

The 2024 report of the *Lancet* Countdown on health and climate change: facing record-breaking threats from delayed action *CRITIQUED* by Dr D Weston Allen MBBS, FRACGP, Grad Dip Phys Med

The *Lancet* pre-empted the Paris Agreement climate targets at COP 21 with its [Commission on Health and Climate Change](#) in June 2015. It has since released annual Countdown reports of progress before every COP. This 139 page [Romanello et al](#)¹ report by “122 leading researchers from UN agencies and academic institutions worldwide” claims to reveal “the most concerning findings yet in the collaboration’s 8 years of monitoring.” The first of its 6 Panels focuses on 15 health indicators, the second on 56 climate change indicators, the third on indigenous knowledge, cultural and spiritual practices, colonisation and dispossession, the fourth on nature-based solutions, the fifth on limits to adaptation, and the sixth on health impacts of the energy production cycle.

The objectives are clear: “Financial support for action on health and climate change” and “a global transformation of financial systems” for “a just transition” from fossil fuels to “clean renewables” for “a zero emissions future.” It notes that: “the global share of electricity from clean modern renewables reached a record high of 10.5% in 2021” and that “global clean energy investment grew 10% in 2023 to \$1.9 trillion”, indicating that the percentage dropped in 2022-23 despite spending more. A likely reason is that the oil and gas companies it blames for “reinforcing global dependence on fossil fuels” are fuelling the mining and refining of [vast resources](#) for the energy transition, for manufacturing, transporting and installing weather-dependent facilities and the massive storage facilities required for intermittent sources, plus long transmission lines.

This critique focuses on Panel 1. It claims that 10 of the 15 indicators monitoring climate change-related health hazards “reached concerning new records.” These include global temperatures (1.61°C above pre-industrial times), outdoor heat stress (27.7% more hours than on average in the 1990s), lost sleep (6% more), heat-related mortality in people over 65 (102% above expected), and extreme weather events (heatwaves, wildfires, storms, floods, and droughts) resulting in record economic losses (US\$227 billion in 2019-2023), labour losses (512 billion potential labour hours in 2023, worth \$835 billion) and severe food insecurity (151 million more people in 2022). It forecasts “a future of increasingly dangerous health hazards” putting people worldwide “increasingly at risk from life-threatening extreme weather events.” Such records and predictions rely on conveniently short time frames, on growing populations that are ageing and urbanising, on inflating economies, on tuned computer models, and on exaggerations.²

Preindustrial times were much colder (by 5°C in Europe³ and 7°C in Russia⁴) than the Holocene Thermal Maximum which was several degrees cooler than the Eemian maximum^{5,6} and an earlier interglacial when our furless species appeared on the hottest continent.^{7,8} Humans thrive during warm periods and suffer terribly during cold ones such as the preindustrial Little Ice Age.^{9,10} Cold weather increases respiratory,^{11,12} cardiovascular^{13,14} and cerebrovascular disease,^{15, 16, 17} taking 18 times more lives than hot weather globally a decade ago,¹⁸ 10 times more in Europe and 40 times more in northern Europe quite recently (Fig. 1).¹⁹ Note how the *Lancet* tries to hide this fact.

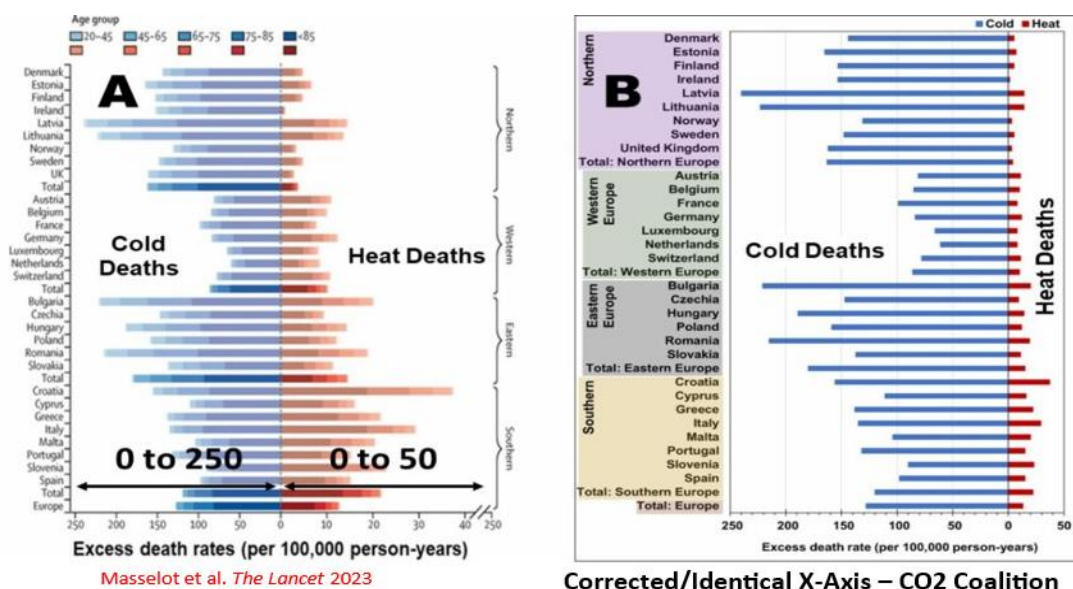


Figure 1: Temperature-related deaths in Europe in 2022 portrayed in the *Lancet* (A) and corrected (B)

While admitting that “cold-related deaths currently exceed heat-related deaths” the report asserts “heat-related deaths are expected to exceed cold-related deaths in a high-warming scenario”, citing a paper²⁰ which ignores adaptation and demographic changes and relies on models running hot on the implausibly high RCP8.5 emissions scenario (+4.9°C this century).²¹ As shown in figure 2, it nevertheless projects cold-related deaths predominating in Australia, East Asia, North America and much of Europe until 2100, and everywhere except SE Asia and South America (without adaptation) under the more realistic RCP4.5 scenario (+2.4°C).²²

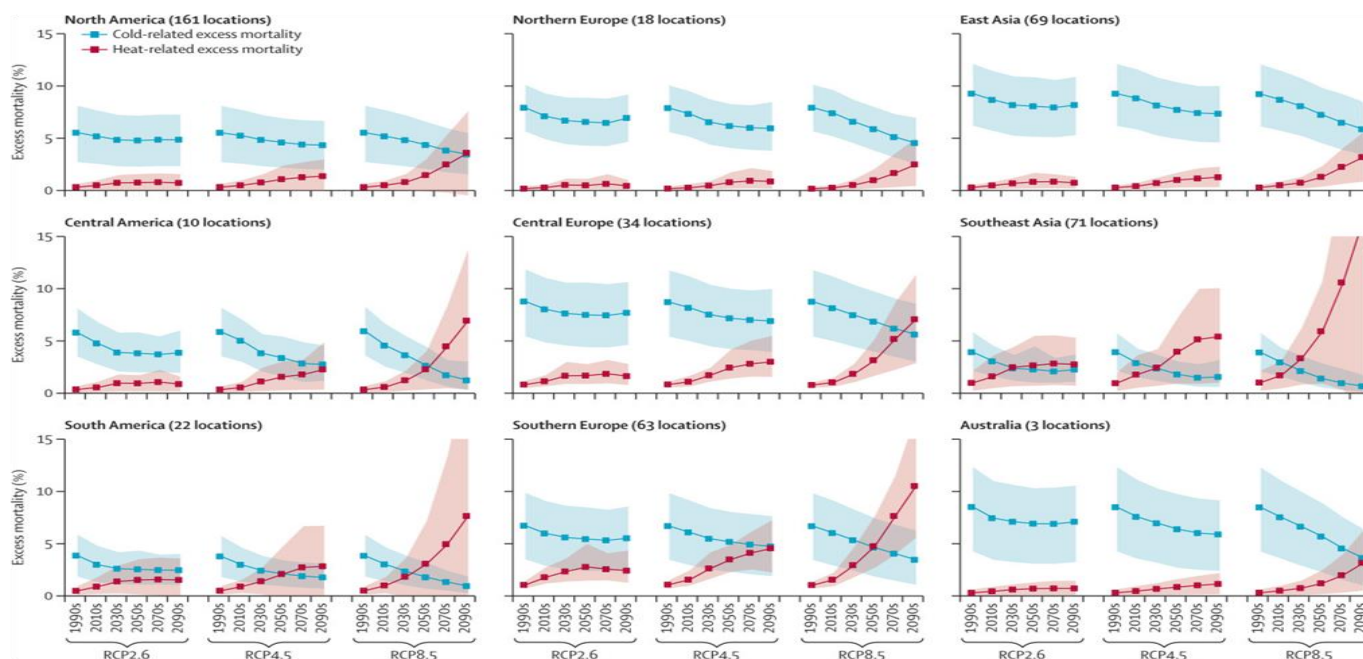


Figure 2: Projected mortality from cold weather (blue) and hot weather (red) under three emissions scenarios.

The report warns: “The growing accumulation of greenhouse gases in the atmosphere is pushing the world to a future of increasingly dangerous health hazards and reducing the chances of survival of vulnerable people all around the globe.” Greenhouse gases slow the radiative cooling of Earth’s surface and thus elevate *minimum* temperatures more than maximums,^{23,24} thus reducing the diurnal temperature range²⁵ and hence respiratory infections,²⁶ cardiovascular and respiratory deaths,^{27,28} childhood asthma²⁹ and diarrhoea.³⁰ Urban warming, the urban heat island effect,³¹ is much more responsible for heat stress and heatwave mortality,³² but this report mentions it only incidentally, pointing out that air-conditioning can increase it and that urban green space can reduce it. The motor vehicle has impacted human heat tolerance much more via urban heat,^{33,34} physical [unfitness](#)³⁵ and obesity³⁶ than by its emissions. This author aged 78 still cycles to work during sub-tropical summers. Hotter nights and consequent sleep loss are impacted much less by greenhouse warming than by urban heat³⁷ and solar forcing.³⁸

During the deadly 2003 European heatwave, most of the planet was normal or cooler than normal at the time.³⁹ The Australian summer of 2016-17 was exceptionally warm in the eastern states and unusually cold in the west. Canberra reached 40°C on 9 February while Perth had its coldest February day on record, reaching 17.4°C. New South Wales had its worst recorded heat wave in January 1896 with temperatures of 102°F (38.9°C) or above for 24 days straight, 120°F (49.9°C) in the shade at Bourke, and 109°F (42.8°C) at midnight at Brewarrina.⁴⁰ In the United States, a 10-day heatwave in August that year took nearly 1,500 lives, most of them manual labourers in New York City; the summer-long heatwave across the Midwest of the USA in 1954 ranks as the hottest in 11 states from 1895 to 2009; heatwaves in the U.S. declined if anything during the 20th century.⁴¹ The most destructive heatwave in US history killed 9,500 people in the eastern states in 1901.⁴² The 1936 heatwave during the North American Dust Bowl decade set record temperatures across 14 states, reached 49°C in Steele, North Dakota⁴³ and killed at least 5,000 people. The UK had severe heatwaves in 1906, with a September record of 35.6°C, and in 1911, with an August record of 37.1°C.⁴⁴

Heatwaves are not caused by climate change but by stationary high-pressure systems, usually over mid-latitudes. Usually defined as lasting [3 or more days](#)., this report, defines heatwaves “as a period of 2 or more days on which both the minimum and maximum temperatures were above the 95th percentile of the local climatology (on the 1986–2005 baseline),” and found the global “heatwave days per person” in 2023 was “over

20%” above that in 2022” and 82% above expected for the 2004-23 period. Records can be easily achieved by altering definitions and selecting short time frames. An [analysis](#) of weather extremes over long time frames reveals little change. Hurricanes and cyclones making landfall this century have actually declined, as has the global [area burnt](#) and most [natural disasters](#).⁴⁵ People are [living longer](#) than ever and **the global population has quadrupled over the past century while the number of deaths from extreme weather events has declined dramatically**.⁴⁶ *The Lancet* excels at turning good news into bad news. This report blames human emissions for “sand and desert dust that exceeded WHO guideline levels, up by 31% from 2003–07.” Deserts, however, are actually [shrinking](#) and the Earth is [greening](#), mostly due to increased atmospheric CO₂.⁴⁷ Vostok ice cores clearly show (Fig. 3) an inverse relationship between atmospheric CO₂ and dust (a colder world is also drier and dustier).

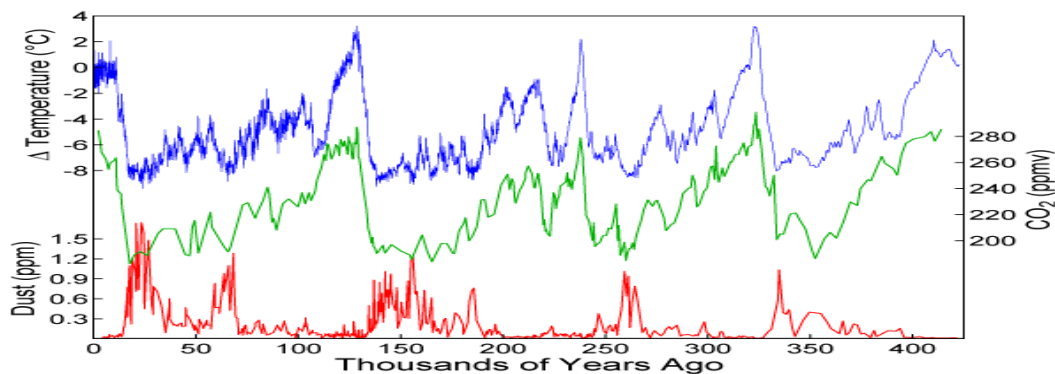


Figure 3: Atmospheric temperature, carbon dioxide and dust from Vostok ice cores.⁴⁸

The report asserts: “Climate change is exacerbating food insecurity and undernutrition by reducing crop yields, labour capacity, and access to water and sanitation; disrupting supply chains”. The undernourished [percentage](#) of the global population actually fell from 12.1% in 2005 to <8% during 2010-2019. It was not climate change but the COVID-19 pandemic and consequent disruption of supply chains that pushed it back over 9%. Crop yields have been [increasing faster](#) than the global population since the 1960s. [Carbon dioxide](#) is an essential plant food which increases the yield per unit of land,⁴⁹ fertiliser and water.⁵⁰ When this author and Prof. Tim Florin wrote a letter critical of the *Lancet*’s 2018 Countdown report, the [Author’s reply](#) stated: “any CO₂ fertilisation effect will eventually be outweighed by the negative effects of heat stress, drought, and flooding on agricultural productivity, resulting from unabated climate change” but CO₂ also mitigates heat-stress⁵¹ and drought.⁵² It also reduces the net global population at high risk of water stress.⁵³ *The Lancet* authors continued: “CO₂ greater than 450 parts per million is likely to have a negative effect on grain quality⁵⁴” but genotype selection and fertilization can maintain [nutrient](#) and protein content.^{55,56} If they were worried about lower protein, iron and zinc levels in CO₂-fertilised food, they would welcome some red meat in the diet, but they don’t because “red meat and dairy contributed to 56% of agricultural emissions in 2021” is all they focus on!

Fossil fuels, attacked 114 times in this report, have not only fertilized crops with carbon and nitrogen (fertilizer made using natural gas) but also allowed agriculture to be mechanized, emancipating slaves and children from laborious farm work and reducing the need for large families (overpopulation). They also allow food to be refrigerated and rapidly transported around the world, relieving famine and hunger. They allowed forests to replace horse paddocks around cities drowning in dung, provided lifesaving medicines and medical equipment, prostheses, spectacles, clothing and numerous modern comforts. Replacing them with biofuel [robs nature](#) and/or agriculture and increases [global food costs](#). Large [wind](#) and [solar](#) facilities and their long [transmission](#) lines can impact farming and food costs. They are not clean, green⁵⁷ or cheap⁵⁸ but this report devotes less than a page to risks associated with them before concluding that “the health effects of energy from non-fossil fuels are, overall, considerably lower than those of fossil fuels.” A rapid transition would result in the loss of billions of lives, pollute the planet and threaten biodiversity.⁵⁹

If the authors of this report really believed that net-zero emissions is imperative to avert a climate crisis, they would have promoted the [safest](#) and most reliable energy source with the fewest lifecycle emissions⁶⁰ and [environmental](#) impacts.⁶¹ Nuclear power, however, was mentioned only thrice and only negatively, in relation to problems associated with extraction, waste and fears. Why do they only promote “renewables” mostly made in China? And why are they so interested in “climate change finance-opportunity at COP29”? Are they seeking to save humanity or to commit a [disastrous](#) crime against it? Why?

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