

Exploring caregivers' experiences of managing environmental and modifiable behavioural asthma triggers in children and young people: a systematic literature review.

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Background

Asthma is the most common long-term condition affecting children and young people in the UK, with over 1.1 million affected¹. Minimising exposure to asthma triggers as part of a personalised asthma plan can help reduce symptoms and the risk of asthma attacks². Smoking, vaping, viral infection, seasonal and environmental factors are known triggers for asthma exacerbations². Several studies focus on caregiver knowledge coupled with a quantitative review on the uptake of actions to minimise exposure to asthma triggers. However, the experiences of caregivers in attempting to implement and maintain these changes remains underexplored. This systematic review aims to fill this gap by examining the real-world challenges and enablers as experienced by caregivers, drawing insights from existing literature to form a foundation for further research.

Aims & Objectives

To explore caregiver experience of mitigating or avoiding exposure to asthma triggers.

- ❖ What challenges are faced?
- ❖ What do caregivers believe constitutes an effective system for supporting ongoing mitigation or avoidance?
- ❖ Who are the key players in the system?

Methods

Searches conducted across CINAHL, MEDLINE, & Scopus.

- ❖ Articles in English published 1946 to July 2025.
- ❖ Search Terms for ASTHMA, TRIGGERS, CAREGIVERS, MINIMISING EXPOSURE AND RESEARCH TYPE (qualitative or mixed-methods).
- ❖ 18356 records identified, 10298 screened (duplicates removed), 206 full text articles assessed for eligibility 27 studies, 30 full text reports included in the review.

Results

Three themes complicate family management of asthma triggers.

Outside Sphere of Control

- ❖ Landlords: lack of action or from fear of eviction.
- ❖ Relatives and neighbours who smoke, don't clean and won't change behaviours.
- ❖ Feeling unable to challenge family caregivers' behaviours for fear of upset or, withdrawal of support.
- ❖ Cost of improvements, moving house or neighbourhood.
- ❖ No safe space for exercise or playing out.

Confusing or conflicting information

- ❖ Exercise risk vs benefits with changing environment/seasons pollen, heat, or cold.
- ❖ Usefulness of interventions e.g. removing all carpets and soft toys.
- ❖ Ineffective methods of reducing second-hand smoke exposure.
- ❖ Response to air quality alerts.
- ❖ Ventilation against mould, or home security?

Impact on Family life

- ❖ Adopting new behaviours, attitudes and regimes to reduce triggers.
- ❖ Always alert/on the lookout for triggers.
- ❖ Avoiding barbeques, holidays, parties due to triggers.
- ❖ Giving up pets.
- ❖ Disadvantages to family or child could outweigh any benefits.

Efforts to minimise asthma trigger exposure were experienced at all levels.

(Bronfenbrenner's Ecological Systems Model).



Discussion

- ❖ Caregiver experiences, preferences, and feedback provides invaluable insights that can inform policy decisions, and shape public health delivery models. Only through listening to caregivers can providers and policy makers identify gaps in support and take steps to effectively address them.
- ❖ Studies frequently focussed whether mitigation was or was not carried out. Challenges and facilitators to trigger avoidance were not explored from the caregivers' perspective. Where they were explored it was more often from the viewpoint of healthcare or social care workers or, hypothesised by the author.
- ❖ Many studies that did engage caregivers were excluded from the review as they relied on closed questions and Likert scales. As such, they did not report people's voice in a way that truly captured an understand of caregivers' concerns, needs, and experience of implementing measures to avoid or mitigate exposure to asthma triggers.
- ❖ Further research focusing on trigger avoidance looking from the caregiver perspective is central to creating a more 'joined up' system reflective of people's needs and preferences, supporting a collaborative approach to improving outcomes for children and young people with asthma.

References

1. Youth People's Health Partnership. Children, young people and families' experiences of chronic asthma management and care. [CYP-Families-Experiences-of-Asthma-Management-Engagement-Report.pdf](#) (accessed September 2025)
2. National Institute for Health and Care Excellence. 2024 Asthma: diagnosis, monitoring and chronic asthma management. [Asthma: diagnosis, monitoring and chronic asthma management \(BTS, NICE, SIGN\)](#) (accessed September 2025)