

# POLAND

## LANCET COUNTDOWN IN EUROPE CLIMATE CHANGE AND HEALTH INSIGHTS 2026

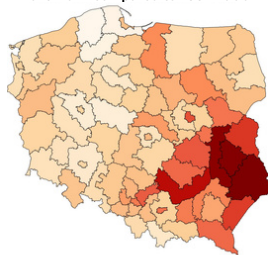
This document highlights patterns in heat-related risks and health impacts, shifting risks of climate-sensitive infectious diseases, and increasing wildfire danger, demonstrating how climate change is shaping health risks across different parts of the country, while also considering longer-term environmental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

### Heat and health

Exposure and vulnerability tend to be concentrated in particular regions in Poland, 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 Poland in 2015–2024 compared to 1991–2000



The **chelmsko-zamojski** subregion registered the highest increase in heat related mortality between 2015–2024 and 1991–2000, with over 4 deaths per 100,000 inhabitants - from over 2 to almost 7 deaths (Indicator 1.1.3).



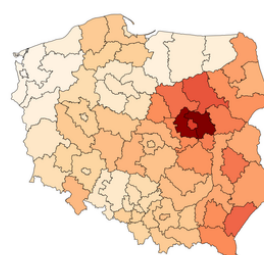
#### Heat-health early warnings

Heat-health early warnings translate daily temperatures into categories of health risk based on the proportion of deaths linked to heat (low: 5–10%, moderate: 10–15%, high: 15–20%, extreme: ≥20%), with a new epidemiological framework. The **subregion of Warsaw** saw an increase in high heat-health warning days from 0–2 in 1991–2000 to 5 in 2015–2024, reflecting rising heat-related health risks (Indicator 2.2.2).

#### Heat exposure of vulnerable populations

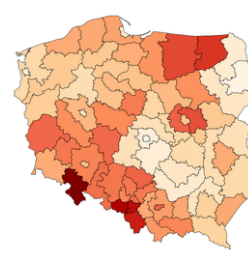
**East Warsaw** registered the highest increase in heatwave days experienced by infants aged under 1 between 2015–2024 and 1991–2000, with a 331% increase from ~940 to ~4,050 total days of heatwave exposure across the infant population (Indicator 1.1.1), highlighting increasing risks to early-life health from more frequent and intense heat exposure.

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



**Walbrzych** registered the highest increase in heatwave days experienced by adults aged over 65 between 2015–2024 and 1991–2000, with a 507% increase from ~395,000 to ~2,399,700 total days of heatwave exposure across the aged population (Indicator 1.1.1), reflecting growing exposure among populations most vulnerable to heat-related illness and mortality.

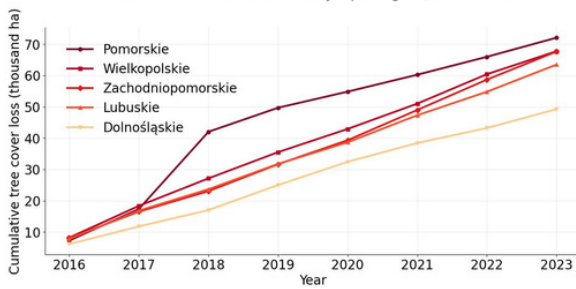
Percentage change in heat exposure days for 2014–2024 compared to 1991–2000 for adults over 65



### Tree cover loss

Loss of tree cover reduces the capacity of ecosystems to regulate local climate and filter air pollutants. This can amplify exposure to heat, worsen air quality, and increase risks to physical and mental health.

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



Between 2016 and 2023, **Pomorski** recorded a high level of tree cover loss, with approximately 72,100 hectares lost; while these losses are primarily driven by forestry, 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 Poland, enabling pathogens such as tick-borne diseases 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.

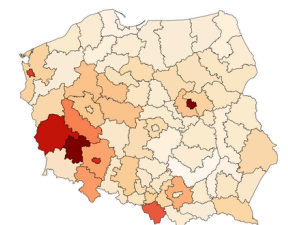
### Ticks

**Koniński** registered the highest increase in the mean climatic suitability for *Ixodes* tick transmission between 2015–2024 and 1981–2010, rising from 4.14 to 4.69 (Indicator 1.3.6).

**Trójmiejski** registered the highest increase in the mean climatic suitability for *Hyalomma* tick transmission over the same period, rising from 0.45 to 1.19 (Indicator 1.3.6).

### West Nile Virus

**Legnica-Głogów** and **Warsaw** registered the largest increases in average outbreak risk for West Nile virus between 1981–2010 and 2015–2024 (Indicator 1.3.2), rising from baselines of 0.0019 to 0.0290 (+1,451%) and 0.0024 to 0.0373 (+1,442%), respectively, indicating a rapid expansion of temperature-driven transmission suitability from previously near-negligible levels (Indicator 1.3.2).



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

## Recommendations

Building on the 2025 Poland data sheet of the Lancet Countdown on Health and Climate Change, which highlighted rising heat exposure, persistent air pollution-related health harms, and uneven progress in adaptation and mitigation, 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, particularly West Nile virus and tick-borne diseases, is needed in areas where environmental suitability for transmission is increasing.



In parallel, prioritising ecosystem resilience and sustainable land-use strategies in exposed areas is critical, particularly in regions experiencing significant tree cover loss,

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](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.