**Eat or heat: fuel poverty and childhood respiratory health**

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When people cannot afford to adequately heat their home, they are experiencing fuel poverty. The drivers of fuel poverty are socioeconomic: low household income; high fuel prices; and energy-inefficient homes. Fuel poverty hits households with children hardest, unsurprisingly, as this demographic is especially susceptible to socioeconomic difficulty. In 2019, 3.2 million households (13.4%) in England were fuel-poor; 40.3% of these included childreni. Lone-parent families have the highest rates (28% in 2019)[[1]](#endnote-1). When living costs are not met by income or benefits, the choice between necessities (“eat or heat”) is stark. Adequately sized accommodation, with sufficient bedrooms, is expensive and in high demand. It is a vicious cycle: the cheapest accommodation is poor quality and energy-inefficient, so families struggling the most get the least value for money on energy.

This Winter brought a perfect storm, just as families are spending further periods of enforced time at home. Extreme weather has been frequent and severe, bringing colder homes, and property damage. Home energy costs soared, reflecting increased global gas prices. To protect energy suppliers from folding, the UK government raised the “Energy Price Cap” (a national regulatory price limit). This financial hit to families is on the backdrop of economic recession, high inflation, and austerity. Temporary increases in Universal Credit, instigated during the pandemic, are being rescinded, rendering households £1,040 poorer per year.

Children in cold houses are at increased risk of asthma attacks, and respiratory infections including bronchiolitis[[2]](#endnote-2), in a year of disrupted viral epidemiology[[3]](#endnote-3), [[4]](#endnote-4). As the temperature drops, circulation of viruses increases (particularly in overcrowded homes), and immunity is impaired. Furthermore, to keep heat in, windows and doors stay closed, and subsequent poor ventilation causes damp, mould, and House Dust Mite proliferation, contributing to chronic and acute respiratory ill-health. Infants in the coldest houses expend calories trying not to be hypothermic and hypoglycaemic, rather than using energy for growth and organ development. Lung maturation takes a hit at a vulnerable stage, with risks of lifelong pulmonary function deficit.

The solution must be systemic. Current government schemes, including a £140 rebate from the Warm home discount[[5]](#endnote-5), and cold weather payments of £25 for each 7-day period below zero degrees Celsius[[6]](#endnote-6), are insufficient. Housing agencies, councils, landlords and health services must work to help families with children. The ultimate aim must be to end child poverty by reducing living costs, and ensuring families have sufficient income and housing rights; in the meantime, Universal Credit cuts must be halted. Healthcare services, from bedside to boardroom, must also address socioeconomic causes of illness. Health professionals must be educated, informed by meaningful research around respiratory impacts of cold housing. Consultations should reflect that substandard accommodation is a modifiable factor in child mortality[[7]](#endnote-7).

In the UK, the harms of fuel poverty to children remain unaddressed, because children are not considered a priority. Climate-emergency activists this year glued themselves to motorways to advocate for home insulation for environmental reasons – we have never fought this vociferously for warmer houses for children. Poverty kills children, and the substandard, cold housing in which they live is one reason for this.

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