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The kids aren't alright

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People are being affected by climate change around the globe today at around 1°C of warming above pre-industrial levels. Current policies towards climate mitigation would result in about twice as much warming over the next 80 years, roughly the lifetime of a today's newborn. Here we quantify the stronger climate change burden that will fall on younger generations by introducing a novel analysis framework that expresses impacts as a function of how they are experienced along the course of a person's life. Combining projections of population, temperature, and 15 impact models encompassing droughts, heatwaves, tropical cyclones, crop failure, floods, and wildfires, we show that, under current climate pledges, newborns in 2020 are projected to experience 2-13 times more extreme events during their life than a person born in 1960, with substantial variations across regions. Limiting warming to 1.5°C consistently reduces that burden, while still leaving younger generations with unavoidable impacts that are unmatched by the impacts experienced by older generations. Our results provide a quantified scientific basis to understand the position from which younger generations challenge the present shortfall of adequate climate action.

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