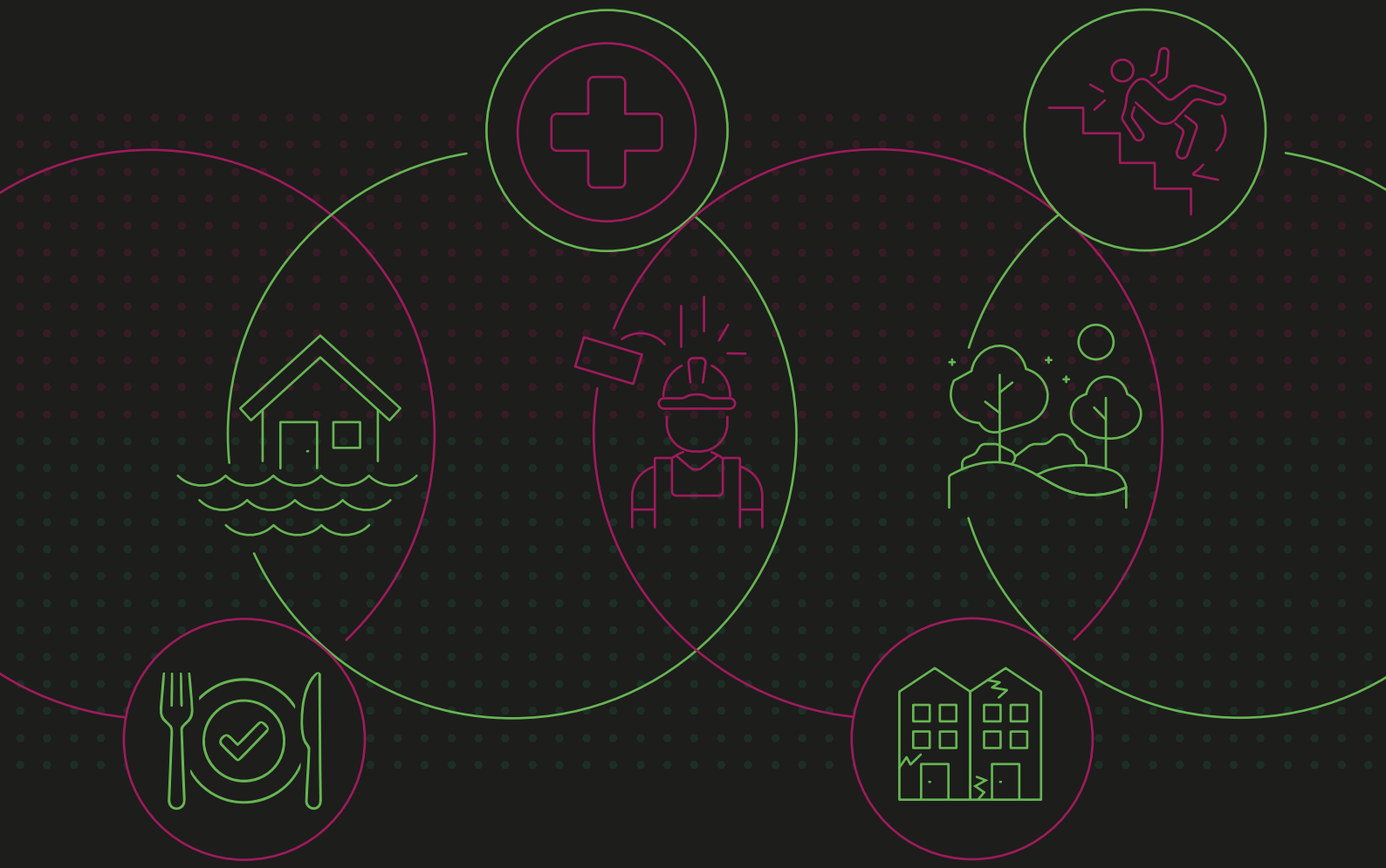
CIEH Perspective

Chartered Institute of Environmental Health

Public Health in Real Life



Introduction

Environmental health delivers public health in real life. It is part of the public health system that makes the conditions for good health possible. Environmental health operates wherever people live, work and gather together: translating national policy into practical outcomes that improve population health, reduce inequalities, enable business growth and support sustainable communities. Environmental health is a principle, not a function: professionals operate across industries, the private, public and third sectors, in the military and in academia and their flexibility means that organisational structures vary.

Environmental Health uniquely protects the public by combining proactive prevention with effective regulation. It reduces risks before they escalate and enforces the standards that keep communities safe, healthy and resilient. It prevents illness, injuries and hazards early, enforces standards and holds risk creators accountable, works across interconnected systems and provides cost-effective population level impact through early action. And if an outbreak does arise, then environmental health is a key part of the emergency resilience network ensuring an effective local response.

The evidence demonstrates that environmental health interventions are among the most cost effective, with community-level prevention costing significantly less than treatment-based approaches. Environmental and public health interventions deliver local priorities and can lead to savings and efficiencies within local authorities. They have been estimated to deliver additional years of healthy life at significantly lower cost than NHS services, reinforcing the importance of upstream action.

Across England, growing demand pressures on public services are strongly linked to environmental and preventable causes. There were over 26 million A&E attendances and 6.4 million emergency admissions in 2023/24[i], with around 1.3 million estimated to be avoidable[ii]. These figures illustrate the scale of opportunity for prevention-led approaches delivered through environmental health. This opportunity can be seized across industry and in the private and third sectors, in academia and in the armed forces, as well as within the public sector.

Within local government, environmental health can sit with public health, or within regulatory or other services. However, the central policy conclusion is consistent: wherever it is located, environmental health makes public health real. Local government reorganisation offers an opportunity to strengthen integration with public health, planning, housing, and economic development, aligning with Department of Health and Social Care (DHSC) priorities around prevention, place-based working and system integration. For senior decision makers, whether going through reorganisation or not, and whether within local government or not, environmental health must be recognised for the role it can play, properly resourced, and able to perform all its functions effectively.

Over
26 MILLION
A&E
attendances

6.4 MILLION
emergency
admissions in
2023/24

Around
1.3 MILLION
estimated to be
AVOIDABLE

Environmental Health as a public health delivery function

EH delivers against public health priorities through:

- infectious disease and outbreak control
- housing improvement
- food safety
- air quality
- workplace health
- community wellbeing
- environmental protection
- healthy place-making
- tackling health inequalities
- emergency preparedness and resilience

Environmental protection and sustainability

Environmental health plays a central role in delivering environmental protection as a key determinant of health. Poor environmental conditions continue to impose substantial health and economic costs across England.

Air pollution remains one of the most significant environmental health risks. Long-term exposure is associated with 30,000 deaths annually in the UK[iii] and contributes to significant NHS and social care costs. Despite reductions in emissions over recent decades, inequalities persist, with PM2.5 (fine particulate matter) concentrations around 8 % higher in the most deprived areas compared with the least deprived[iv].

Land contamination and waste management also contribute to environmental health risks. Fly-tipping incidents exceeded 1.2 million in England in 2024/25[v].

Environmental health practitioners operate across these domains, assessing risks, advising businesses, regulating activities and enforcing standards where necessary. This work ensures that environmental policy translates into real world improvements in health and place.

From a policy perspective, environmental protection illustrates the systems nature of public health. Air quality, housing, transport planning, energy use and economic activity are all interconnected. However, these relationships are managed structurally, environmental health provides the operational thread that enables them to work together.

Long-term

AIR POLLUTION

exposure contributes to

29,000

& 43,000

deaths annually in the UK

4.5 MILLION CHILDREN

are growing up in areas with unsafe levels of

PARTICULATE POLLUTION

Public protection and wellbeing

Environmental health is a core pillar of public protection, addressing risks that would otherwise lead to illness, injury and reduced wellbeing. The scale of these risks is significant.

Foodborne illness alone affects around 2.4 million people in the UK each year, resulting in more than 200,000 GP attendances, over 16,000 hospital admissions and approximately 180 deaths annually. The economic cost of foodborne disease is estimated at over £10 billion per year[vi].

Noise and environmental nuisance also have substantial health impacts, with risks including cardiovascular disease, sleep disturbance, poor performance and learning, mental health problems, stress and reduced quality of life. Noise complaints exceed 305,000 per year in England and Wales, reflecting widespread public concern[vii].

Around
130,000
HEALTHY LIFE YEARS
are estimated to be lost in the UK due to
NOISE POLLUTION

450,000
A&E attendances annually linked to FALLS

With a cost to the
NHS
ESTIMATED AT AROUND
£2 BILLION per year

Environmental health services also contribute to managing wider public protection issues, including antisocial behaviour, environmental hazards, animal health and community safety, such as the licensing of certain cosmetic treatments.

Environmental health interventions are distinctive in their focus on prevention. By identifying and addressing risks early, they reduce the likelihood of harm and the need for downstream interventions. This aligns strongly with DHSC priorities for prevention and a shift towards upstream investment. The Nuffield Public Health Intervention Ladder[viii] indicates that environmental health interventions can make significant contributions, such as in supporting the implementation of the Tobacco and Vapes Act.

In cases of a major outbreak, environmental health has a clear and specific role in emergency response, as part of community resilience.[ix]

For local authorities, the policy implication is clear: environmental health provides a practical mechanism to reduce demand across the system while improving outcomes. It also strengthens community resilience by creating safer and healthier environments.

Health, safety and wellbeing

Environmental health contributes directly to protecting health and safety across workplaces and public environments. Work-related ill health remains a major challenge, affecting around 1.9 million workers annually in Great Britain[x].

The economic cost of workplace injury and new cases of work-related ill health is estimated at over £22 billion per year, with more than 40 million working days lost. In addition, around 11,000 deaths each year are linked to occupational lung disease, and hundreds of thousands of cases of stress, depression and anxiety are associated with working conditions[xi].

Exposures to materials such as asbestos continue to represent significant risks. Building professionals may be exposed to it without their knowledge, for example in smaller business where there may not be full awareness of the presence of asbestos in a building. Managing these legacy risks requires ongoing regulatory oversight and technical expertise.

Environmental health practitioners play a key role through inspection, advice and enforcement. They ensure compliance with health and safety standards, support employers to manage risks and intervene where necessary to protect workers and the public.

The public health value of this work lies in prevention. By addressing risks at source, environmental health reduces both human harm and economic cost. Evidence consistently demonstrates that preventive interventions offer substantially better value than treatment.

In the context of local government reorganisation, there is a need to ensure that workplace health and safety functions remain integrated with wider public health objectives, particularly in relation to economic development, employment and reducing health inequalities.

5.5%

Work-related ill health affects around

1.9 MILLION WORKERS

annually in Great Britain

With an estimated cost of

OVER £22 BILLION

More than

40 MILLION LOST

working days

Housing and communities

Housing is recognised as a fundamental determinant of health, and environmental health has a critical role in addressing housing-related risks.

There are approximately 2.4 million poor-quality homes in England, with conditions such as damp, cold and structural hazards contributing to ill health . Poor housing is estimated to cost the NHS around £1 billion annually in first-year treatment costs alone[xiii].

Cold homes are a significant driver of excess winter mortality. Damp and mould are associated with respiratory conditions, including around 5,000 cases of asthma and 8,500 respiratory infections annually[xiv].

Fuel poverty further exacerbates these risks, affecting millions of households and creating additional health and social challenges. Children living in poor-quality housing experience worse health and educational outcomes, reinforcing intergenerational inequalities.

Environmental health practitioners are uniquely positioned to intervene, combining regulatory powers with technical expertise and local knowledge. They identify hazards, enforce standards and support improvements in housing conditions. They intervene during the planning process to ensure residents of new builds or conversions will not be adversely affected by poor air quality or contaminated land.

The economic case for intervention is strong. Investment in housing improvements not only improves health outcomes but delivers long term savings to the NHS and wider public sector. Evidence suggests that targeted remediation of the most serious hazards would generate significant returns over time.

Local government reorganisation presents an opportunity to strengthen integration between housing, public health and environmental health. Aligning these functions can support more effective, place-based interventions and deliver on priorities for addressing health inequalities and improving communities.

7.9%

There are approximately

2.4 MILLION POOR-QUALITY HOMES in England

Estimated to cost the NHS around £1 BILLION per year in first-year treatment costs

Food safety and integrity

6%

FOODBORNE ILLNESS
affects around
2.4 MILLION PEOPLE
in the UK each year

Food safety CHALLENGES include ALLERGEN RISKS leading to increased HOSPITAL ADMISSIONS particularly among CHILDREN

Food safety is a core environmental health function and a visible expression of public health in action. It underpins public confidence in food systems and protects population health.

Each year, foodborne illness affects around 2.4 million people in the UK, with significant health and economic consequences including working days lost. In addition to acute illness, food safety challenges include allergen risks, which have led to increasing hospital admissions, particularly among children.

Environmental health practitioners ensure that food businesses comply with hygiene and safety standards. Through inspection, advice and enforcement, in businesses, communities and also in ports, they support compliance and protect consumers, for example by providing assessments under the food hygiene rating scheme. They make it possible for people to trust the restaurants, pubs, takeaways and other hospitality outlets in their local area, and are key to thriving local economies. And they show businesses how making changes – for example, to the oils they use when frying food – can increase sales and reduce obesity at the same time. This kind of co-creation brings economic benefits right in the heart of communities.

Now they face new and emerging challenges: online purchase of food, and less visible businesses termed ‘dark kitchens.’ But the principles behind high standards and transparency for consumers will remain consistent.

Priorities must therefore include a focus on maintaining workforce capacity, modernising inspection approaches and ensuring that regulatory systems keep pace with changes in the food economy.

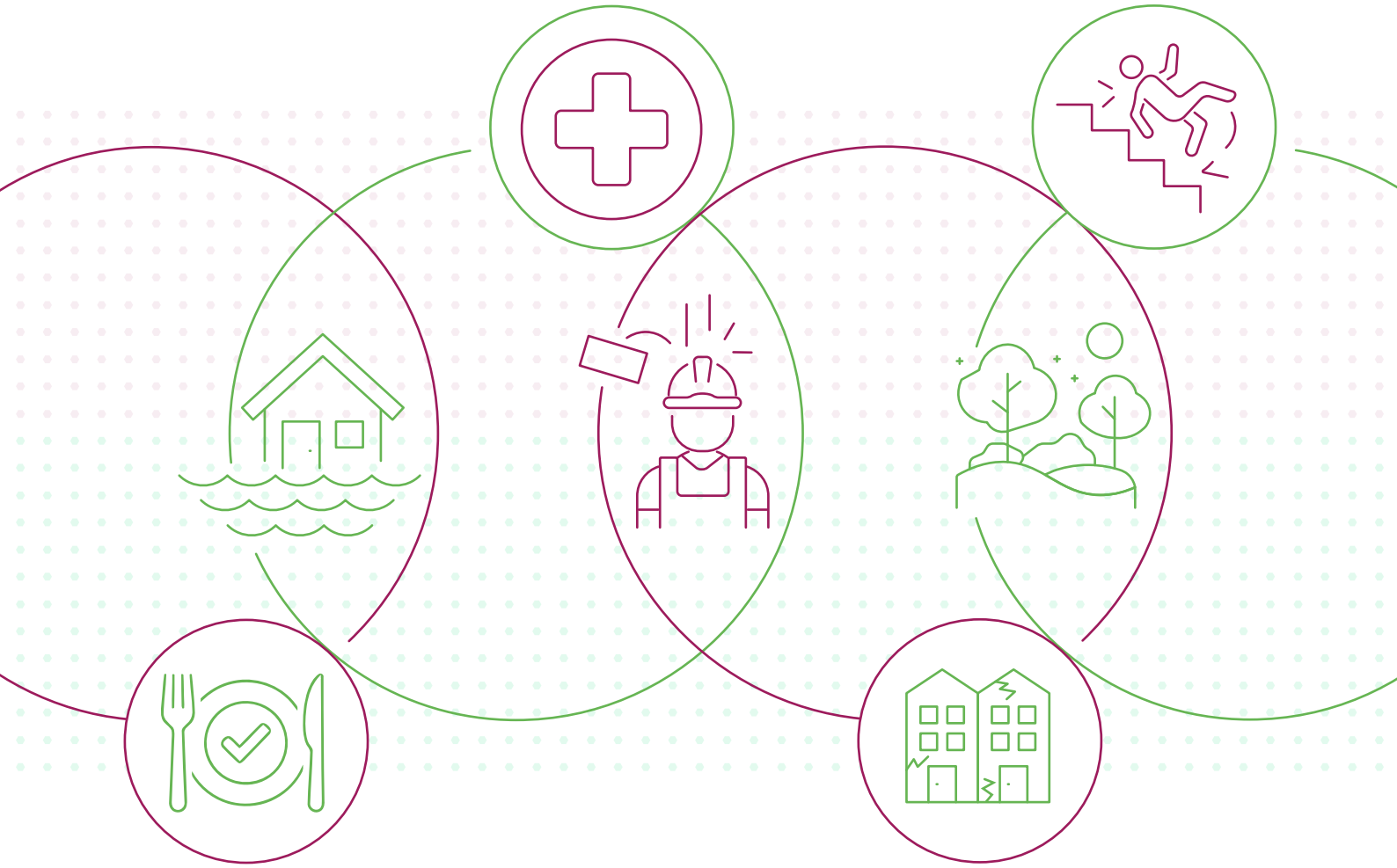
Conclusion

Environmental health is a core component of the public health system. It operates across environmental protection, public protection, workplace safety, housing and food systems, delivering prevention at scale, working closely with other disciplines such as planning.

The evidence demonstrates that environmental health interventions reduce illness, save lives, lower costs to the NHS and support economic productivity. They also play a critical role in addressing health inequalities and improving community resilience.

For local authorities undergoing reorganisation, environmental health offers a powerful, practical tool to deliver strategic objectives. We call upon system designers to maximise environmental health's ability to use both its public health perspective and statutory levers.

If environmental health is properly supported, it can act as a cornerstone of modern local government – making public health real for the communities it serves.




Broad skill-set
Resolving underlying causes – not just symptoms
Problem solvers
Risk management
Influencing and negotiation
Regulatory decision-making
Evidence-based practice
Environmental health practitioners
Inspection and investigation
Partnership development
Governance and compliance
Professional knowledge
Flexibility
One of the only areas of public health practice that has day-to-day engagement with citizens and businesses – often the most vulnerable in society or higher risk or rogue business activities

[i] NHS England, 2024. Hospital Accident & Emergency Activity, 2023-24. Available at: https://digital.nhs.uk/data-and-information/publications/statistical/hospital-accident--emergency-activity/2023-24

[ii] Department of Health and Social Care (DHSC), 2024. NHS plan to cut avoidable admissions to boost efforts to reduce waiting times – Press Release. Available at: https://www.england.nhs.uk/2024/05/nhs-plan-to-cut-avoidable-admissions-to-further-boost-efforts-to-reduce-waiting-times/

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[v] Department for Environment, Food & Rural Affairs, 2026. Fly-tipping statistics for England, 2024 to 2025. Available at Fly-tipping statistics for England, 2024 to 2025 - GOV.UK (accessed: 29 July 2026)

[vi] Food Standards Agency (FSA), 2020. The Foodborne Disease Estimates for the United Kingdom in 2018. Available at: https://www.food.gov.uk/print/pdf/node/3831

[vii] CIEH, 2026. Noise Complaint Data Briefing. Available at: noise-complaint-data-briefing-2026.pdf (accessed: 29 July 2026)

[viii] Nuffield Council on Bioethics, 2007. Public health: ethical issues. London. Nuffield Council on Bioethics

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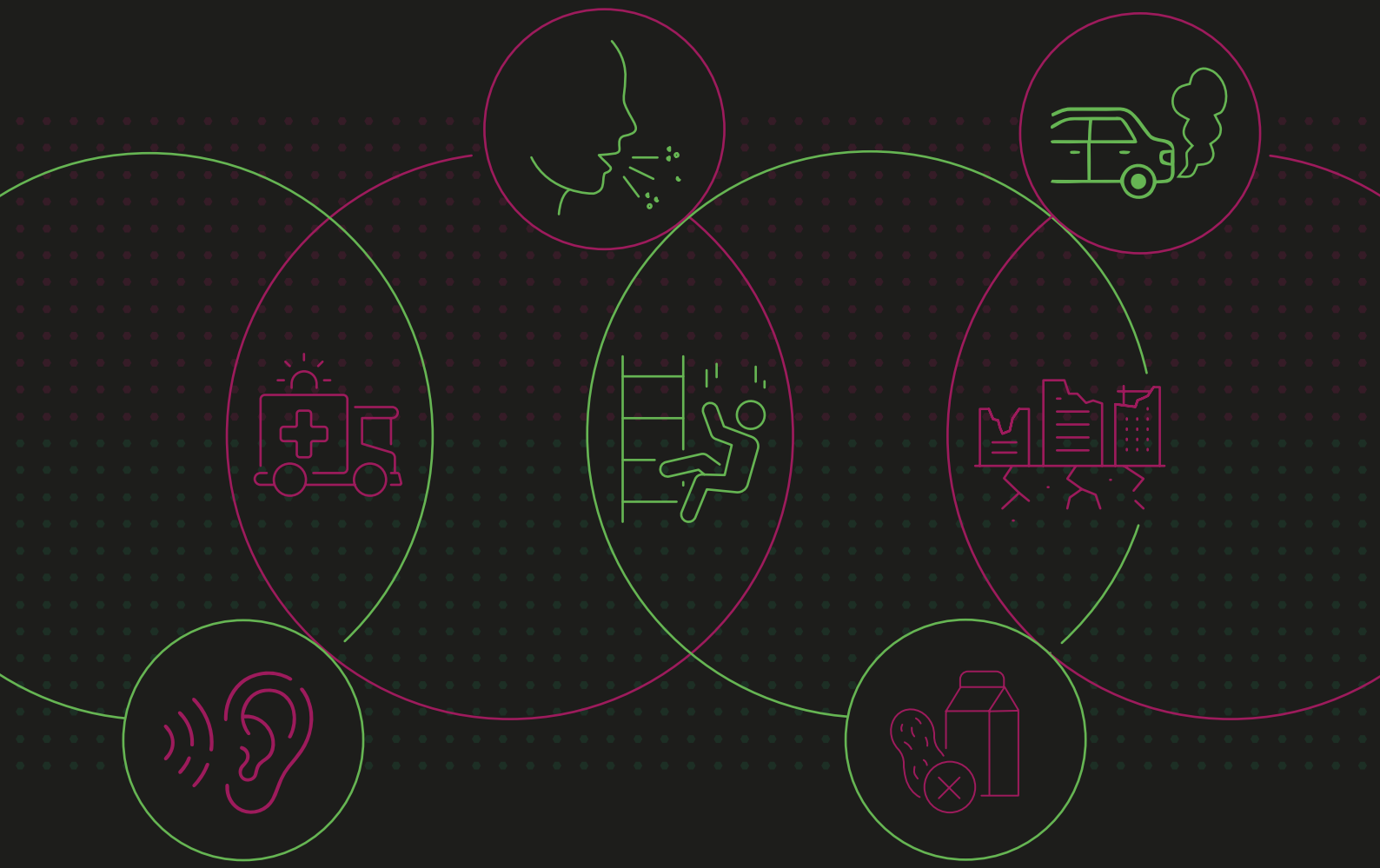
[x] Health and Safety Executive (HSE), 2025. Summary statistics booklet 2025. Available at: Health and safety statistics 2025 (accessed: 29 July 2026)

[xi] Ibid

[xii] Ministry of Housing, Communities and Local Government, 2026. English Housing Survey 2024-2025. Available at English Housing Survey 2024 to 2025: headline findings on housing quality and energy efficiency - GOV.UK (accessed: 29 July 2026)

[xiii] Building Research Establishment (BRE), 2023. The cost of ignoring poor housing. Available at: https://bregroup.com/documents/d/bre-group/bre_the_cost_of_ignoring_poor_housing_report_web

[xiv] Milczewska, K., 2023. Damp and Mould: understanding and addressing the health risks for rented housing providers, UK Health Security Agency (UKHSA). Available at: https://researchportal.ukhsa.gov.uk/ws/portalfiles/portal/65360158/Damp_and_Mould_understanding_and_addressing_the_health_risks_for_rented_housing_providers_SD.pdf#:~:text=We%20estimated%20that%20damp%20and%20mould%20in%20homes,of%20new%20cases%20of%20allergic%20rhinitis%20in%202019 (accessed: 29 July 2026)



Chartered Institute of Environmental Health

Chadwick Court, 15Hatfields, London SE1 8DJ
+44 (0)20 7827 5800
policy@cieh.org

cieh.org

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