

Climate disasters and their Impacts on public health and the Brazilian Unified Health System (SUS)*

Catástrofes climáticas e os impactos para a saúde pública e o SUS

Catástrofes climáticas y sus impactos en la salud pública y el Sistema Único de Salud (SUS)

Tânia Solange Bosi de Souza Magnago¹ 

¹ Universidade Federal de Santa Maria, Santa Maria, Rio Grande do Sul, Brazil

* Text extracted from the speech at the Brazilian Congress on Climate Disasters (ConBrasCC) – Impacts, perspectives and challenges for the management of health services, 2025.

The World Health Organization (WHO) recognizes the climate crisis as a global health emergency, with consequences for human health and health service infrastructure.^{1,2} It is estimated that between 2030 and 2050, this crisis could be responsible for approximately 250,000 additional deaths per year.¹

We live in challenging times, marked by the intensification of extreme weather events. Among their most devastating manifestations are floods, inundations, and landslides. In 2024, Brazil witnessed, with sadness and concern, one of the most serious climate catastrophes in its recent history: the floods in the state of Rio Grande do Sul,³ which occurred between April and May. These floods highlighted not only the effects of the climate emergency but also social vulnerability and the challenges of overburdening public services, especially the Unified Health System (SUS).

The damage to people's health—both physical and mental—and to healthcare services,³⁻⁵ from primary care to hospital care, was immense. This damage is not limited to the moment of the event, but produces successive waves of suffering, illness, and social exclusion.^{4,5} The most visible aspect is the overcrowded shelters, damaged basic units and hospitals, and improvised care.⁴ But there is also a silent, less perceived layer,

which concerns psychological suffering, the rupture of bonds, collective anxiety, and the feeling of loss of dignity.

Mental health care needs to be expanded and institutionalized in response protocols.⁵ Urgent training for healthcare professionals in psychosocial care must become routine in disaster contexts. Therefore, it is essential to discuss the management strategies and public policies needed to mitigate health risks in the face of these catastrophes.

The SUS responded quickly and effectively, mobilizing the National SUS Force, sending vaccines and medicines, among other actions.⁵ Various public safety, civil protection, and defense agencies worked tirelessly to resolve the problems, ensuring health care for the general public and affected professionals. Also noteworthy are the solidarity networks, which mobilized rapid and decentralized responses, emotional and psychological support, community engagement, coordination, and resource mobilization.⁵

However, it is necessary to develop management strategies and public health policies with an effectively preventive, integrated, and systemic approach, which consider climate risk as a structuring component of the SUS's planning and organization. They also ensure that health services are prepared to resist and respond effectively to these events.

In this context, the role of public health surveillance services and health system managers becomes strategic.^{3,5} It is imperative to prepare health facilities to respond to extreme weather events, guarantee their operational continuity, ensure access to supplies, medicines, and adequate infrastructure, and establish robust contingency plans. This requires adequate funding, resilience and equity criteria, and strong, continuous, and coordinated intersectoral governance

References

1. World Health Organization (WHO). Climate change [Internet]. Geneva: WHO; 2024 [cited 2025 May 20]. Available from: <https://www.who.int/news-room/fact-sheets/detail/climate-change-and-health>.
2. Pan American Health Organization (PAHO). Climate change and health [Internet]. Washington, DC: PAHO; 2023 [cited 2025 May 20]. Available from: <https://www.paho.org/en/topics/climate-change-and-health>.
3. Freitas CM, Barcellos C. Desastre no Rio Grande do Sul, Brasil: crise climática, resposta do Sistema Único de Saúde e desafios dos novos tempos. Cad Saúde Pública. 2024;40(11):e00114424. doi: 10.1590/0102-311XPT114424.
4. Duarte MLC, Silva DG, d'Ávila AP, Dias EP, Souza NK. Reflections regarding mental health after the 2024 floods in the south of Brazil. Rev Enferm UFSM. 2025;15:e8. doi: 10.5902/2179769288634.
5. Nunes PC, Carvalho PVR, Jatobá A. A tragédia climática no Rio Grande do Sul e a Força Nacional do SUS: política pública com foco na resiliência diante das novas crises sanitárias. Ciênc Saúde Colet. 2025;30(Supl 1):e2409523. doi: 10.1590/1413-812320242911.09852024.

Funding/Acknowledgements: National Council for Scientific and Technological Development (CNPq). Process No. 401279/2024-3

Authorship contribution

1 – Tânia Solange Bosi de Souza Magnago

Corresponding author

Nurse, Teacher, Healthcare Manager – tania.magnago@ufsm.br

Research conception and/or development and/or manuscript writing; Review and approval of the final version

Editor in Chief: Cristiane Cardoso de Paula

Scientific Editor: Eliane Tatsch Neves

How to cite this article

Magnago TSBS. Climate disasters and their Impacts on public health and the Brazilian Unified Health System (SUS). Rev. Enferm. UFSM. 2025 [Access at: Year Month Day]; vol.15, e15:1-3. DOI: <https://doi.org/10.5902/2179769293275>