMATE CHANGE IN EUROPE

SPAIN

LANCET COUNTDOWN IN EUROPE
CLIMATE CHANGE AND HEALTH INSIGHTS 2026

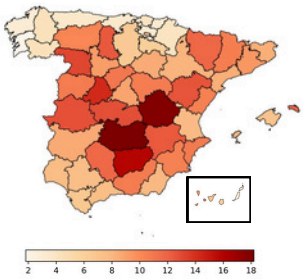
This document highlights patterns in heat-related risks and health impacts, shifting risks of climate-sensitive infectious diseases, and increasing wildfire danger, demonstrating how climate change is shaping health risks across different parts of the country, while also considering longer-term environmental changes such as tree cover loss.

Heat and health

Exposure and vulnerability tend to be concentrated in particular regions in Spain, reflecting differences in local climate conditions, population age structure, and adaptive capacity. Tracking these subnational patterns is important for identifying where heat poses the greatest risks to health, where pressure on health systems may intensify, and where targeted adaptation measures are most needed.

Heat-related mortality

Change in annual heat-related deaths per 100,000 inhabitants in Spain in 2015-2024 compared to 1991-2000



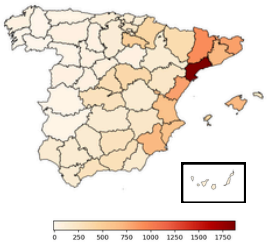
The **province of Ciudad Real** registered the highest increase in heat related mortality between 2015–2024 and 1991–2000, with over 18 deaths per 100,000 inhabitants, from 8.8 to 27 (Indicator 1.1.3).

Heat-health early warnings

Heat–health early warnings translate daily temperatures into categories of health risk based on the proportion of deaths linked to heat (low: 5–10% to extreme: ≥20%), with a new epidemiological framework. The **province of Lleida** recorded an increase in extreme heat–health warning days from 0–1 in 1991–2000 to 8 in 2015–2024, reflecting growing heat-related health risks (Indicator 2.2.2).

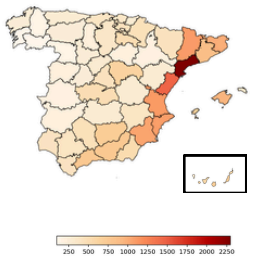
Heat exposure of vulnerable populations

Percentage change in heat exposure days for 2014-2024 compared to 1991-2000 for infants under 1



The **region of Tarragona** registered the highest increase in heatwave days experienced by infants aged under 1 between 2015–2024 and 1991–2000, with an increase of 3,403 total days of heatwave exposure across the infant population (from ~180 to ~3600) (Indicator 1.1.1), highlighting increasing risks to early-life health from more frequent and intense heat exposure.

Percentage change in heat exposure days for 2014-2024 compared to 1991-2000 for adults over 65



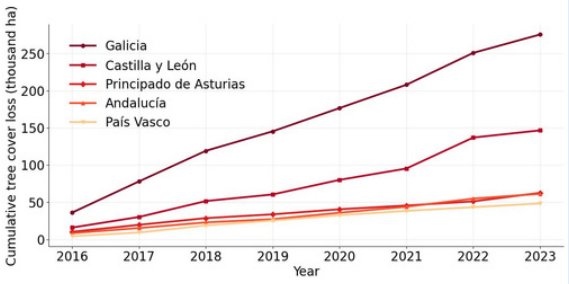
The **region of Tarragona** also registered the highest increase in heatwave days experienced by adults aged over 65 between 2015–2024 and 1991–2000, with an increase of 1.9 billion total days of heatwave exposure across the aged population (from ~81,700 to ~1,960,500) (Indicator 1.1.1), reflecting growing exposure among populations most vulnerable to heat-related illness and mortality.

Wildfires and tree cover loss

Rising temperatures and changing precipitation patterns are increasing wildfire risk across Southern Europe, with implications for air quality, health, and health system pressure. Wildfires contribute to spikes in particulate matter and other pollutants, exacerbating respiratory and cardiovascular conditions, while also placing strain on emergency response and healthcare services.

The region of Melilla recorded the highest increase in wildfire danger between 2015–2024 and 1981–2010, with an increase of 13.3% from 29.2 to 33.1 (Indicator 1.2.2), reflecting heightened exposure to fire-related hazards and associated health risks.

Cumulative Tree Cover Loss- Top 5 regions (2016-2023)



Between 2016 and 2023, the **Galicia region** in Spain recorded the highest level of tree cover loss among regions, with approximately 275,600 hectares lost; while forestry activities and wildfires are the primary drivers of these losses, they can exacerbate climate impacts by reducing carbon sequestration capacity and increasing vulnerability to heat and environmental degradation (Indicator 3.6).

Climate-sensitive infectious diseases

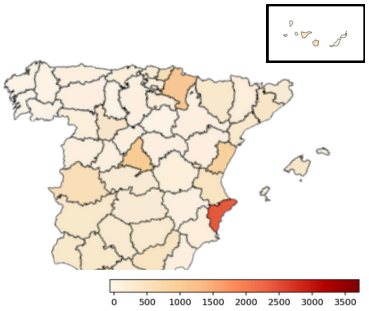
Climate change is altering the environmental suitability for vector-borne diseases across Spain, enabling pathogens such as West Nile virus and dengue to expand into new regions or intensify in areas where they are already present. These changes vary across regions due to differences in temperature, precipitation, and vector ecology.

Dengue

In 2024, the **province of València** recorded the highest climatic suitability for dengue transmission associated with *Aedes albopictus* (18.55), while the **province of Cádiz** recorded the highest climatic suitability associated with *Aedes aegypti* (0.037), closely followed by **province of Sevilla** (0.031) (Indicator 1.3.3).

West Nile Virus

Ceuta registered the highest increase in average outbreak risk for West Nile virus transmission between 1981–2010 and 2015–2024 (Indicator 1.3.2), rising from 0.002 to 0.064 and reaching 0.251 in 2025, reflecting rapidly strengthening temperature-driven conditions conducive to vector–pathogen transmission. (Indicator 1.3.2)



Increase in average risk of West Nile virus outbreaks: 1981–2010 vs 2015–2024

Recommendations

Building on the 2025 Spain data sheet of the Lancet Countdown on Health and Climate Change, which highlighted intensifying heat and drought, compounding flood risks, persistent wildfire and air-quality harms, and gaps in preparedness for a healthy net-zero transition, these findings point to the need for more geographically targeted responses.

- Strengthening **heat–health action plans and early warning systems** in high-risk regions is imperative.
- Enhancing **surveillance and prevention of climate-sensitive infectious diseases** in areas where environmental suitability for mosquito-borne transmission is increasing is also needed.
- In parallel, **prioritising wildfire risk reduction and ecosystem resilience** in exposed areas is critical, particularly in regions experiencing significant tree cover loss, as land-use change can intensify heat exposure, reduce carbon sequestration, and heighten vulnerability to fire.

Aligning regional public health, climate adaptation, and land-use strategies can help mitigate these interconnected risks while supporting a more resilient and health-focused response to climate change.

Kriit HK, Chen-Xu J, Semenza J, et al. The 2026 Europe report of the *Lancet* Countdown on health and climate change: narrowing window for decisive health action. Lancet Public Health 2026; published online Apr 21. https://doi.org/10.1016/S2468-2667(26)00025-3

The Lancet Countdown Europe is a regional research collaboration providing an overview of the relationship between public health and climate change, the region's response to climate change, and the health benefits that emerge from this transition. The Lancet Countdown was established in partnership with Wellcome.

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