

Climate Change and Health in Africa: From Epidemiology to the Economics of Heat-Attributable Birth Outcomes

Pre-Congress Side Event

Saturday 5 September 2026 • 11:30 AM–1:00 PM (SA Time) • CTICC (Cape Town International Convention Centre)

About

In Africa, climate change already imposes severe and disproportionate economic costs: heat-related reductions in labour capacity were equivalent to roughly 4.1% of the continent's GDP in 2022 (against 0.1–0.2% in Europe and North America), concentrated in agriculture and among the lowest-income workers (Romanello et al., 2023). The inaugural Lancet Countdown on health and climate change in Africa (Ali et al., 2025) warns that such damage threatens progress across the Sustainable Development Goals, even as the climate finance pledged to vulnerable nations — approximately US\$300 billion per year by 2035 under the COP29 New Collective Quantified Goal — falls far short of need and remains largely undelivered. Without this, some of the continent's hard-won health gains in child mortality reduction are significantly threatened, with predictions that heat-related child mortality on the continent could exceed 38,000 deaths annually by 2049 (Chersich et al., 2022). Among the most acute yet understudied threats within this crisis is the impact of ambient heat on pregnant women and their fetuses.

Ambient heat exposure is now firmly linked to adverse birth outcomes (preterm birth, low birthweight, and stillbirth), with the impact being largest in low-income settings facing the steepest projected warming (Chersich et al., 2023). Within those settings, the effects of heat are concentrated among populations within lower socioeconomic strata (Andriano, 2023), with some estimates indicating impacts on later life outcomes as well (Wilde et al., 2017). Yet to our knowledge no published study has economically valued the burden of heat-attributable adverse birth outcomes in a sub-Saharan African setting. Without this, governments and donors systematically under-invest in a major public health threat, further exacerbating the risks faced, especially by the most vulnerable.

This pre-Congress workshop, convened by Wits Planetary Health Research with the Lancet Countdown Africa Regional Centre, has two interlinked aims. First, to present foundational epidemiological and economic concepts that make climate-related maternal and perinatal harms visible and accountable. Second, to initiate a forward-looking African research agenda that produces policy-relevant evidence to protect the region's most vulnerable populations.

A 90-minute panel discussion will bring together experts in epidemiology, health economics, and population health from sub-Saharan Africa to identify methodological approaches, data needs, ethical considerations, and priority research questions.

Registration link

<https://docs.google.com/forms/d/e/1FAIpQLSfbm8lxZdYN-66ScJEY71hTH9sffBhjwM1LDbCrhPeHT2O0KQ/viewform?usp=header>

Speakers

- **Prof Matthew Chersich** — Sets out the broad population health research agenda
- **Dr Darshnika Lakhoo / Dr Danielle Travill** — Epidemiological evidence on heat impacts on maternal, fetal, and neonatal outcomes
- **Dr Vinayak Bhardwaj** — Key economic questions arising from the epidemiological evidence and key economic implications
- **Associate Prof. Olufunke Alaba / Lancet Countdown Africa Working Group 4** — Climate Change and Health Economics and Finance — implications for Lancet indicators; open questions worth investigating
- **Prof. Tafadzwanashe Mabhaudhi** — Lancet Countdown Africa — broader climate countdown work and vision for Africa

Contact

Vinayak Bhardwaj • Wits Planetary Health Research / Lancet Countdown Africa •
vinayak.bhardwaj@witsphr.org