Department for Transport

AECOM

Health Impact Analysis (HIAn) for the draft Heathrow Expansion National Policy Statement

Scoping Report

Department for Transport

16th June 2026

Quality information

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Revision History

Revision	Revision date	Details	Name	Position
V1.0	2/2/26	Initial version for client comment	E.H.	Associate Director
V2.0	12/2/26	Revised version to reflect client comments	E.H.	Associate Director
V3.0	30/3/26	Revised clean version to reflect consultee comments	E.H.	Associate Director
V4.0	16/6/26	Final comments and accessibility edits	E.H.	Associate Director

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1. Introduction

1.1. Aims of this report

1.1.1. The Department for Transport (DfT) has commissioned AECOM to prepare a suite of documents, including a Health Impact Analysis (HIAn), to support the preparation and publication of the Heathrow Expansion National Policy Statement (NPS).

1.1.2. The HIAn has been commissioned alongside an Appraisal of Sustainability (AoS) required under the Planning Act 2008, a Habitats Regulations Assessment (HRA) required under the Conservation of Habitats and Species Regulations 2017, and an Equalities Impact Assessment (EqIA). An HIAn is not a statutory requirement but represents best practice and was carried out for the current ANPS.

1.1.3. An HIAn provides a systematic analysis of how a plan, policy or proposal may impact health across the population, including vulnerable groups. The findings support decision-makers by providing an evidence-based understanding of potential health impacts.

1.1.4. An HIAn was previously produced by WSP to support the production of the adopted 2018 ANPS[1], and the updated HIAn will build upon the evidence and findings of that report to reflect the Heathrow Expansion NPS. The updated HIAn will reflect new evidence on potential environmental, social and economic impacts, policy developments and commitments, developments in the aviation sector, and further work on measures to manage or mitigate potential impacts on communities and the environment.

1.1.5. This HIAn Scoping Report sets out the proposed scope and approach of the HIAn, alongside the key evidence and contextual information on which the approach is based. It has been prepared in line with current industry guidance and best practice.

1.2. Background: the ANPS / HENPS

1.2.1. Airports play an important role in local and national economies by supporting employment, attracting businesses, and enabling the movement of people and goods. They also support quality of life by enabling leisure travel and social connectivity. However, there are also various negative environmental effects

[1] Department for Transport (2018) Health impact analysis for the proposed Airports National Policy Statement. Available at: https://www.gov.uk/government/publications/health-impact-analysis-for-the-proposed-airports-national-policy-statement [Accessed: 28/01/26].

associated with aviation which have consequences for human health and wellbeing[2].

1.2.2. National Policy Statements (NPS) are designated under the Planning Act 2008 to provide guidance for decision-makers on the application of Government policy when determining Development Consent for Nationally Significant Infrastructure Proposals (NSIPs). The ANPS, designated in 2018, provides a policy framework for additional airport capacity in the South East of England.

1.2.3. The 2018 ANPS sets out the Government's position that additional capacity is best met by a Northwest Runway at Heathrow Airport. It also outlines the requirements for Development Consent, including for associated development such as terminals, surface access and other infrastructure.

1.2.4. In January 2025, the Government confirmed support for a third runway at Heathrow Airport and invited proposals to be brought forward by Summer 2025. In October 2025, the Secretary of State for Transport launched the preparation of the draft Heathrow Expansion NPS, and in November, the Secretary of State for Transport announced that the Northwest Runway scheme promoted by Heathrow Airport Limited (HAL) would inform the draft Heathrow Expansion NPS.

1.2.5. The UK Government has set targets to make a decision on development consent for expanding Heathrow by 2029 and plan to deliver an operational third runway by 2035.

1.3. Structure of this report

1.3.1. This HIAn Scoping Report is structured as follows:

- Chapter 2: Legislation, Policy, and Strategy Review;
- Chapter 3: Evidence Review;
- Chapter 4: Health Impact Analysis Approach; and
- Chapter 5: Next Steps.

[2] Airports Commission (2015). *'Airports Commission: Final Report*'.

2. Legislation, Policy and Strategy Review

2.1. Legislation

2.1.1. There is no statutory requirement for HIAn or HIA. However, the following legislation provides relevant context for the HIAn.

Health and Social Care Act 2012 (as amended by Health and Care Act 2022)

2.1.2. The Health and Social Care Act 2012[3] embedded public health duties within local authorities which remain in force. It introduced a requirement for local authorities to lead on Joint Strategic Needs Assessments (JSNAs) and Joint Health and Wellbeing Strategies (JHWSs) through Health and Wellbeing Boards established by the Act, thus linking health evidence and strategy to broader local decision-making frameworks, including spatial planning. The Health and Care Act 2022[4] created Integrated Care Systems (ICSs) to promote greater collaboration between the NHS, local authorities, and other partners in improving health outcomes and addressing wider determinants of health.

Equality Act 2010

2.1.3. The Equality Act 2010[5] protects people from discrimination in the workplace and wider society, requiring equal treatment in access to employment and private and public services. The Act is relevant to the HIAn as it establishes the framework for considering effects on protected characteristic groups which may experience disproportionate health impacts from developments. The EqIA is being prepared alongside the HIAn to accompany the AoS. The EqIA assesses impacts on 'priority groups', defined as those with protected characteristics as per the Equality Act 2010. These priority groups help to inform the identification of vulnerable groups within the HIAn.

Planning Act 2008

2.1.4. The Planning Act 2008[6] established the consenting system for large-scale infrastructure projects and introduced NPSs as the main policy framework for deciding those projects. The Planning Act 2008 requires an AoS to be undertaken

[3] UK Parliament (2012). Health and Social Care Act 2012. Available at: Health and Social Care Act 2012 [Accessed: 29/01/26].
[4] UK Parliament (2022) Health and Care Act 2022. Available at: Health and Care Act 2022 [Accessed: 29/01/26].
[5] UK Parliament (2010). Equality Act 2010. Available at: Equality Act 2010 [Accessed: 27/01/26].
[6] UK Parliament (2008). Planning Act 2008. Available at: Planning Act 2008 [Accessed: 27/01/26].

before an NPS is designated to assess its environmental, social and economic effects and support sustainable development. The AoS being undertaken for the draft Heathrow Expansion NPS will therefore inform, and be informed by, the HIAn, as both are concerned with the potential impacts of airport expansion on human receptors and their health (holistically defined).

Local Government and Public Involvement in Health Act 2007

2.1.5. The Local Government and Public Involvement in Health Act 2007[7] strengthened the role of local authorities in improving population health and wellbeing and promoted partnership working and public involvement in decision-making. It also supported the use of evidence on local health needs and inequalities, including through JSNAs and JHWSs, and informed the later development of joint priorities and action through Health and Wellbeing Boards.

2.1.6. The Act created statutory health-related functions for local authorities relating to scrutiny of NHS services and patient and public involvement. These statutory functions underpin later reforms introduced through the Health and Social Care Act (as above), ensuring that health evidence, priorities, and partnership working are embedded within local decision-making.

The Environmental Assessment of Plans and Programmes Regulations 2004

2.1.7. The Environmental Assessment of Plans and Programmes Regulations 2004[8] transpose the Strategic Environmental Assessment (SEA) Directive (2001/42/EC) into UK law. The Regulations require an SEA to be undertaken where a plan or programme is likely to have significant environmental effects. This includes consideration of a wide range of environmental topics such as air quality, biodiversity, human health, soil, water, climatic factors, cultural heritage, and landscape.

2.1.8. Although the Regulations do not mandate a standalone Health Impact Assessment, they require that human health is assessed as part of the wider appraisal process.

[7] UK Government (2007) Local Government and Public Involvement in Health Act 2007. Available at: https://www.legislation.gov.uk/ukpga/2007/28/contents [Accessed: 10/02/26].
[8] UK Government (2004) The Environmental Assessment of Plans and Programmes Regulations 2004. Available at: https://www.legislation.gov.uk/uksi/2004/1633/contents [Accessed: 10/02/26].

2.2. National

National Planning Policy Framework (2024)

2.2.1. The National Planning Policy Framework (NPPF)[9], updated in December 2024, emphasises sustainable development and the role of planning in supporting a healthy and just society, including the economic, social, and environmental dimensions of sustainable development.

2.2.2. The following sections of the NPPF are of particular relevance to the HIAn:

- **Paragraph 96:** 'Planning policies and decisions should aim to achieve healthy, inclusive and safe places which: [...] c) enable and support healthy lives, through both promoting good health and preventing ill-health, especially where this would address identified local health and well-being needs and reduce health inequalities between the most and least deprived communities';
- **Paragraph 198:** 'Planning policies and decisions should also ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should: a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development – and avoid noise giving rise to significant adverse impacts on health and the quality of life'; and
- **Paragraph 223:** 'Planning policies should: [...] (f) set out criteria or requirements to ensure that permitted and proposed operations do not have unacceptable adverse impacts on […] human health, taking into account the cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality'.

Planning Practice Guidance for Healthy and safe communities (2022)

2.2.3. The NPPF is supported by a series of guidance in the form of the Planning Practice Guidance (PPG)[10]. The PPG for Healthy and safe communities[11] outlines the role of planning in promoting healthy communities. It sets out that the design and use of both the built and natural environments, including the provision of green infrastructure, are key determinants of health and wellbeing. Paragraph 001 of the guidance states:

"*Planning and health need to be considered together in two ways: in terms of creating environments that support and encourage healthy lifestyles, and in terms*

[9] Ministry of Housing, Communities & Local Government (2024). National Planning Policy Framework. Available at: National Planning Policy Framework [Accessed: 27/01/26].
[10] Ministry of Housing, Communities and Local Government (2024) Planning practice guidance. Available at: https://www.gov.uk/government/collections/planning-practice-guidance [Accessed: 10/02/26].
[11] Ministry of Housing, Communities and Local Government (2022) Guidance: Healthy and safe communities. Available at: https://www.gov.uk/guidance/health-and-wellbeing [Accessed: 10/02/26].

of identifying and securing the facilities needed for primary, secondary and tertiary care, and the wider health and care system (taking into account the changing needs of the population)".

2.2.4. Paragraph 005 of the guidance further notes that:

"It is helpful if the Director of Public Health is consulted on any planning applications (including at the pre-application stage) that are likely to have a significant impact on the health and wellbeing of the local population or particular groups within it. This would allow them to work together on any necessary mitigation measures. A health impact assessment is a useful tool to use where there are expected to be significant impacts.

Information gathered from this engagement will assist local planning authorities in considering whether the identified impact(s) could be addressed through planning conditions or obligations."

Flightpath to the future: a strategic framework for the aviation sector (2022)

2.2.5. 'Flightpath to the Future' (2022)[12] is the UK Government's strategic framework for the aviation sector, including recovery from COVID-19, sustainable growth, and economic and social outcomes. The strategy aims to balance economic growth, environmental responsibility, and social inclusion to ensure aviation contributes to the UK's prosperity while meeting health, climate, and equality commitments.

2.2.6. The following objectives are of relevance to this HIAn:

- **Objective 4 'Put the sector on course to achieve Jet Zero'** – sets out the role of the aviation industry in climate emissions and identifies commitments to tackling climate change and delivering net zero emissions by 2050. It recognises the local detrimental impacts of air quality emissions and noise from aviation;
- **Objective 5 'Capture the potential of new technology and its uses'** – outlines airspace modernisation initiatives aim to reduce noise and air pollution to deliver health and wellbeing benefits to communities near airports;
- **Objective 6 'Unlock local benefits and level up'** – identifies the role of aviation in boosting regional economies and supporting local employment through improved connectivity; and
- **Objective 7 'Unleash the potential of the next generation of aviation professionals'** – focuses on creating growth, jobs, and inward investment into communities through building talent pipelines, enhancing inclusion in career paths and supporting diversity through training and upskilling initiatives.

[12] Department for Transport (2022). Flightpath to the Future. Available at: Flightpath to the future

Jet Zero: Strategy for Net Zero by Aviation by 2050 (2022)

2.2.7. The Jet Zero Strategy (2022)[13] sets out the UK Government's plan for achieving net zero aviation by 2050, balancing environmental goals with economic growth. Policies of relevance to the HIAn include those promoting employment growth in the aviation industry and reducing greenhouse gas emissions.

2.3. Regional

The London Plan (2021)

2.3.1. The London Plan[14] was adopted with amendments in March 2021. The Plan includes strategic and planning policies to encourage equal life chances and recognises the inequalities existing within Greater London. This Plan aims to influence how major infrastructure projects address social, economic and environmental considerations, including health:

- **Employment, education and skills:** prioritises inclusive economic growth and education and skills development, requiring major projects to provide local employment opportunities and support training and apprenticeships, especially for underrepresented groups;
- **Health and wellbeing:** focuses on reducing adverse health impacts and health inequalities, considering the wider determinants of health and a systematic approach to improving mental and physical health. It seeks to improve air quality, noise reduction and green infrastructure; and
- **Equality and inclusion:** requires developments to address the needs of people with protected characteristics.

2.3.2. Policy T8 'Aviation' acknowledges airports as drivers of growth and highlights the need to protect public health, particularly for communities near airports, by addressing noise, air pollution, and associated health risks.

2.4. Local

2.4.1. The policy and strategy documents of the London Borough (LB) of Hillingdon (where Heathrow Airport is located), along with those of nearby local authorities (set out in paragraph 3.4.2) of potential relevance to health, will be reviewed as part of the HIAn. These documents include:

- Local Plans;

[13] Department for Transport (2022). Jet Zero Strategy: delivering net zero aviation by 2050. Available at: Jet Zero strategy: delivering net zero aviation by 2050 - GOV.UK

[14] Mayor of London (2021) The London Plan: The spatial development strategy for Greater London. Available at: https://www.london.gov.uk/sites/default/files/the_london_plan_2021.pdf [Accessed: 19/01/26].

- Joint Health and Wellbeing Strategies, Joint Strategic Needs Assessment (JSNA), integrated care board plans; and
- Economic Development Strategies.

3. Evidence Review

3.1. Introduction

3.1.1. This chapter sets out the information reviewed to inform this HIAn Scoping Report. It covers:

- Consultation and engagement;
- Literature and guidance review; and
- A baseline community profile.

3.2. Consultation and engagement

3.2.1. The DfT conducted national consultations on the draft ANPS and revised draft ANPS in 2017, allowing members of the public, organisations, and interested parties to comment on the documents. The consultation responses[15] include matters relevant to the determinants of health, particularly concerning noise, air quality, and carbon emissions.

3.2.2. The HIAn prepared for the 2018 ANPS reflected the inputs of a Health Impact Analysis Steering Group, which included representatives from Public Health England, the Department for Transport project team, and other relevant government departments. The Steering Group informed the HIAn scope and approach, provided technical expertise and helped to ensure the study was robust and proportionate. The updated HIAn will build upon the approach and findings of the HIAn prepared for the 2018 ANPS, while taking account of guidance, evidence and information which has come forward since 2018.

3.2.3. In preparation of this Scoping Report, consultation with the Office for Health Improvement and Disparities (OHID), part of the Department of Health and Social Care, was undertaken in January 2026. This discussion covered the context, evidence sources, and proposed approach to the HIAn including study area, methodology, health determinants, and vulnerable groups. Feedback from the OHID has been taken into account and incorporated into this Scoping Report.

3.2.4. Engagement with the UK Health Security Agency (UKHSA) was also conducted in March 2026, to inform the update to the HIAn, in advance of public consultation and parliamentary scrutiny of any draft Heathrow Expansion NPS and supporting documentation in the second half of 2026.

[15] OPM Group for the Department for Transport (2018) Consultation on revised draft Airports National Policy Statement. Summary report of consultation responses. Available at: https://assets.publishing.service.gov.uk/media/5b0fdacbed915d2cd7a16552/summary-of-responses-to-the-revised-draft-airports-nps-consultation-use-this-one.pdf [Accessed: 19/01/26].

3.3. Guidance and literature review

3.3.1. Guidance on Health Impact Assessment (HIA) which has come forward since 2018 is listed below.

3.3.2. The study accompanying the 2018 ANPS was amended from an HIA to a HIAn by WSP following discussion with the Health Impact Analysis Steering Group at the scoping stage. As set out in that document[16], an HIAn excludes the additional mitigations and recommendations stages of a HIA. This is to avoid cutting across the recommendations coming out of the AoS, as well as wider ongoing work to develop a mitigations package. In other respects, the guidance on HIAs listed below remains relevant.

3.3.3. The following guidance has been reviewed to inform HIAn scoping:

- International Association for Impact Assessment (IAIA) (2021) International Best Practice Principles: Health Impact Assessment Series 5[17];
- Public Health England (PHE) (2020) Health Impact Assessment in spatial planning: A guide for local authority public health and planning teams[18];
- Wales Health Impact Assessment Support Unit (WHIASU) (2021) Health Impact Assessment: A practical guide[19];
- Institute of Public Health (2021) Health Impact Assessment Guidance: A Manual[20];
- Institute of Public Health (2021) Health Impact Assessment Guidance: Technical Guidance[21];
- Institute of Public Health (2021) Health Impact Assessment Guidance: The Case for HIA[22];
- Public Health Scotland (2025) A guide to Health Impact Assessment[23];

[16] WSP for the DfT (2018) Airports National Policy Statement: health impact analysis, shortlisted schemes. Available at: 2018 HIAn [Accessed: 29/01/26]. See Section 2.4.
[17] IAIA (2021) International Best Practice Principles: Health Impact Assessment. Available at: International Best Practice Principles: Health Impact Assessment [Accessed: 27/01/26].
[18] PHE (2020) Health Impact Assessment in spatial planning. A guide for local authority public health and planning teams. Available at: Health Impact Assessment in spatial planning [Accessed: 27/01/26].
[19] WHIASU (2021) Health Impact Assessment: A practical guide. Available at: Health Impact Assessment: A practical guide [Accessed: 27/01/26].
[20] Institute of Public Health (2021) Health Impact Assessment Guidance: A Manual. Available at: A Manual https://instituteofpublichealth.org/hia-guidance[Accessed: 27/01/26].
[21] Institute of Public Health (2021) Health Impact Assessment Guidance: Technical Guidance. Available at: Technical Guidance [Accessed: 29/01/26].
[22] Institute of Public Health (2021) Health Impact Assessment Guidance: The Case for HIA. Available at: The Case for HIA [Accessed: 29/01/26].
[23] Public Health Scotland (2025) A guide to Health Impact Assessment. Available at: A guide to Health Impact Assessment [Accessed: 27/01/26].

- Institute of Environmental Management and Assessment (IEMA) (2022) Guide to: Effective Scoping of Human Health in Environmental Impact Assessment[24];
- IEMA (2022) Guide to: Determining Significance for Human Health in Environmental Impact Assessment[25]; and
- World Health Organisation (WHO) (2023) A place in the public health toolbox: Policy briefs 1 on health impact assessments and incorporating health into environmental assessments[26].

3.3.4. Since 2018, a number of airport expansion schemes have come forward through the consenting process (e.g. Gatwick Northern Runway and London Luton Airport Expansion). The impact assessments undertaken for those DCO applications have included investigation of the potential effects of airport expansion on health, and these have been reviewed in order to inform this Scoping Report.

3.3.5. Further review of the literature providing relevant evidence will be undertaken for the full HIAn.

3.4. Community profile

3.4.1. A profile of the local population and workforce has been compiled, using publicly available information, as a preliminary baseline to inform HIAn scoping.

3.4.2. The study area for the preliminary baseline takes in the following local authorities. It includes the local authorities which host and neighbour Heathrow, as well as others which are further afield. This reflects the potential geographical extent of potential impacts on health, include those relating to noise, air quality, and surface access, and is broadly consistent with the 2018 HIAn[27].

- Buckinghamshire[28];

[24] IEMA (2022) Guide to: Effective Scoping of Human Health in Environmental Impact Assessment. Available at: Effective Scoping of Human Health in Environmental Impact Assessment [Accessed: 27/01/26].
[25] IEMA (2022) Guide to: Determining Significance for Human Health in Environmental Impact Assessment. Available at: Determining Significance for Human Health in Environmental Impact Assessment [Accessed: 27/01/26].
[26] WHO (2023) Policy briefs on health impact assessments and incorporating health into environmental assessments. Available at: Policy briefs on health impact assessments [Accessed: 27/01/26].
[27] As noted in section 4.3.1, in the HIAn the study area will vary according to the population which is subject to potential health impacts in each case, and will reflect the study areas of the specific technical assessments which it draws upon.
[28] This study area updates that set out in the 2018 HIAn following local government reorganisation in 2020, when South Bucks District Council was abolished and incorporated into Buckinghamshire Council Unitary Authority (UA), alongside Aylesbury Vale, Chiltern and Wycombe. It should be noted that Buckinghamshire UA is a large local authority, including some communities located at a substantial distance from Heathrow Airport. This spatial expansion of the study area introduces additional populations with potentially different socio-demographic characteristics to those considered in the 2018 HIAn. Accordingly, the community profile data should be interpreted, and comparisons with the 2018 baseline made, with recognition of this expanded geographic scope.

- Ealing;
- Elmbridge;
- Hillingdon;
- Hounslow;
- Richmond upon Thames;
- Runnymede;
- Slough;
- Spelthorne;
- Wandsworth; and
- Windsor and Maidenhead.

3.4.3. This preliminary community profile presents baseline demographic, economic and health indicators for the study area. It first presents an average of the constituent local authorities and compares this with the national average. It secondly provides data for individual local authorities to illustrate inequalities within the study area and to reflect localised baseline conditions, given that some effects will vary geographically.

3.4.4. Full detail is set out in **Appendix A**, with a summary of findings presented below.

Population

3.4.5. According to the 2021 Census, the population of the study area is 2,678,853, increasing by 9% from 2,457,358 in 2011[29]. ONS subnational population projections, based on 2022 data, indicate that the study area population will rise a further 5% to 2,818,022 by 2029.

3.4.6. The study area has a relatively young population. 19.9% of the population of the study area is aged under 16, above the national average of 18.6%. Slough has the greatest proportion of younger residents (24.9%) in the study area, followed by Elmbridge (21.6%), Hillingdon (20.9%), and Hounslow (20.6%).

3.4.7. The proportion of the population of working age (16-64 years) is greater than the national average of (65.6% versus 63.0%, respectively). Wandsworth has the greatest proportion of working age residents, with 74.0% of the population, followed by Ealing (68.4%), Hounslow (67.6%), and Hillingdon (65.6%).

3.4.8. There is also a lower proportion of older people (65+ years) within the study area. Older people represent 14.5%, lower than the national average of 18.4%. The local authority with the greatest proportion of older people is Buckinghamshire at 18.7%, followed by Windsor and Maidenhead (18.5%), Spelthorne (18.0%), and Elmbridge (17.8%).

[29] ONS (2012) 2011 Census.

3.4.9. The study area population is 66.2% White, compared to 81.0% in England, with significant variation between the local authorities (notably 86.1% in Elmbridge and 36.0% in Slough). Asian ethnic groups represent 20.1% of the study area compared to 9.6% in England, ranging from 46.7% in Slough to 6.5% in Elmbridge.

3.4.10. The study area has a lower proportion of disabled people (12.6%) compared to the national average (17.3%). Runnymede has the greatest proportion of disabled residents disabled at 14.6%, and Slough the lowest at 11.3%.

Socio-economic factors

3.4.11. According to the 2021 Census, economic activity levels are higher than the national average. 63.5% of residents in the study area are economically active (excluding full-time students) compared to 58.6% across England as a whole.

3.4.12. The 2021 Census showed the unemployment rate to be higher than the national average (3.3% unemployed, greater than the national average of 2.9%) with variation in unemployment rates between the local authorities (Hounslow, Ealing, Slough and Hillington all have unemployment rates above 3.5%).

3.4.13. However, Department of Health & Social Care data[30] indicates that the study area has a lower proportion of long-term unemployment (0.43 people per 1,000 residents) compared to the national average (0.51 people per 1,000 residents). Elmbridge has the lowest proportion of long-term unemployed residents (0.20 residents per 1,000), closely followed by 0.24 residents in Windsor and Maidenhead. In comparison, Ealing has the highest proportion of long-term unemployed residents (0.88 residents), followed by Spelthorne (0.59 residents).

3.4.14. The 2025 English Indices of Deprivation indicate that the study area is most deprived in the living environment dimension, with an average rank[31] of 98 out of 296 local authorities, followed by the barriers to housing and services dimension with an average rank of 122. The study area is least deprived in terms of the health and disability dimension, with an average rank of 236th.

3.4.15. Elmbridge is the least deprived local authority in terms of overall deprivation, ranked 292nd, closely followed by Windsor and Maidenhead (285th), and Richmond upon Thames (282nd). In comparison, Ealing is the most deprived (45th), closely followed by Hounslow (49th).

[30] Department of Health & Social Care (2025) Fingertips: Local Authority Health Profiles. Available at: https://fingertips.phe.org.uk/profile/health-profiles

[31] The ‘average rank’ for the study area has been calculated by taking the mean of the deprivation ranks for each local authority within the study area.

3.4.16. In terms of health and disability deprivation, Windsor and Maidenhead is similarly the least deprived (293rd), closely followed by Richmond upon Thames (290th). In comparison, Ealing is the most deprived (177th), followed by Hillingdon (181st).

Health

3.4.17. In the 2021 Census, 54.4% of residents in the study area reported 'very good' health, greater than the national average of 48.5%. The proportion of the study area in 'very bad' health (0.8%) is lower than the national average (1.2%), with Ealing and Hounslow both having the highest proportion of residents in 'very bad' health (1.0%).

3.4.18. In the study area, 68.0% of adults are physically active, greater than the national average of 67.4%. However, Hillingdon, Slough, and Spelthorne have the lowest proportion of physically active adults (56.2%, 57.1%, and 58.1% respectively).

3.4.19. The proportion of the population reporting depression or anxiety in the study area is 11.3%, lower than the national average of 13.7%. Runnymede (13.1%) has the greatest proportion of patients reporting depression or anxiety.

3.4.20. In the study area, 6.9% of live babies have a low birth weight, slightly greater than the national average of 6.8%. Both children in reception and year 6 in the study area have a lower proportion of obesity (8.2% and 32.5% respectively) compared to the national average (9.8% and 36.2% respectively). However, there is again variation between local authorities.

3.4.21. The mortality and premature mortality rates for the population in the study area are better than the national average of 100. However, cardiovascular disease mortality rate in those under 75 is higher than the national average in Slough and Ealing (135.3 and 101.9 respectively). Slough, Runnymede, and Spelthorne also have a greater mortality rate from respiratory disease above the national average (118.6, 104.0, and 102.1 respectively).

4. Health Impact Analysis Approach

4.1. Introduction

4.1.1. This chapter sets out the proposed approach and scope of the HIAn, including:

- Overarching approach;
- Study area;
- Health determinants scoped in, and criteria for determining the magnitude of health impacts;
- Vulnerable sub-groups, and criteria for determining their sensitivity to change;
- Methodology for appraising the significance of impacts; and
- Cumulative effects.

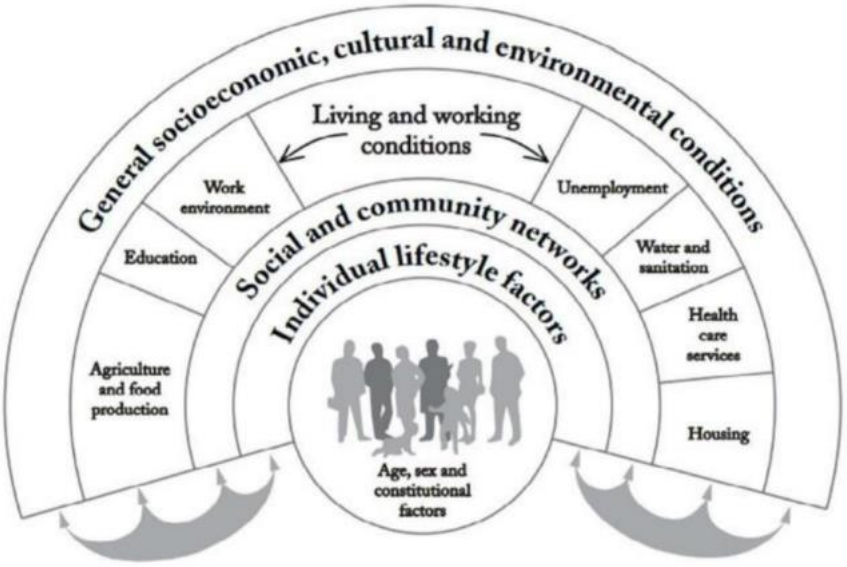
4.2. Overarching approach

4.2.1. This HIAn defines health as encompassing both physical and mental health.[32] The health of individuals is determined by a range of individual constitutional and behavioural factors (or 'determinants'), as well as broader environmental, social and economic factors. Some factors are direct and obvious, others are indirect.

4.2.2. Dahlgreen and Whitehead's model of the main determinants of health illustrates the breadth of possible influences on health, as shown in Plate 1. At the centre of the illustration are factors that are largely fixed, including individual age, sex, constitutional and genetic factors. Outside of this are factors generally described as the wider or broader determinants of health. The model emphasises interactions between the layers. Moving outwards from the centre, individual lifestyle choices are embedded in social norms and community networks, and in living and working conditions, which in turn are shaped by and related to the wider socioeconomic and cultural environment.

[32] The terms 'quality of life' and 'wellbeing' will be considered as equivalent to rather than different to 'health' as holistically defined here.

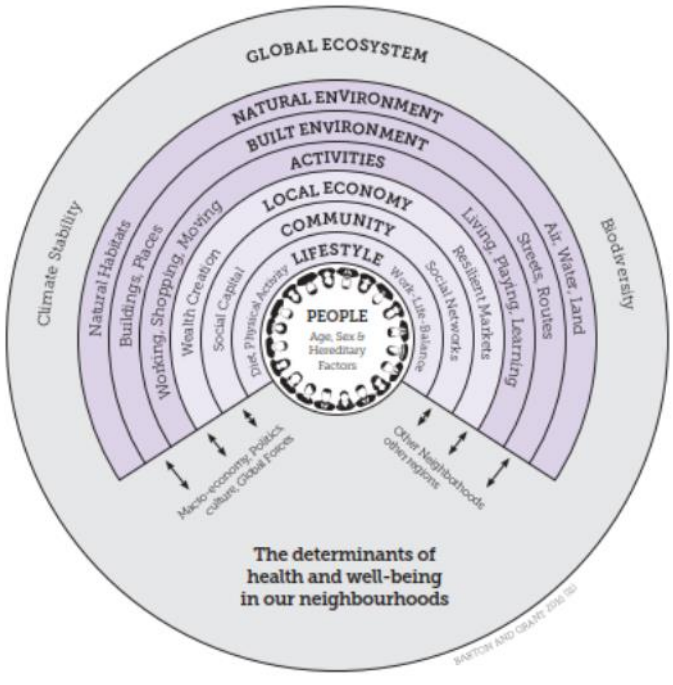
Plate 1: Determinants of health



Source: Dahlgreen and Whitehead (1993)[33]

4.2.3. Plate 2 illustrates how elements of the built environment and communities influence health at a local scale.

Plate 2: Determinants of health in neighbourhoods



Source: Barton and Grant (2006)[34]

[33] Dahlgreen, G. and Whitehead, M. (1993) Policies and strategies to promote social equity in health. Background document to World Health Organisation – Strategy for Europe. Institute for Future Studies.
[34] Barton, H. and Grant, M. (2006) A health map for the local human habitat. The Journal of the Royal Society for the Promotion of Health pp. 252-253.

4.2.4. The range of personal, social, economic, and environmental factors that influence health status are known as health determinants and include the physical environment, income levels, employment, education, community support, and housing. The expansion of Heathrow Airport has the potential to give rise to changes in health status by influencing these health determinants. Changes can affect the health of receptors, identified as the 'general population' and 'vulnerable groups'. The latter refers to groups who may have a higher sensitivity to these changes in health status, by virtue of characteristics such as age (for example older people or children), ethnicity, socio-economic factors, disability, sex, or gender.

4.3. Study Area

4.3.1. The HIAn will consider numerous relevant health determinants and impacts, and the study area for the analysis of each will vary according to the population subject to potential health impacts. The HIAn will reflect the study areas for the specific technical assessments it draws upon, such as noise and air quality. The baseline information presented within the HIAn will reflect the geography of the potential health impacts on the relevant population, as far as possible given the availability of data and proportionate to this strategic study.

4.3.2. To establish a preliminary community baseline for HIAn scoping, a study area has been established which reflects the extent of the key health impacts of the expansion of Heathrow Airport. This study area encompasses 11 local authorities, as set out in paragraph 3.4.2.

4.4. Health Determinants and Impacts

4.4.1. The full HIAn will provide an analysis of the potential health impacts on human receptors during the pre-construction, construction, and operational phases of the Northwest Runway at Heathrow Airport. The decommissioning phase is not considered in this HIAn, as the potential for airport decommissioning is unknown.

4.4.2. Table 1 sets out the health determinants which are scoped into the HIAn.

Table 1: Summary of health determinants scoped into the HIAn

Social	Economic	Environmental
Access to housing	Employment and income	Air quality
Access to social infrastructure (e.g. healthcare, education, and community facilities)	Education, skills, and training opportunities	Noise
Access to open space and active travel opportunities		Landscape and townscape
Access to transport (especially public transport)		Climate change mitigation and adaptation
Insecurity, and perceptions of risk		Soil quality
Community identity and cohesion		Water quality

4.4.3. Health determinants such as diet and nutrition, community safety, radiation, and biodiversity have been scoped out of the HIAn. These health determinants are considered to be neutral in effect or insignificant during the pre-construction, construction, and operational phases in the context of the expansion of Heathrow Airport.

4.4.4. A summary of the proposed scope of the HIAn in each phase is set out in Table 2, expanding on Table 1. The potential health impacts associated with each determinant are described.

Table 2: HIAn assessment scope

Health determinant	Impact Source	Potential health impact	Phase		
			Pre-construction	Construction	Operation
Access to housing	Direct effects (e.g. demolition/displacement) and indirect effects (e.g. increased demand for homes associated with the temporary construction-phase workforce) on access to housing. May include changes in housing availability, affordability, tenure mix, and quality.	Access to adequate, affordable housing and living conditions is fundamental to physical and mental health. Disruption may contribute to stress and anxiety and reduced wellbeing.	Y	Y	Y
Access to social infrastructure (e.g. healthcare, education, and community facilities)	Direct impacts on access to social infrastructure via land-take and severance. Indirect impacts due to increased demand for services due to population changes associated with construction (e.g. temporary construction-phase workforce) and operation.	Social infrastructure includes services which directly meet health and care needs, as well as facilities such as schools and community centres which underpin healthy, sustainable communities. Increased pressure on social infrastructure may reduce accessibility and service quality, contributing to stress and adverse health outcomes.	N	Y	Y
Access to open space and active travel opportunities	Potential loss, severance, or reduced access to open space and active travel resources directly via land-take and severance, and indirectly due to	Open spaces and active travel opportunities promote physical, outdoor activity and therefore have multi-faceted wellbeing benefits. Reduced access to or loss of recreational areas and	N	Y	Y

Health determinant	Impact Source	Potential health impact	Phase		
			Pre-construction	Construction	Operation
	increased demand due to population changes.	active travel resources may impact physical and mental health in numerous ways, including reduced social interaction.			
Access to transport (especially public transport)	Changes to transport networks, including road closures, diversions, increased congestion, and altered public transport provision.	Transport disruption may affect access to services, contributing to physical and mental health effects such as stress.	N	Y	Y
Insecurity, and perceptions of risk	Uncertainty and anticipation of adverse impacts associated with the airport expansion, including perceived risks and hazards.	Increased anxiety and adverse mental health and wellbeing arising from uncertainty and perceived risks amongst local people.	Y	Y	Y
Community identity and cohesion	Displacement, relocation, and changes in community composition.	Loss of social networks, belonging and stability, with potential adverse effects social cohesion and mental health.	Y	Y	Y
Employment and income	Creation of direct and indirect employment and income opportunities. Potential disruption to existing businesses.	Employment and income are key determinants of physical and mental health. Economically active members of the population, including local business owners, employees and those looking for work, have potential to experience benefits	N	Y	Y

Health determinant	Impact Source	Potential health impact	Phase		
			Pre-construction	Construction	Operation
		and disbenefits from the airport expansion.			
Education, skills, and training opportunities	Creation of direct and indirect education, skills and training opportunities. Potential disruption to existing opportunities.	Education, skills and training are key determinants of physical and mental health. Potential for those seeking education, skills, and training opportunities to experience benefits and disbenefits from the airport expansion.	N	Y	Y
Air quality	Air quality effects from construction activities, construction traffic, aircraft operations, and associated operational traffic.	Potential direct and indirect effects on physical health including respiratory and cardiovascular impacts.	N	Y	Y
Noise	Noise from construction activities, construction traffic, aircraft operations, and associated operational traffic.	Potential direct and indirect effects on health including on sleep, annoyance, mental health and wellbeing, cognitive performance, and cardiovascular stress.	N	Y	Y
Landscape and townscape	Changes to the landscape and townscape, impacting visual amenity.	Potential mental health impacts relating to loss of visual amenity, change in place identity and character.	N	Y	Y
Climate change	Changes in greenhouse gas emissions from construction activities, airport operations	Potential long-term health impacts associated with climate	N	Y	Y

Health determinant	Impact Source	Potential health impact	Phase		
			Pre-construction	Construction	Operation
mitigation and adaptation	including aircraft movements, and associated construction and operation traffic.	change and changes in environmental exposures.			
Soil quality	Soil disturbance, loss, or contamination due to construction and operation activities	Potential indirect physical health effects associated with contaminated soils (e.g. contact) and secondary pathways such as dust generation or impacts on food production.	N	Y	Y
Water quality	Deterioration in surface water or groundwater quality arising from construction activities (e.g. accidental spills), and from increased surface water run off during operation as a result of reduced ground permeability.	Potential indirect physical health effects associated with exposure to contaminated water and ecological degradation affecting community wellbeing.	N	Y	Y

4.4.5. The HIAn will consider the size of the effect on human receptors in the context of the study area, termed the magnitude of impact. Magnitude of impact is informed by duration, population exposure, frequency, severity, the proportion of the population affected, and reversibility or permanence, as set out in Table 3.

Table 3: HIAn magnitude of impact criteria

Magnitude of impact	Description
High	An impact that is large in scale or a population has high exposure to; long-term in duration; continuous in frequency; its severity is predominantly related to mortality or changes in morbidity (physical or mental health) for very severe illness/injury outcomes; where the majority of a population is affected; that results in a permanent change; and/or has substantial service quality implications.
Medium	An impact that is moderate in scale or that a population has low exposure to; has a medium-term duration; is frequent; its severity is predominantly related to moderate changes in morbidity or major change in quality-of-life; that affects a large majority of the population; can be gradually reversed; and/or has small service quality implications.
Low	An impact that is small in scale or a population has very low exposure to; is short-term in duration; due to occasional events; its severity predominantly relates to a minor change in morbidity or moderate change in quality-of-life; that affects a small minority of the population; can be rapidly reversed; and/or has slight service quality implications.
Very low	An impact that is negligible in scale or a population has negligible exposure to; is very short-term in duration; its severity predominantly relates to a minor change in quality-of-life; that affects very few people; that can be immediately reversed once the activity is completed; and/or that has no service quality implication.

Source: IEMA (2022) Guide to: Determining Significance for Human Health in Environmental Impact Assessment.

4.5. Sensitive Sub-groups

4.5.1. Health inequalities are present within populations and are defined by the WHO as: "*differences in health status or in the distribution of health determinants between different population groups. For example, differences in mobility between elderly people and younger populations or differences in mortality rates between people from different social classes*"[35].

[35] World Health Organisation (WHO) (2018) Health inequalities and their causes. Available at: https://www.who.int/news-room/facts-in-pictures/detail/health-inequities-and-their-causes [Accessed: 28/07/25].

4.5.2. The HIAn will consider potential impacts of the expansion of Heathrow Airport on the health of the general population and also on the health of population sub-groups which might be less able to respond to, and therefore more sensitive or vulnerable to, change.

4.5.3. Evidence which will be used to identify sensitive population sub-groups in the context of each health determinant includes:

- Baseline data on the demographic and health characteristics of the affected community;
- Literature review of health impacts of airport projects;
- Vulnerable groups identified in the 2018 HIAn report;
- Priority groups identified in the EqIA; and
- Consultation and engagement (with the Department of Health and Social Care, as set out in Section 3.2).

4.5.4. Based on initial research, the following sub-groups are considered to have the potential to experience greater health impacts as a result of the expansion of Heathrow Airport:

- Children (aged 15 and under) and younger people (aged 16-24);
- Older people (aged 65 and over);
- Women (pregnancy and maternity);
- Economically inactive or unemployed people;
- Shift workers;
- Faith and belief groups;
- Minority ethnic groups;
- People on low-incomes;
- Disabled people;
- People with poor health; and
- People with poor access to services, facilities, and amenities.

4.5.5. Table 4 identifies the sensitivity criteria that will be used to inform the analysis. These are based on IEMA guidance (2022). The HIAn will adopt a qualitative approach in order to categorise the sensitivity of human receptors, including the general population and potentially vulnerable sub-groups, as high, medium, low, or very low sensitivity.

Table 4: HIAn sensitivity criteria

Sensitivity	Description
High	Population or sub-populations who experience high levels of deprivation; are reliant on shared resources; within which there are wide inequalities between the most and the least healthy; whose outlook is predominantly anxiety or concern; who are prevented from undertaking daily activities; dependents; people with very poor health status; and/or people with a very low capacity to adapt.
Medium	Population or sub-populations who experience moderate levels of deprivation; have few alternatives to shared resources; experience widening inequalities between the most and the least healthy; whose outlook is predominantly uncertainty with some concern; who are highly limited from undertaking daily activities; who provide or require a lot of care; those with fair health status; and/or people with a limited capacity to adapt.
Low	Population or sub-populations who experience low levels of deprivation; have many alternatives to shared resources; experience narrowing inequalities between the most and least healthy; whose outlook is predominantly ambivalence with some concern; those who are slightly limited from undertaking daily activities; those who provide or require some care; those with fair health status; and/or people with a high capacity to adapt.
Very low	Populations or sub-populations who experience very low levels of deprivation; rely on no shared resources; whose outlook is predominantly support with some concern; people who are not limited from undertaking daily activities; people who are independent (not a carer or dependant); people with good health status; and/or people with a very high capacity to adapt.

Source: IEMA (2022) Guide to: Determining Significance for Human Health in Environmental Impact Assessment.

4.6. Methodology for appraisal of impacts

4.6.1. The HIAn will categorise the potential health effects associated with the expansion of Heathrow Airport in line with the criteria set out in Table 5 below, which are informed by IEMA (2022) guidance[36].

4.6.2. Significance of effect is determined based on the intersection of sensitivity and magnitude of impact. Where two options are shown (e.g. Minor/Negligible),

[36] IEMA (2022) Guide to: Determining Significance for Human Health in Environmental Impact Assessment. Available at: https://www.iema.net/media/yljb2nbs/iema-eia-guide-to-determining-significance-for-human-health-nov-2022.pdf [Accessed: 27/01/26].

professional judgement will be used to determine which option is most appropriate. The potential effect will be described as either 'beneficial' or 'adverse'.

Table 5: Significance of effect criteria

Magnitude of impact	Sensitivity			
	High	**Medium**	**Low**	**Very low**
High	Major	Major / Moderate	Moderate / Minor	Minor / Negligible
Medium	Major / Moderate	Moderate	Minor	Minor / Negligible
Low	Moderate / Minor	Minor	Minor	Negligible
Very low	Minor / Negligible	Minor / Negligible	Negligible	Negligible

4.6.3. The duration of impact will be identified for each effect:

- Short-term: 0-5 years;
- Medium-term: 5-10 years; and
- Long-term: 10+ years.

4.6.4. As noted in Section 2.4 of the 2018 HIAn[37], this HIAn does not include additional mitigation or recommendations to avoid inconsistency with the AoS, which is the primary vehicle for mitigation and recommendations.

4.7. Cumulative Effects

4.7.1. The full HIAn will provide a qualitative assessment of intra-project and inter-project cumulative effects.

4.7.2. Intra-project cumulative effects may arise where multiple effects, which individually may be not significant, combine to give rise to a significant effect. For example, this could happen during construction, if a receptor is subjected to noise, air quality, and visual impacts associated with the expansion of Heathrow Airport. The full HIAn will consider these intra-project cumulative health effects.

4.7.3. Inter-project cumulative effects may result from the combined influence of the draft Heathrow Expansion NPS and other policies, plans, programmes, and development proposals. A full review of plans and projects which have the potential to interact with the draft Heathrow Expansion NPS and lead to cumulative, synergistic and

[37] WSP for the DfT (2018) Airports National Policy Statement: health impact analysis, shortlisted schemes. Available at: 2018 HIAn [Accessed: 29/01/26].

indirect effects will therefore be undertaken. This includes, where relevant, other development proposals that may interact with the plan spatially or temporally.

4.7.4. The HIAn will draw on the analysis contained within relevant technical assessments (e.g. noise and air quality) as well as the AoS to identify potential cumulative effects for health.

4.8. Assumptions and Limitations

4.8.1. The HIAn will be high-level, reflecting a proportionate approach to updating the 2018 HIAn. The HIAn will be based on the draft Heathrow Expansion NPS which is published for consultation, rather than on detailed plans and design information for the Heathrow expansion scheme. While DfT will provide some up-to-date analysis of potential effects (e.g. associated with noise, air quality and economic activity), it is not within the scope of the NPS review to undertake detailed impact assessment work and so the HIAn will largely be based on pre-existing publicly available information, such as that produced by the Airports Commission.

4.8.2. The analysis of health effects will be undertaken against a baseline of the population within the study area (which will vary depending on the determinant or impact being considered), as far as practicable within the limitations of the data and the scope of a high level study. Different datasets are available at different geographical levels. They are also subject to time lags between collection and publication, and baseline conditions may be subject to change over time which may influence the findings of the analysis. All baseline information reflects the most recent available data at the time of writing.

4.8.3. The analysis of likely health effects will be informed by professional judgement, drawing on relevant guidance, literature, and consultation and engagement, as described in Chapter 3.

4.8.4. Analysis of health effects during the pre-construction, construction, and operation phases will be informed by the findings of newly commissioned DfT analysis (see above), pre-existing information and the relevant health determinants' AoS topic chapters. Assumptions and limitations identified within those information sources are also applicable to this HIAn and will be clearly stated as far as is possible.

Appendix A

A local community profile has been compiled below, using publicly available information, to set out a preliminary baseline to inform HIAn scoping. It outlines population characteristics, socio-economic factors, and health indicators within the local authorities whose populations are likely to experience health effects associated with the expansion of Heathrow Airport. Headline findings are summarised in section 3.4, with full details set out below.

The study area takes in the following local authorities. It includes the local authorities which host and neighbour Heathrow, as well as others which are further afield:

- Hillingdon;
- Hounslow;
- Ealing;
- Slough;
- Spelthorne;
- Buckinghamshire[38];
- Elmbridge;
- Richmond upon Thames;
- Runnymede;
- Wandsworth; and
- Windsor and Maidenhead.

This community profile first presents baseline data for the study area using an average of the local authorities and compares this with the national average. It then presents data for individual local authorities to illustrate inequalities and variations within the Study Area.

Data for the community profile baseline has been obtained from the following sources and the most recent publicly available data has been used:

- Office for National Statistics (ONS) (2022) 2021 Census[39];

[38] This updates the study area set out in 2018 by WSP as South Bucks District Council was abolished and its functions transferred to Buckinghamshire Council Unitary Authority in 2020, combining the four former districts of Aylesbury Vale, Chiltern, South Bucks, and Wycombe.
[39] ONS (2022) 2021 Census. Available at: https://www.nomisweb.co.uk/sources/census_2021 [Accessed: 27/01/26].

- ONS (2012) 2011 Census[40];
- Department for Levelling Up, Housing and Communities (2025) English Indices of Deprivation[41]; and
- Department of Health & Social Care Fingertips Local Authority Health Profiles[42,43].

A full review of data, including that contained with Joint Strategic Needs Assessments, will be undertaken for the HIAn.

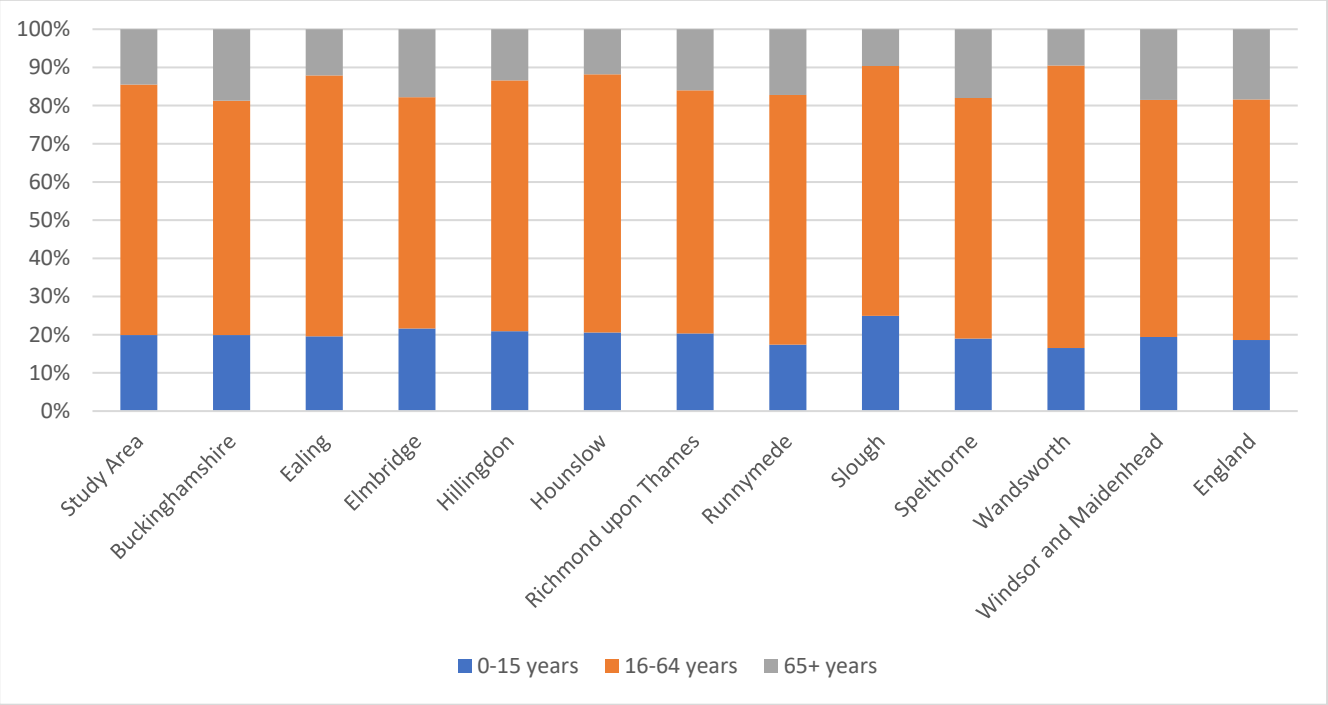
Population

According to the 2021 Census, the population of the study area is 2,678,853. Buckinghamshire accounts for the largest share of this (20.6%), and Runnymede the smallest (3.3%).

As shown in **Plate 3**, 19.9% of the population of the study area is aged under 16, above the national average of 18.6%. The working population (16-64 years) comprises 65.6% of the study area, greater than the national average of 63.0%. In comparison, older people (65+ years) represent 14.5%, lower than the national average of 18.4%. Slough has the greatest proportion of younger residents (24.9%) in the study area, followed by Elmbridge (21.6%), Hillingdon (20.9%), and Hounslow (20.6%). Wandsworth has the greatest proportion of working age residents, with 74.0% of the population, followed by Ealing (68.4%), Hounslow (67.6%), and Hillingdon (65.6%). The local authority with the greatest proportion of older people is Buckinghamshire at 18.7%, followed by Windsor and Maidenhead (18.5%), Spelthorne (18.0%), and Elmbridge (17.8%).

[40] ONS (2011) 2011 Census. Available at: https://www.nomisweb.co.uk/sources/census_2011 [Accessed: 27/01/26].
[41] Ministry of Housing, Communities and Local Government (2025) English indices of deprivation. Available at: https://www.gov.uk/government/collections/english-indices-of-deprivation [Accessed: 16/01/26].
[42] Note: The most recent available data varies by dataset.
[43] Department of Health & Social Care (various) Fingertips Local Authority Health Profiles. Available at: https://fingertips.phe.org.uk/profile/health-profiles [Accessed: 16/01/26].

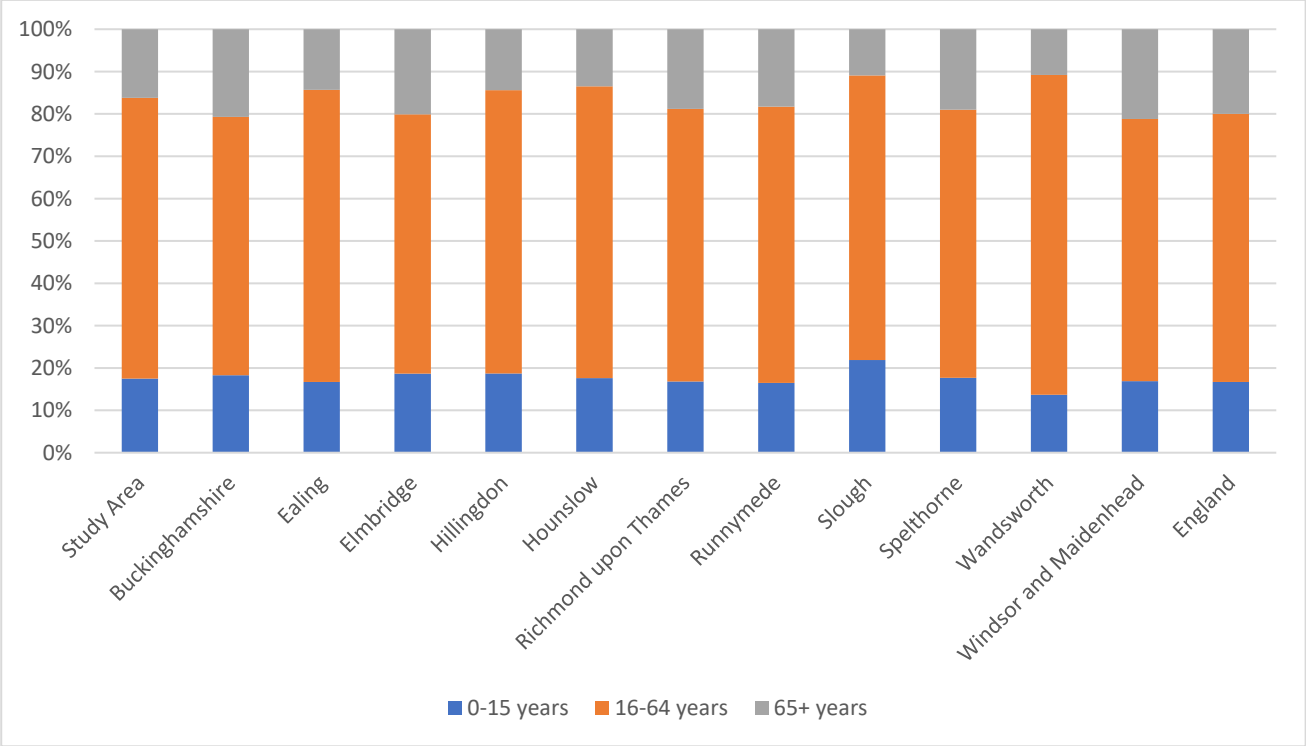
Plate 3: Age breakdown



Source: ONS (2022) 2021 Census.

The projected age breakdown is 17.5% aged under 15, 66.3% aged 16 to 64, and 16.2% aged over 65 in the Study Area, as shown in Error! Reference source not found.. Slough is projected to have the greatest proportion of younger residents (21.9%), compared to Wandsworth with the lowest proportion (13.7%). In comparison, Wandsworth is projected to have the greatest proportion of working aged residents (75.5%), and Buckinghamshire (61.0%) the lowest. Windsor and Maidenhead is projected to have the greatest proportion of older residents (21.2%), with Wandsworth the lowest proportion (10.8%).

Plate 4: Population projections in 2029 by age



Source: ONS (2022) Subnational population projections for England: 2022-based.

The 2021 Census outlines a self-assessment of the extent to which residents' day-to-day activities are impacted by long-term health problems or disability, as shown in **Table 6**. Under the Equality Act 2010, disability is defined as a physical or mental impairment that has a 'substantial' or 'long-term' negative effect in individuals' ability to do normal daily activities. The study area has a lower proportion of disabled people at 12.6% compared to the national average (17.3%). Runnymede has the greatest proportion of disabled residents disabled at 14.6%, and Slough the lowest at 11.3%. Similarly, the study area has a lower proportion of disabled residents with their day-to-day activities limited a lot and limited a little (5.1% and 7.6% respectively) compared to England (7.3% and 10.0% respectively).

Table 6: Disability

Area	Disabled under the Equality Act (%)	Disabled – Day-to-day activities limited a lot (%)	Disabled – Day-to-day activities limited a little (%)
Study Area	12.67	5.1	7.6
Buckinghamshire	13.5	5.0	8.5
Ealing	12.2	5.4	6.8
Elmbridge	11.9	4.4	7.5
Hillingdon	12.9	5.6	7.3

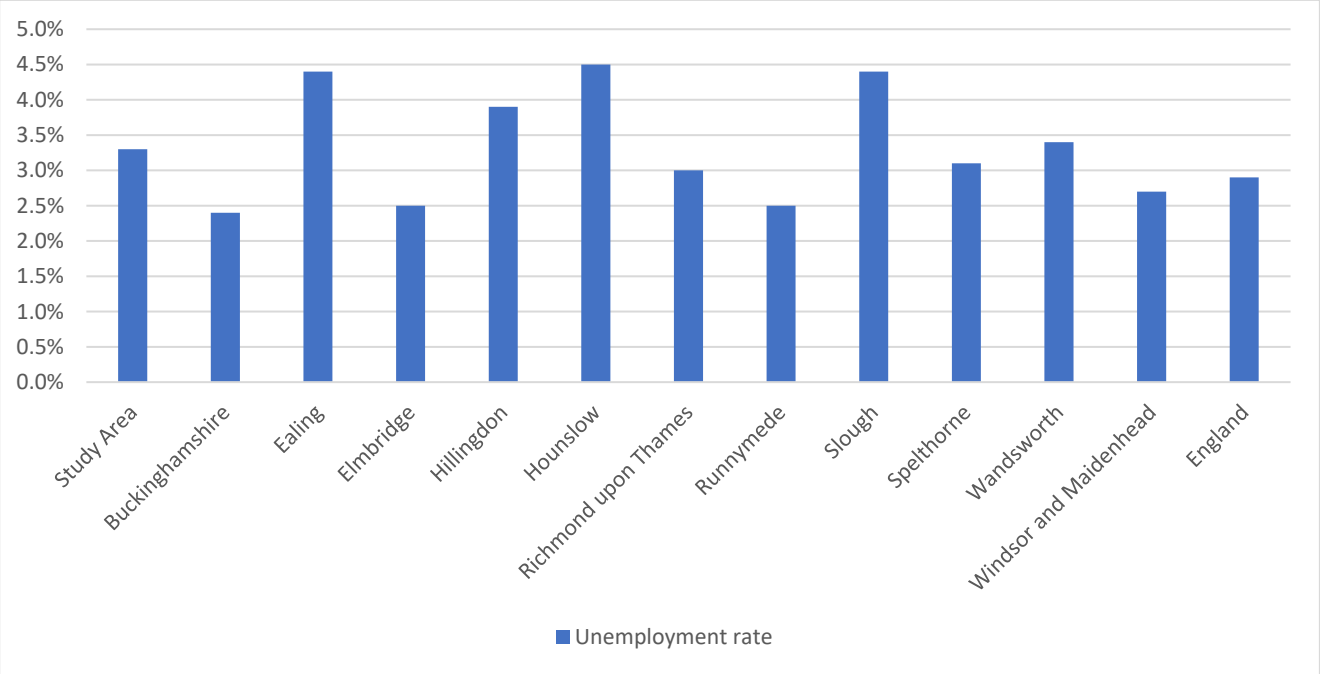
Area	Disabled under the Equality Act (%)	Disabled – Day-to-day activities limited a lot (%)	Disabled – Day-to-day activities limited a little (%)
Hounslow	12.2	5.4	6.9
Richmond upon Thames	12.0	4.5	7.6
Runnymede	14.6	5.5	9.1
Slough	11.3	5.0	6.4
Spelthorne	14.2	5.7	8.6
Wandsworth	11.4	4.5	6.9
Windsor and Maidenhead	12.3	4.7	7.6
England	17.3	7.3	10.0

Source: ONS (2022) 2021 Census.

Socio-economic factors

Economic activity data from the 2021 Census shows that 63.5% of residents in the study area are economically active (excluding full-time students), while 3.3% are unemployed. The economic activity rate in the study area is higher than the national average of 58.6%. However, the unemployment rate in the study area is also higher than the national average of 2.9%. **Plate 5** shows the variation in unemployment rates between the local authorities. There is variation in unemployment rates between the local authorities: Hounslow, Ealing, Slough and Hillington all have unemployment rates above 3.5%.

Plate 5: Unemployment rate



Source: ONS (2022) 2021 Census.

The Department of Health & Social Care[44] provides data on long-term unemployment in 2024/5, defined as those claiming out of work benefit for over 12 months aged between 16 and 64. The study area has a lower proportion of long-term unemployment, at 0.43 people per 1,000 residents, compared to the national average (0.51 people per 1,000 residents). Elmbridge has the lowest proportion of long-term unemployed residents (0.20 residents per 1,000), closely followed by 0.24 residents in Windsor and Maidenhead. In comparison, Ealing has the highest proportion of long-term unemployed residents (0.88 residents), followed by Spelthorne (0.59 residents).

The 2025 English Indices of Deprivation provides information on deprivation dimensions in the local authorities comprising the study area. **Table 7** shows the average deprivation rank for each dimension out of 296 local authorities, with 1 being the most deprived. The average rank shows that the study area is most deprived in the living environment dimension, with an average rank of 98, followed by barriers to housing and services with an average rank of 122. The study area is least deprived in terms of health and disability, ranked 236th.

[44] Department of Health & Social Care (2025) Fingertips Local Authority Health Profiles. Available at: https://fingertips.phe.org.uk/profile/health-profiles [Accessed: 16/01/26].

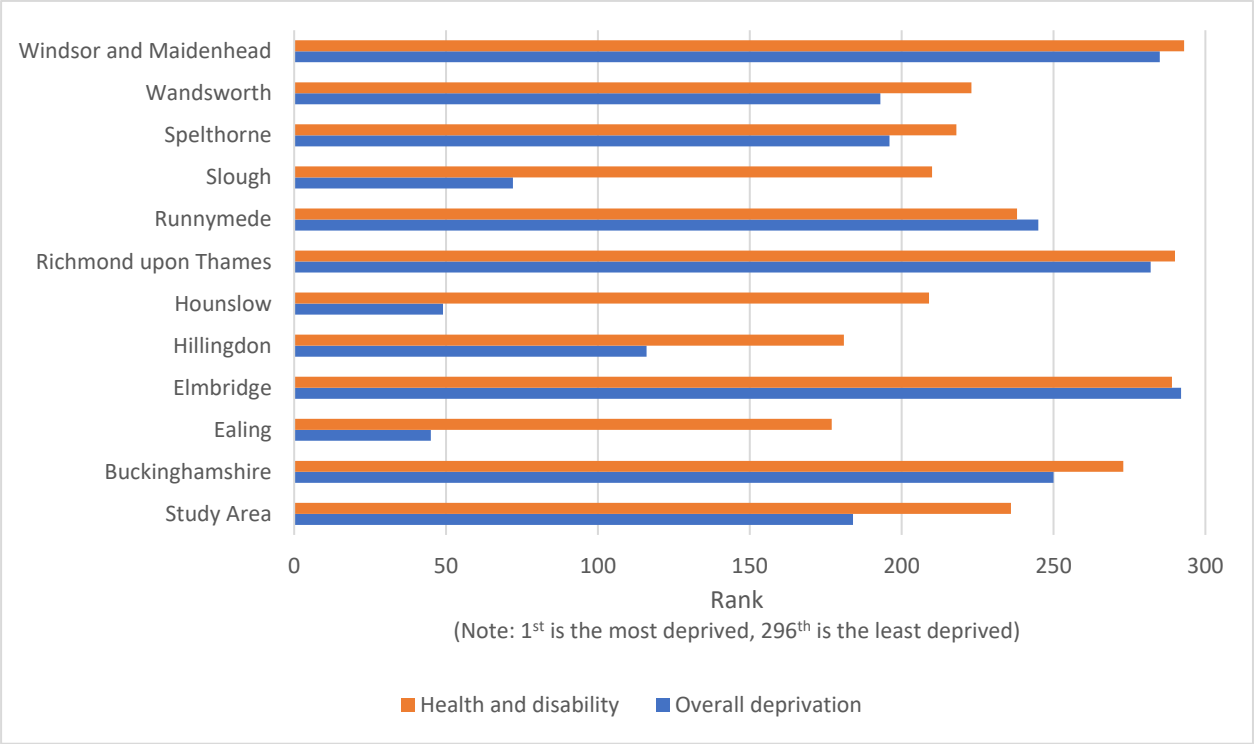
Table 7: Deprivation by rank

Deprivation Dimension	Study Area (average)
Deprivation	184
Employment	209
Education Skills and Training	206
Income	166
Income deprivation affecting children index (IDACI)	171
Income deprivation affecting older people index (IDAOPI)	141
Health and disability	236
Barriers to housing and services	122
Living environment	98

Source: Ministry of Housing, Communities and Local Government (2025) English indices of deprivation.

It is noted that there is variation in the districts comprising the study area. This variation in overall deprivation and health and disability dimensions is shown in **Plate 6**. As shown, Elmbridge is the least deprived local authority in terms of overall deprivation, ranked 292nd, closely followed by Windsor and Maidenhead (285th), and Richmond upon Thames (282nd). In comparison, Ealing is the most deprived (45th), closely followed by Hounslow (49th). In terms of health and disability deprivation, Windsor and Maidenhead is similarly the least deprived (293rd), closely followed by Richmond upon Thames (290th). In comparison, Ealing is the most deprived (177th), followed by Hillingdon (181st).

Plate 6: Overall deprivation and health and disability deprivation

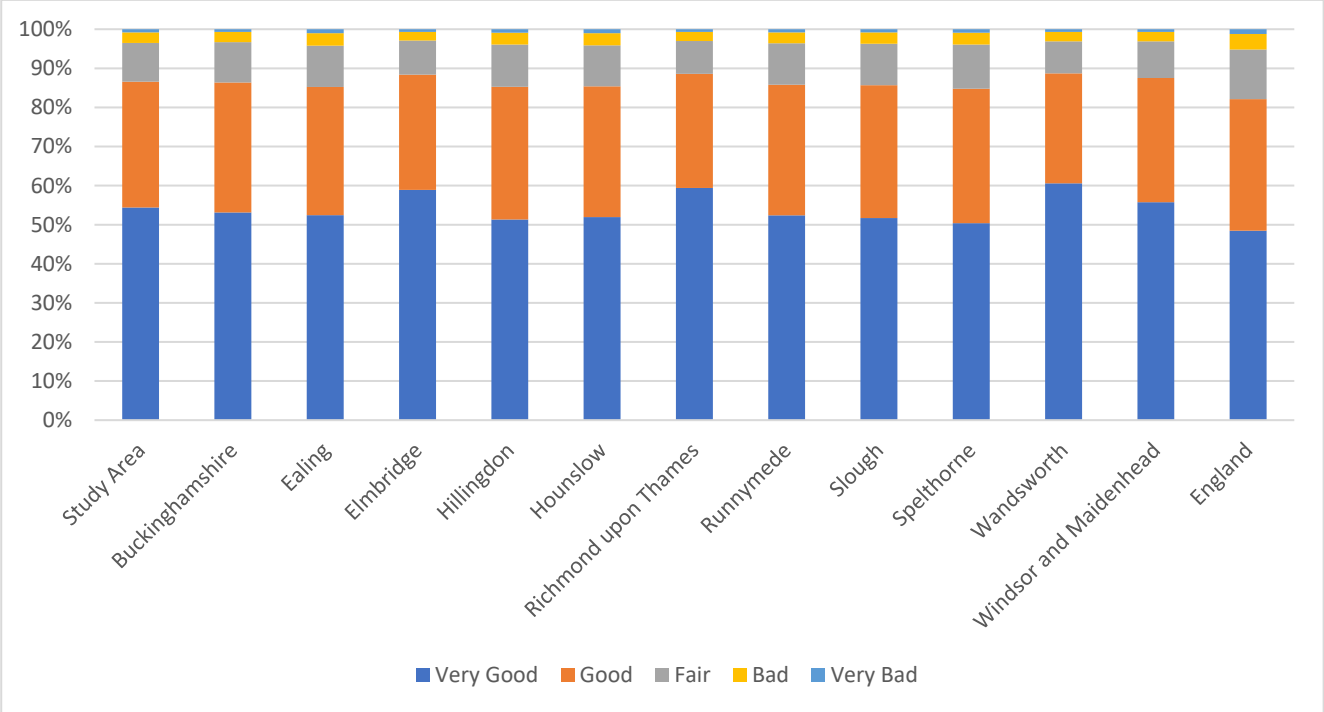


Source: Ministry of Housing, Communities and Local Government (2025) English indices of deprivation.

Health

The 2021 Census provides data on self-assessed general health, as shown in **Plate 7.** In the study area, 54.4% of residents report 'very good' health, greater than the national average of 48.5%. The population of Wandsworth has the greatest proportion of residents in 'very good' health (60.6%), compared to 50.4% in Spelthorne. The proportion of the study area in 'very bad' health (0.8%) is lower than the national average (1.2%), with Ealing and Hounslow both having the highest proportion of residents in 'very bad' health (1.0%) and Buckinghamshire, Elmbridge, Richmond upon Thames, Wandsworth, and Windsor and Maidenhead the lowest (0.7%).

Plate 7: General health



Source: ONS (2022) 2021 Census.

Table 8 presents numerous health indicators from the Department of Health and Social Care for the study area, its constituent local authorities, and the national average. Overall, the data suggests that the study area performs better than the England average across all health indicators presented, apart from the rate of live babies with a low birth weight, in which the study area performed slightly worse than the national average. There is clear spatial variation between local authorities within the study area, with areas such as Slough, Hillingdon and Hounslow performing worse than Richmond upon Thames, Windsor and Maidenhead, Buckinghamshire, and Ealing in general.

Green shading indicates health outcomes in the area that are better than the national average. Pink shading indicates health outcomes in the area that are worse than the national average.

Table 8: Baseline health indicators

Health indicators	Study Area	Buckinghamshire	Ealing	Elmbridge	Hillingdon	Hounslow	Richmond upon Thames	Runnymede	Slough	Spelthorne	Wandsworth	Windsor and Maidenhead	England
Physically active adults (%) (2024)	68.0	73.7	65.7	80.3	56.2	60.2	76.6	71.0	57.1	58.1	74.8	74.1	67.4
Population reporting depression or anxiety (%) (2017)	11.3	10.1	11.2	10.0	11.6	11.5	9.7	13.1	11.5	12.5	12.7	9.9	13.7
Low birth weight of live babies (%) (2018-22)	6.9	6.6	7.6	6.4	6.4	8.2	5.8	6.7	8.4	7.5	6.2	6.5	6.8
Obese children (reception year) (%) (2022/3-2024/5)	8.2	7.6	9.7	6.0	9.1	10.4	5.6	7.7	10.8	7.9	8.1	7.1	9.8
Obese children (year 6) (%) (2022/3-2024/5)	32.5	30.4	37.3	13.1	37.3	39.8	24.2	38.5	41.0	32.7	33.1	29.7	36.2
Mortality from causes considered	82.7	70.5	93.4	63.8	92.8	94.7	61.2	82.2	115.8	79.7	83.0	72.2	100.0

Health indicators	Study Area	Buckinghamshire	Ealing	Elmbridge	Hillingdon	Hounslow	Richmond upon Thames	Runnymede	Slough	Spelthorne	Wandsworth	Windsor and Maidenhead	England
preventable (aged under 75) (per 100,000) (2024)													
Mortality from cancer (per 100) (2024)	89.1	88.2	85.4	81.7	95.2	87.5	84.0	95.0	96.0	91.7	90.6	84.8	100.0
Mortality from cancer (aged under 75) (per 100,000) (2024)	86.6	86.6	82.1	95.7	92.8	84.8	72.0	92.3	95.7	80.7	87.8	82.3	100.0
Mortality from cardiovascular disease (per 100) (2024)	92.4	83.3	96.5	87.1	97.9	99.6	74.2	98.3	118.5	91.8	89.0	80.4	100.0
Mortality from cardiovascular disease (aged under 75) (per 100) (2024)	87.5	70.3	101.9	61.7	96.1	99.5	65.4	87.8	135.3	95.5	82.3	67.2	100.0

Health indicators	Study Area	Buckinghamshire	Ealing	Elmbridge	Hillingdon	Hounslow	Richmond upon Thames	Runnymede	Slough	Spelthorne	Wandsworth	Windsor and Maidenhead	England
Mortality from respiratory diseases (per 100) (2024)	90.8	80.4	96.1	80.6	94.7	86.6	64.0	104.0	118.6	102.1	83.3	88.2	100.0
Hip fractures: emergency hospital admissions (65 years+) (per 100) (2021)	88.3	94.4	83.4	97.0	89.9	86.1	90.8	89.8	85.9	86.6	75.4	92.0	100.0

Source: Department of Health & Social Care. Fingertips Local Authority Health Profiles.

Note: Green shading indicates health outcomes in the area that are better than the national average. Pink shading indicates health outcomes in the area that are worse than the national average.