

Cabot Institute for the Environment, University of Bristol, UK

Cite this as: *BMJ* 2022;378:o1940 http://dx.doi.org/10.1136/bmj.o1940 Published: 04 August 2022

Downplaying the catastrophic health impact of heatwaves costs lives

Dann M Mitchell, Y T Eunice Lo

The UK recently well and truly surpassed its daytime and night time highest temperature records. A previous national daytime record of 38.7°C, set in 2019, was broken when temperatures rose above 40°C in the UK for the first time on 19 July and reached a new high of 40.3°C in Lincolnshire. That night, the previous overnight record of 23.9°C (recorded in 1990) was also broken, with the temperature provisionally hitting 25.8°C in Surrey.

Heatwaves are often called "silent killers," and are one of the clearest examples of an environmental hazard that leads to adverse health outcomes.

Over the past two decades we have seen changes in individual heatwave characteristics that can be attributed to human induced climate change—and in the past five years we have even detected an increase in excess mortality from heatwaves attributable to human activity. Attribution analysis is complex and time consuming, but a provisional rapid fire analysis by the World Weather Attribution has suggested that this event was made at least 10 times more likely by human induced climate change, although that number can change quite a bit depending on how the event is defined. It is therefore extremely likely that more excess deaths have occurred in this heatwave than would have without climate change.

Typically, around 1000-2000 heatwave excess deaths occur during a UK summer, but extremely hot summers can see as many as 2500. An estimated 850 people lost their lives in England and Wales between 18 and 19 July, when the UK issued its first red warning for extreme heat since launching the warning system in 2021.

When heatwaves become unprecedented, cascading impacts start to be very relevant. A clear example of negative physical and mental health outcomes from this heatwave were the fast paced and widespread wildfires.

Wildfires per se are not uncommon in the UK. A high risk of dangerous fire exists in around 10% of summers, but we expect the risk to more than double if we miss the upper goal set out in the Paris Climate Agreement. This goal sets out the ambition to limit global average warming to 1.5°C above pre-industrial levels, and our planet is already at around 1.1°C above the baseline. Wildfires around London on 18 and 19 July meant that the capital's firefighters saw their busiest day since the second world war, and point toward areas of adaptation required to manage the effects of future climate change.

Well informed and targeted information and advice from the government and the media, before and during heatwaves, are critical to keeping the community protected, and in helping to hammer home the importance of implementing climate policies to limit future climate change.

Some recent media reporting has been excellent, alluding to the dangers of the heat and highlighting the role of climate change, but elsewhere misinformation, and denialism are rife. Some sections of the press downplayed, belittled, or attempted to counter the expert opinions of meteorologists and climate scientists, including launching personal attacks on them.

No one guite thought we would see the narrative of the satirical movie "Don't Look Up" played out in real life, but we did. A clip from the film, where an astronomer warns in a TV interview that a comet is hurtling towards that earth and will completely destroy it, and is told by the news anchor "to keep the bad news light," went viral, with similarities drawn with the real life coverage of the heatwave. In reality, one news presenter said meteorologists were "harbingers of doom" for stating that heatwaves lead to excess deaths. Meanwhile the editorial of a major UK newspaper said, "Listening to apocalyptic climate change pundits... you'd think Britain was about to spontaneously combust" on day one of the heatwave, then ran with the headline "Hottest UK day ever... nightmare of the wildfires" the following day, seemingly unaware of the contradiction. We even saw a large anti-climate lobby group implying that the "nightmare" wildfires were caused by people pushing a pro-climate action agenda.

More and more we see how effective social media influencers can be in these types of communications, with this heatwave being one of the clearest examples. As with the traditional media, we saw some excellent reporting and advice from some of the well known science based authors and broadcasters, but we also heard the voices of disinformation and scepticism amplified through enhanced visibility from non-scientific creators with many thousands of followers, for example through tagging on Twitter.

Downplaying, ignoring, or misreporting the catastrophic health impact of heatwaves costs lives. It costs lives at the time of the event, through giving the public an unrealistic view of the risk, and it costs lives in the longer term by hindering the climate change negotiation process.

Heatwaves are only part of the global burden of climate change on health, but events like the 2022 UK record breaker act as a stark reminder for why urgent emission reductions are necessary. We have options available to us, what we need now is the national and international collaborative spirit to bring them to bear.

Competing interests: None declared

Provenance and peer review: not commissioned; not externally peer reviewed.