Life expectancy in Wirral 2019-21

Public Health

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Current Version: 1

Version History	Date	Author	Reviewer	Actions
V1	April 2024	Jack Font	Sarah Kinsella	Removed inequalities by IMD decile due to no updates
V2	May 2024	Jack Font	Sarah Kinsella	Added new template of report

Report Overview

Abstract	
Background to this report	This update summarises the most recently available data (2019-21) for life expectancy (LEx) in Wirral.
Intended or potential audience	**External** • Wirral Partners • General Public **Internal** • Adults' Care and Health Strategic Commissioning Department • Director of Public Health and wider Public Health Team • Regeneration and Place Department • JSNA Bulletin
Links with other topic areas	• Deprivation • Population • Mortality • Health Inequalities

Key Findings

- Life expectancy (LEx) at birth in Wirral increased steadily from the 1990s to early 2000s for both males and females, but both appear to have plateaued since around 2009-11

- In 2019-21, LEx at birth in Wirral was 77.3 years for males and 81.5 years for females (a decrease for males on the previous time period (2018-20), females remained the same); the gap between males and females has increased (4.2 years) since 2018-20 (when it was 3.8 years)

- The ward with the lowest LEx at birth for males was Birkenhead and Tranmere (71.0), whilst West Kirby and Thurstaston had the highest (83.0). For females, Seacombe had the lowest LEx (76.6) whilst Greasby, Frankby and Irby had the highest (88.1)

- The gap in LEx at birth between wards in Wirral has narrowed for both males and females in 2019-21. In males, the gap decreased from 12.6 years in 2018-20 to 12.0 years in 2019-21; in females the gap has decreased from 11.9 years to 11.5 years

- LEx at age 65 for males in Wirral in 2019-21 saw a decrease of 0.1 years compared to 2018-20; LEx at age 65 for females in Wirral in 2019-21 remained the same as 2018-20

- Following a steady increase between the early 1990s to the early 2000s, overall LEx at age 65 then plateaued in Wirral, the North West and England from 2009-11 onwards (with small fluctuations). Research by the OECD shows that this trend is also apparent in other developed countries

- Healthy Life Expectancy has not been updated by ONS and so cannot yet be presented for 2019-21. For Healthy Life Expectancy data (2018-20, which is still the latest available), please visit the dedicated Life Expectancy page on our JSNA website

Contents

Introduction

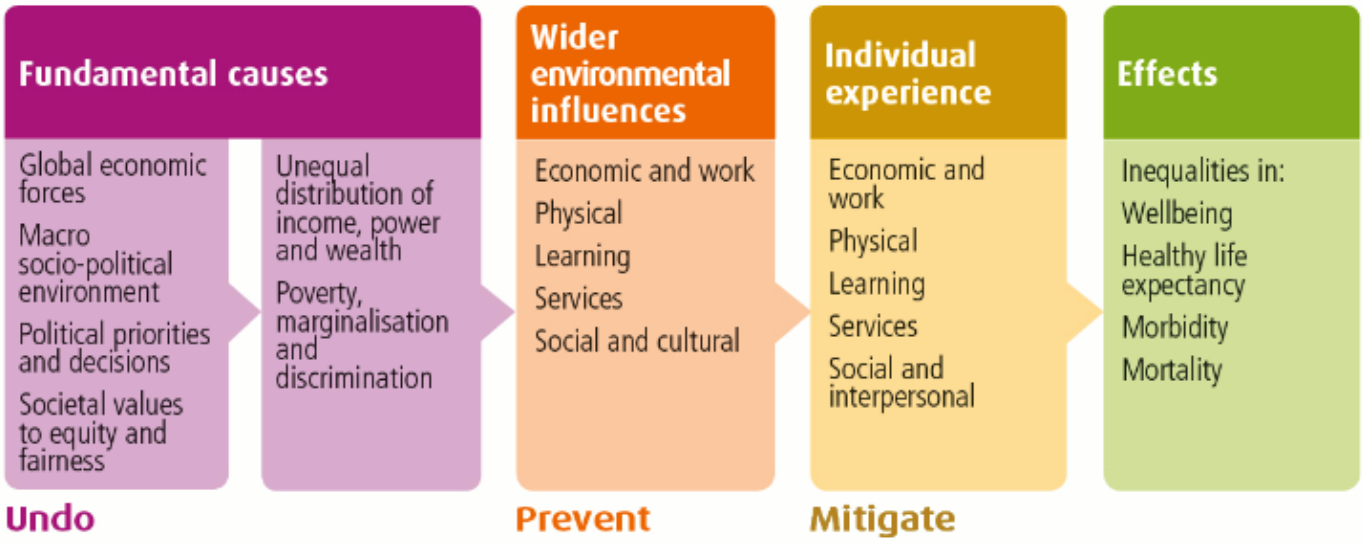
This update summarises the most recently available data (2019-21) for life expectancy (LEx) in Wirral and compares local and national data.

Life expectancy at birth in England showed dramatic increases throughout the twentieth century as health and living conditions improved. It increased from 46 years for males and 50 years for females in 1900, to 78 years for males and 82 years for females in 2011. However, LEx appears to have plateaued since this time, not just in England but in other developed countries.

Increases in LEx were not uniform across all social groups; marked increases took place amongst more affluent social groups, while progress was significantly slower for people in more deprived social groups. The inequality gap in LEx between these groups has increased in recent years.

Consequently, reducing inequalities in LEx was a public health target throughout the 1990s and 2000s and is now one of the overarching indicators in the current Public Health Outcomes Framework (PHOF). The causes of these health inequalities are complex and involve interactions between social, educational, economic and structural factors **(Figure 1).**

Figure 1: Causes of health inequalities



Source: Public Health Scotland

Life Expectancy at Birth

Life expectancy (LEx) is an estimate of the average number of years a person would survive if he or she experienced a particular area's age-specific mortality rates for that time period throughout the rest of his or her life.

It is *not* the number of years a baby could actually expect to live, because it makes no allowance for probable future changes in death rates (i.e. people living longer) or for people moving away from the area in which they were born. Along with infant mortality, it is widely used by Public Health as a useful indicator of the health of the overall population.

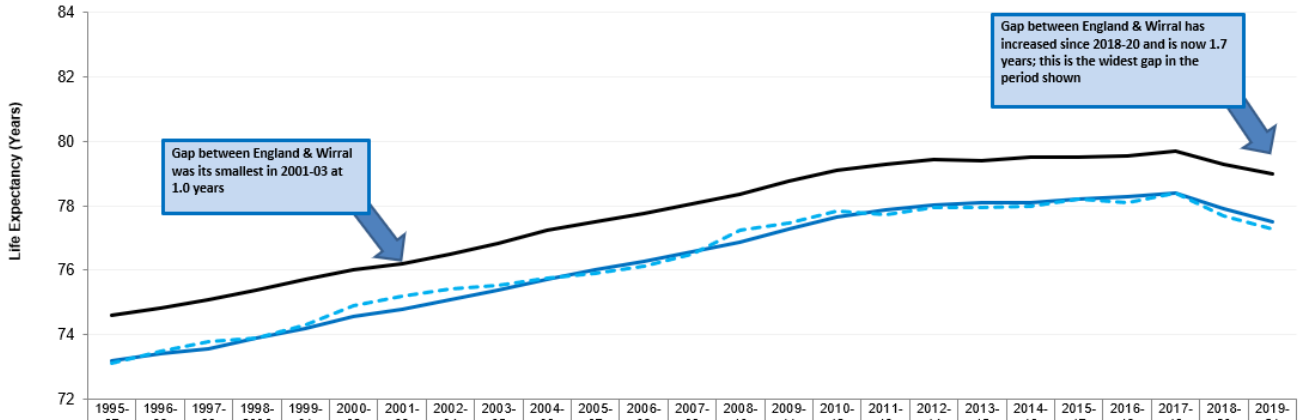
Figures 2 and 3 show the annual trend in LEx at birth for males and females in England, North West, and Wirral between 1995-97 and 2019-21.

Since 1995-97, LEx at birth has increased by 4.2 years for males in Wirral, compared to 4.4 years for males in England. Therefore, although LEx has been increasing locally, it has also been increasing in England at a greater rate, meaning that the LEx gap between men in England and Wirral has widened.

The latest period (2019-21) saw a decrease in LEx at birth amongst males in Wirral of 0.4 years compared to 2018-20. LEx at birth amongst males in England also decreased (by 0.3 years).

This means that the LEx gap between males in Wirral and England has increased by 0.1 years, from 1.6 years in 2018-20, to 1.7 years in 2019-21. This is the widest the gap has ever been. Compared to the North West, Wirral males have a lower LEx for 2019-21 (77.3 vs 77.5).

Figure 2: Trend in Life Expectancy at birth for males in England, North-West & Wirral, 1995-97 to 2019-21

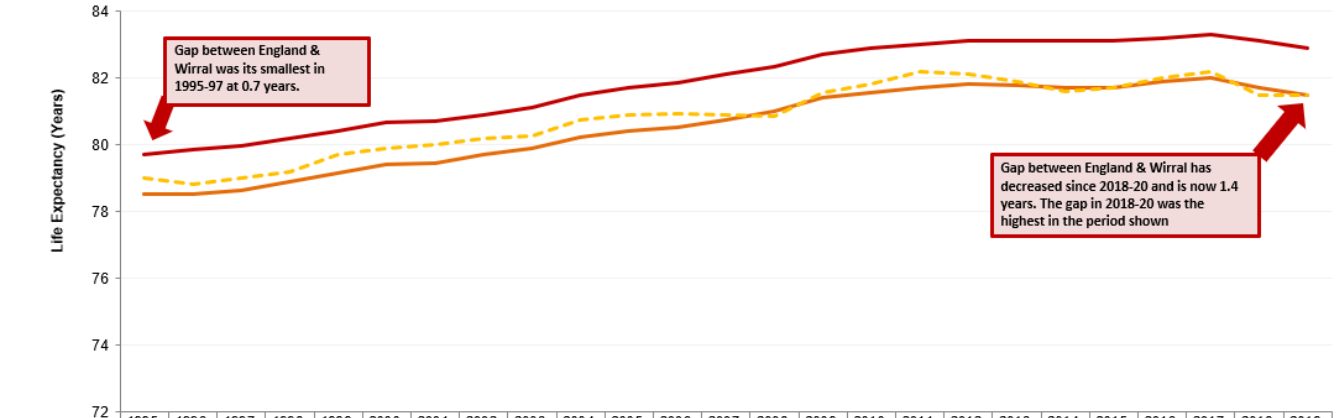


	1995-97	1996-98	1997-99	1998-2000	1999-01	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11	2010-12	2011-13	2012-14	2013-15	2014-16	2015-17	2016-18	2017-19	2018-20	2019-21
England	74.6	74.8	75.1	75.4	75.7	76.0	76.2	76.5	76.8	77.2	77.5	77.8	78.1	78.4	78.8	79.1	79.3	79.4	79.4	79.5	79.5	79.6	79.7	79.3	79.0
North-West	73.2	73.4	73.6	73.9	74.2	74.6	74.8	75.1	75.4	75.7	76.0	76.3	76.6	76.9	77.3	77.6	77.9	78.0	78.1	78.1	78.2	78.3	78.4	77.9	77.5
Wirral	73.1	73.5	73.8	73.9	74.3	74.9	75.2	75.4	75.5	75.8	75.9	76.1	76.5	77.2	77.5	77.8	77.7	78.0	77.9	78.0	78.2	78.1	78.4	77.7	77.3

Source: Public Health Outcomes Framework, 2024
Note: A larger version of this chart is available in Appendix 1

Figure 3 shows that LEx at birth increased for females in Wirral between 1995-97 and 2019-21, by 2.5 years, compared to an increase of 3.2 years for females in England over the same period. So, although LEx at birth has been increasing locally for females, it has not increased at the same pace as England, meaning the gap between Wirral and England continues to widen (currently 1.4 years, compared to a gap of 0.7 years in 1995-97). Compared to the North West, Wirral females have the same LEx for 2019-21 (81.5 years).

Figure 3: Trend in Life Expectancy at birth for females in England, North-West & Wirral, 1995-97 to 2019-21



	1995-97	1996-98	1997-99	1998-2000	1999-01	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11	2010-12	2011-13	2012-14	2013-15	2014-16	2015-17	2016-18	2017-19	2018-20	2019-21
England	79.7	79.8	80.0	80.2	80.4	80.7	80.7	80.9	81.1	81.5	81.7	81.9	82.1	82.3	82.7	82.9	83.0	83.1	83.1	83.1	83.1	83.2	83.3	83.1	82.9
North-West	78.5	78.5	78.6	78.9	79.1	79.4	79.5	79.7	79.9	80.2	80.4	80.5	80.7	81.0	81.4	81.6	81.7	81.8	81.8	81.7	81.7	81.9	82.0	81.7	81.5
Wirral	79.0	78.8	79.0	79.2	79.7	79.9	80.0	80.2	80.3	80.7	80.9	80.9	80.9	80.9	81.5	81.8	82.2	82.1	81.9	81.6	81.7	82.0	82.2	81.5	81.5

Source: Public Health Outcomes Framework, 2024
Note: A larger version of this chart is available in Appendix 2

Life Expectancy at Age 65

Figure 4 shows life expectancy (LEx) at age 65 in Wirral, the North West and England for both males and females from 2001-03 to 2019-21. The chart shows that after many years of increasing gains in LEx at age 65, 2009-11 marked the start of a plateauing in England, the North West and Wirral, followed by a decrease in 2018-20 which continued in 2019-21.

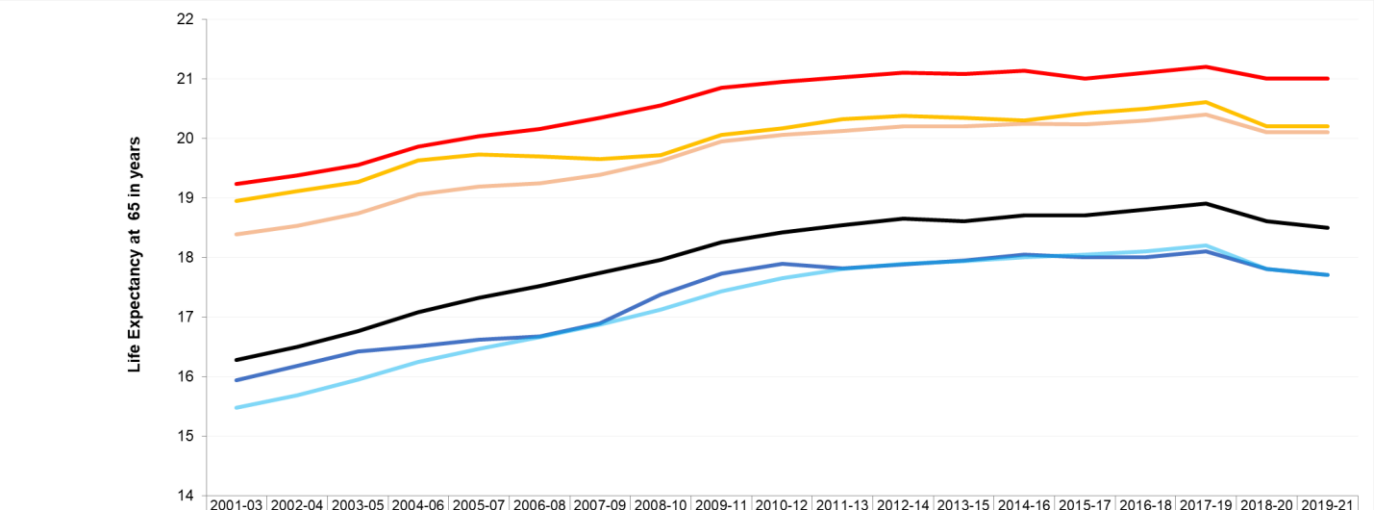
The most recent time period (2019-21) showed a decrease in LEx at 65 amongst males in Wirral (-0.1 years), the North West (-0.1 years) and England (-0.1 years). This means that the gap in LEx in men aged 65 years between Wirral and England has remained the same. LEx at 65 for females remained the same as the previous year in all three areas.

This means the gap in LEx in women aged 65 years between Wirral and England remained the same as in 2018-20.

These changes mean that the gap in LEx at 65 between males and females in Wirral has increased between 2018-20 and 2019-21 (from 2.4 to 2.5 years).

As shown below in **Figure 4**, LEx at birth and at age 65 has plateaued somewhat over the last few time periods. A 2019 report by the Organisation for Economic Cooperation & Development (OECD) compares the rate of LEx globally and notes that trends for increases have also stalled in recent years in other developed countries, not just the UK.

Figure 4: Life Expectancy at age 65 in England, North-West & Wirral, by males and females, 2001-03 to 2019-21



	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11	2010-12	2011-13	2012-14	2013-15	2014-16	2015-17	2016-18	2017-19	2018-20	2019-21
Males Wirral	15.9	16.2	16.4	16.5	16.6	16.7	16.9	17.4	17.7	17.9	17.8	17.9	17.9	18.0	18.0	18.0	18.1	17.8	17.7
Males North West	15.5	15.7	15.9	16.2	16.5	16.7	16.9	17.1	17.4	17.7	17.8	17.9	17.9	18.0	18.0	18.1	18.2	17.8	17.7
Males England	16.3	16.5	16.8	17.1	17.3	17.5	17.7	18.0	18.2	18.4	18.5	18.6	18.6	18.7	18.7	18.8	18.9	18.6	18.5
Females Wirral	18.9	19.1	19.3	19.6	19.7	19.7	19.6	19.7	20.1	20.2	20.3	20.4	20.3	20.3	20.4	20.5	20.6	20.2	20.2
Females North West	18.4	18.5	18.7	19.1	19.2	19.2	19.4	19.6	19.9	20.1	20.1	20.2	20.2	20.2	20.2	20.3	20.4	20.1	20.1
Females England	19.2	19.4	19.6	19.9	20.0	20.2	20.3	20.5	20.9	20.9	21.0	21.1	21.1	21.1	21.0	21.1	21.2	21.0	21.0

Source: Public Health Outcomes Framework, 2024

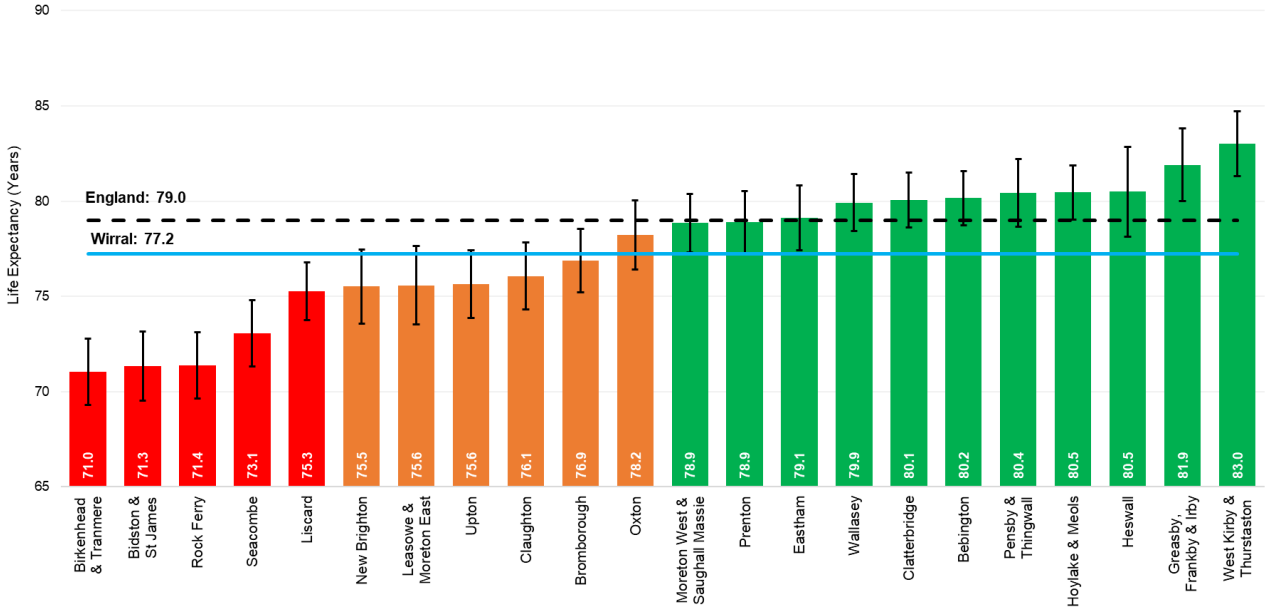
Inequalities in Life Expectancy within Wirral and England

Life Expectancy at Birth by Ward

Life expectancy varies considerably between Wirral wards. As **Figure 5** shows, there is a gap of 12.0 years between the wards with the highest and lowest male LEx in Wirral for 2019-21 (Birkenhead & Tranmere and West Kirby & Thurstaston). This is a narrowing of the gap, compared to the previous period, as it was 12.6 years in 2018-20. The average Wirral LEx for males was 77.2 years, whilst the England average was 79.0 for the same time period (1.8 years higher).

The four wards with the lowest LEx are also the four most deprived wards in Wirral according to the IMD 2019; Birkenhead and Tranmere, Bidston and St James, Rock Ferry and Seacombe.

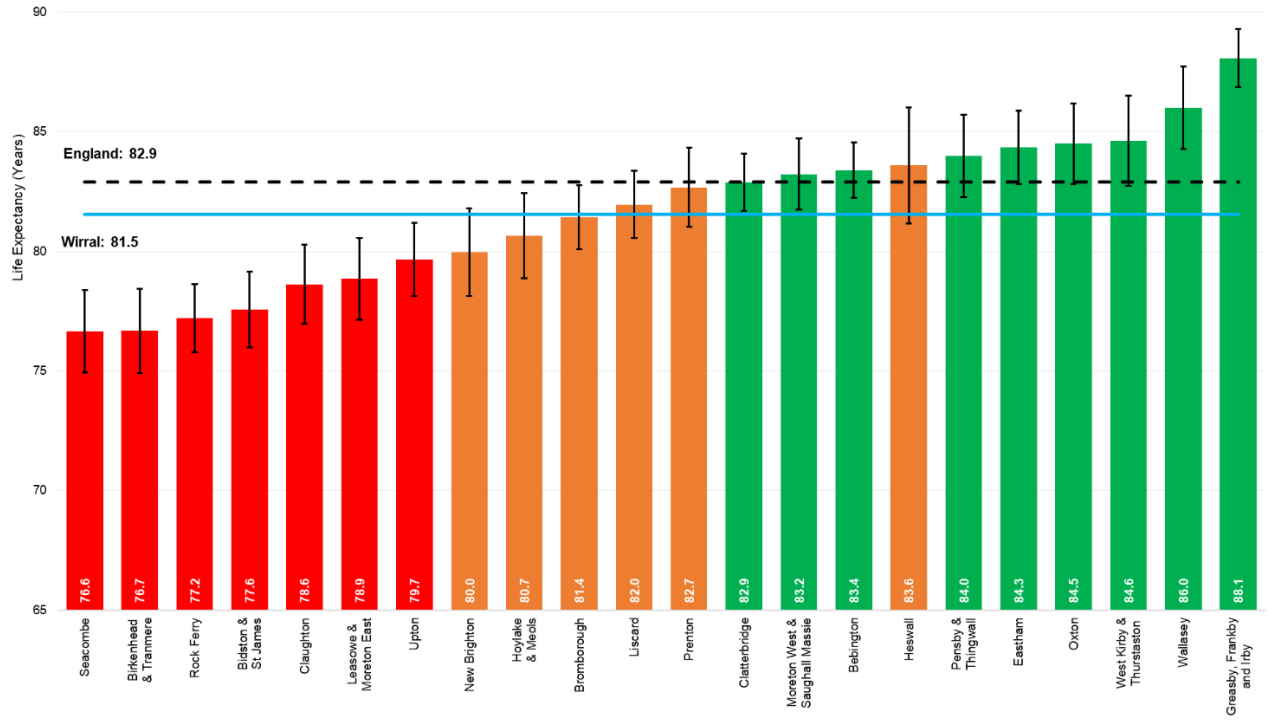
Figure 5: Male life expectancy at birth, by Wirral Ward, 2019-21



Source: Public Health Intelligence Team, 2024
Note: Confidence intervals displayed on each bar within this chart show the range at which we can be 95% certain the true value lies between

Figure 6 below shows that, for 2019-21, the gap between the Wirral wards with the highest and lowest female LEx was 11.5 years (Seacombe and Greasby, Frankby and Irby). This is a narrowing of the gap, compared to the previous period, as it was 11.9 years in 2018-20. As was the case with males, the four wards with the lowest female LEx are the four most deprived wards in Wirral: Birkenhead and Tranmere, Bidston and St. James, Rock Ferry and Seacombe.

Figure 6: Female life expectancy at birth, by Wirral Ward, 2019-21



Source: Public Health Intelligence Team, 2024
Note: Confidence intervals displayed on each bar within this chart show the range at which we can be 95% certain the true value lies between

Map 1 and Map 2 (Appendices 3 and 4) show life expectancy at birth by Wirral railway station. These maps reinforce in a visual format the ward level data shown previously; that wards on the west side of Wirral are typically less deprived and have a higher life expectancy for 2019-21.

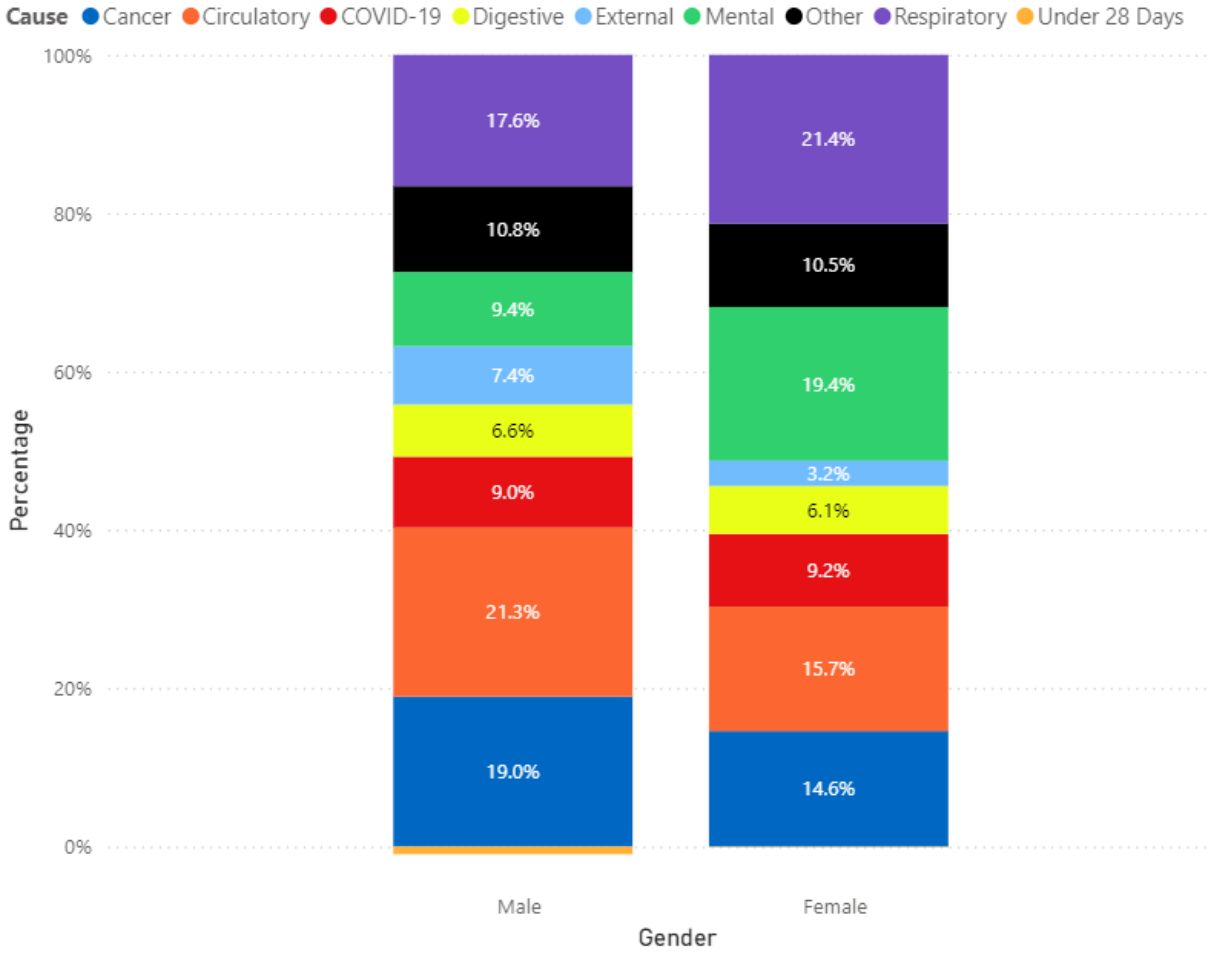
Those of the east side of Wirral are typically those that are more deprived and have lower life expectancy.

Causes of the Gap in Life Expectancy between Wirral & England

Targeting the causes of death which contribute most to the life expectancy gap between Quintile 1 (Deciles 1 and 2, the most deprived deciles) and Quintile 5 (Deciles 9 and 10 the least deprived deciles) within Wirral should have the biggest impact on reducing inequalities. In order to help local areas identify which causes of death are driving health inequalities, Office for Health Improvement and Disparities (OHID) produce a Segment Tool which is available here: https://analytics.phe.gov.uk/apps/segment-tool/ with Quintile 1 compared to Quintile 5 in **Figure 7** below.

Please note that this data is produced by the Office for Health Improvement and Disparities (OHID) irregularly, with the latest data showing 2020-21 (in contrast to the remainder of this report which is 2018-20). We have therefore replicated their methodology using local data to produce data for Wirral in 2019-21 (to match the rest of this report), so the chart below will therefore not match what is on the Segment Tool.

Figure 7: Proportional (%) breakdown of the life expectancy gap between Quintile 1 (most deprived) and Quintile 5 (least deprived), by broad cause of death (2019-21)



Source: Public Health Intelligence Team, 2024
Source Footnote: Circulatory includes heart disease and stroke. Respiratory includes flu, pneumonia, and chronic obstructive respiratory disease. Digestive includes alcohol-related conditions such as chronic liver disease and cirrhosis. External includes deaths from injury, poisoning and suicide. Mental and behavioural includes dementia and Alzheimer's disease. Percentages may not sum to 100 due to rounding.
Note: It should be noted that the above 'scarf' charts only relate to deaths which contributed to the *gap* between Quintile 1 and Quintile 5 in Wirral - they are not the causes of *all* deaths in Wirral.

Figure 7 shows how the broad causes of death contributed to these gaps in life expectancy between these quintiles by gender. The largest contributors to the gap were different for males and females in Wirral. In males, circulatory conditions (21.3%) contributed to the gap the most, followed by cancer (19.0%). In females, however, respiratory disease contributed 21.4% of the gap followed by mental and behavioural causes (namely dementia and Alzheimer's) which contributed 19.4% of the gap.

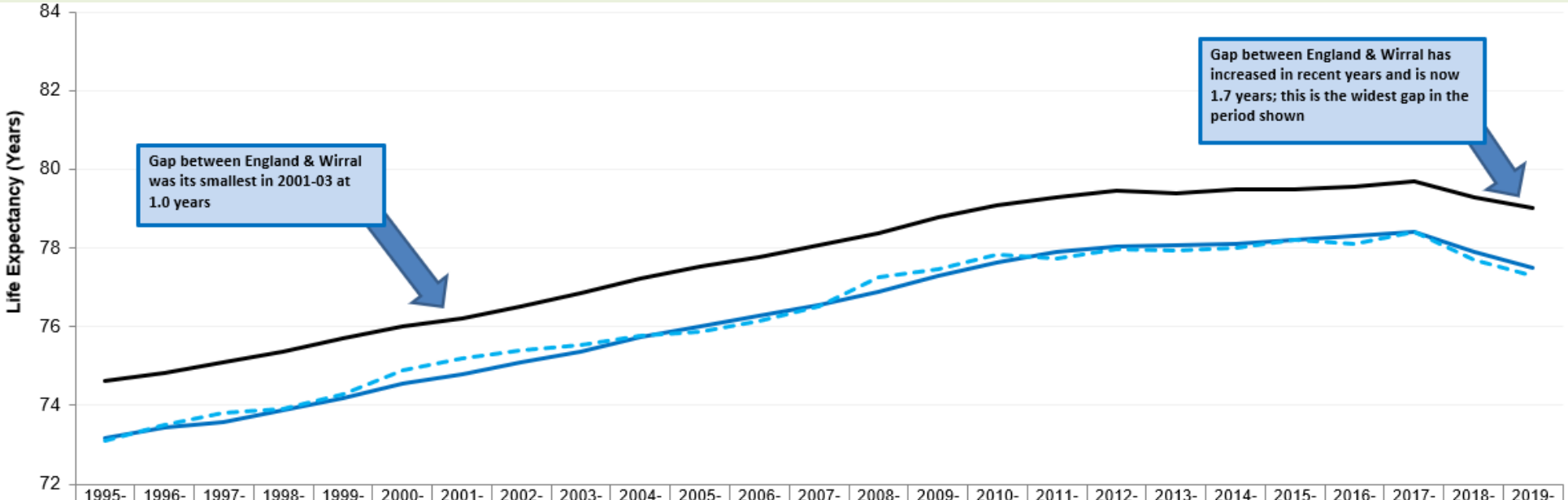
Healthy Life Expectancy (HLE)

Please note: The publication of Healthy Life Expectancy (HLEx) data has not kept pace with the release of Life Expectancy data. The ONS (who produce HLEx) stated on 26/03/2024 that they cannot produce HLEx for local authorities for 2019-21 or 2020-22 at the present time, due to the impact of the COVID-19 pandemic on the Annual Population Survey (necessary to produce HLEx). They have also stated they are working on an updated methodology to calculate subnational estimates for the future.

For Healthy Life Expectancy data (2018-20, which is still the latest available), please visit the dedicated Life Expectancy page on our JSNA website

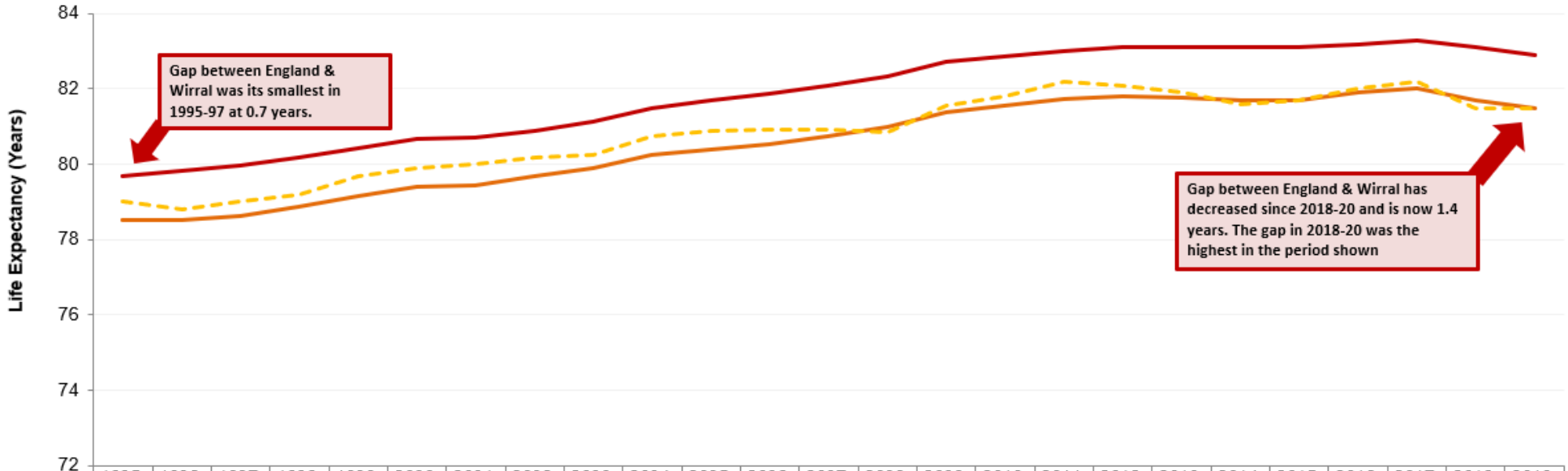
Appendices

Appendix 1: Trend in Life Expectancy at birth for males in England, North-West & Wirral, 1995-97 to 2019-21



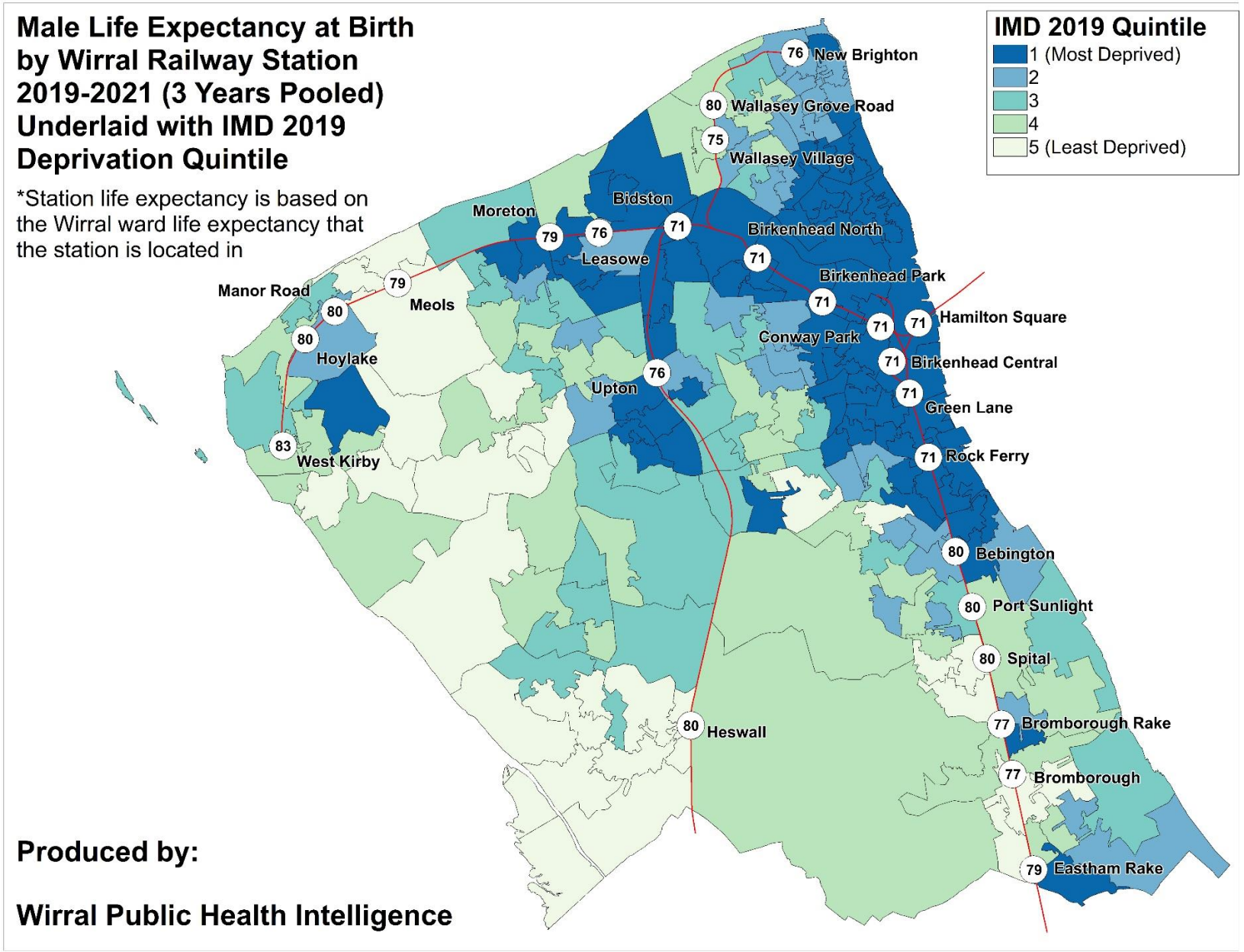
	1995-97	1996-98	1997-99	1998-2000	1999-01	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11	2010-12	2011-13	2012-14	2013-15	2014-16	2015-17	2016-18	2017-19	2018-20	2019-21
England	74.6	74.8	75.1	75.4	75.7	76.0	76.2	76.5	76.8	77.2	77.5	77.8	78.1	78.4	78.8	79.1	79.3	79.4	79.4	79.5	79.5	79.6	79.7	79.3	79.0
North-West	73.2	73.4	73.6	73.9	74.2	74.6	74.8	75.1	75.4	75.7	76.0	76.3	76.6	76.9	77.3	77.6	77.9	78.0	78.1	78.1	78.2	78.3	78.4	77.9	77.5
Wirral	73.1	73.5	73.8	73.9	74.3	74.9	75.2	75.4	75.5	75.8	75.9	76.1	76.5	77.2	77.5	77.8	77.7	78.0	77.9	78.0	78.2	78.1	78.4	77.7	77.3

Appendix 2: Trend in Life Expectancy at birth for females in England, North West & Wirral, 1995-97 to 2019-21

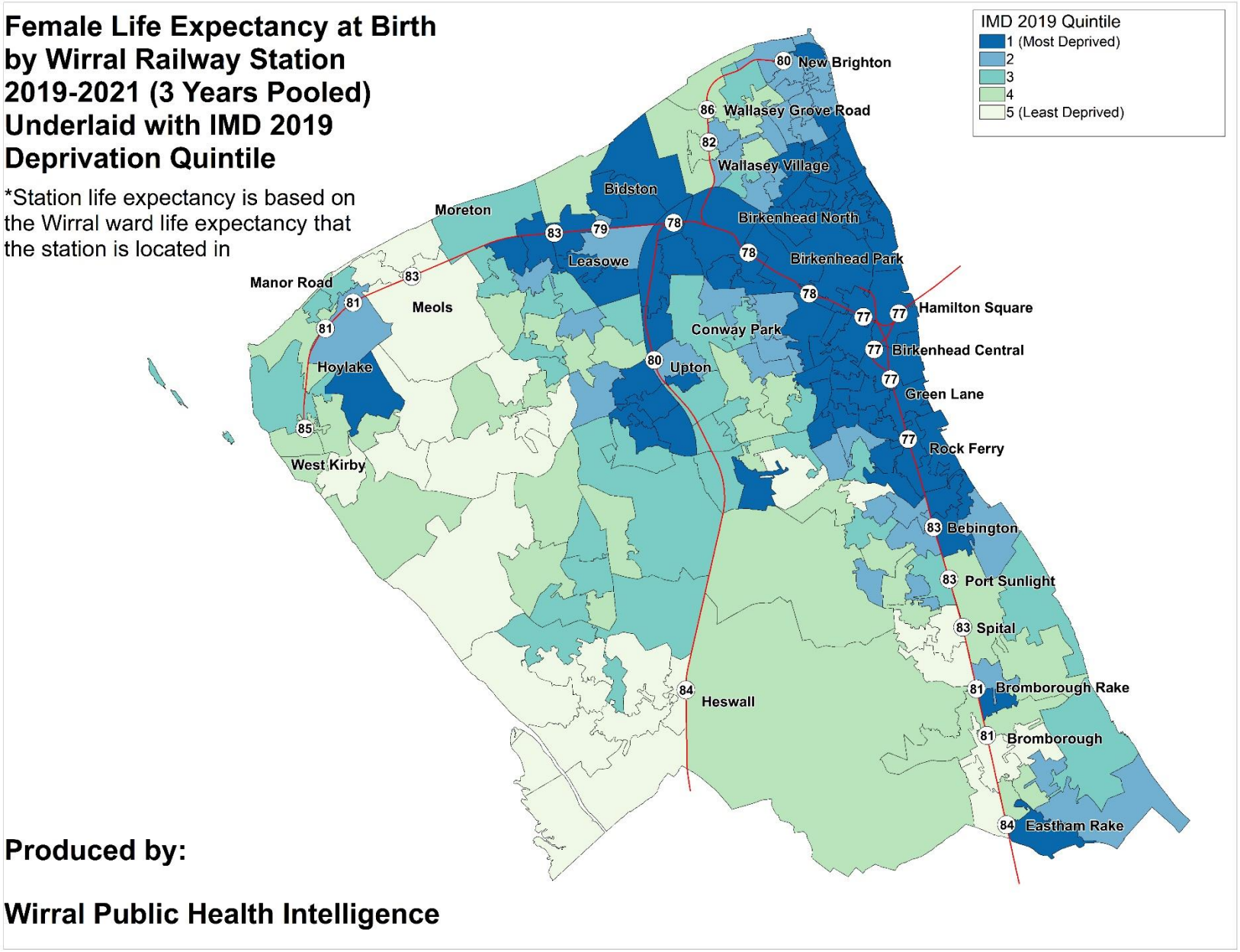


	1995-97	1996-98	1997-99	1998-2000	1999-01	2000-02	2001-03	2002-04	2003-05	2004-06	2005-07	2006-08	2007-09	2008-10	2009-11	2010-12	2011-13	2012-14	2013-15	2014-16	2015-17	2016-18	2017-19	2018-20	2019-21
England	79.7	79.8	80.0	80.2	80.4	80.7	80.7	80.9	81.1	81.5	81.7	81.9	82.1	82.3	82.7	82.9	83.0	83.1	83.1	83.1	83.1	83.2	83.3	83.1	82.9
North-West	78.5	78.5	78.6	78.9	79.1	79.4	79.5	79.7	79.9	80.2	80.4	80.5	80.7	81.0	81.4	81.6	81.7	81.8	81.8	81.7	81.7	81.9	82.0	81.7	81.5
Wirral	79.0	78.8	79.0	79.2	79.7	79.9	80.0	80.2	80.3	80.7	80.9	80.9	80.9	80.9	81.5	81.8	82.2	82.1	81.9	81.6	81.7	82.0	82.2	81.5	81.5

Appendix 3: Life expectancy at birth in males by Wirral Railway Station (2019-21) and Indices of Multiple Deprivation (2019)



Appendix 4: Life expectancy at birth in females, by Wirral Railway Station (2019-21) and Indices of Multiple Deprivation (2019)



Further Reading / Links

- Wirral JSNA: https://www.wirralintelligenceservice.org/
- Health & Social Care Outcomes Framework: https://www.gov.uk/government/collections/health-and-social-care-outcomes-frameworks
- Public Health England – Data and analysis tools: https://www.gov.uk/guidance/phe-dataand-analysis-tools
- Office for National Statistics – Life Expectancies: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies
- Indices of Multiple Deprivation 2019 Explorer: http://dclgapps.communities.gov.uk/imd/iod_index.html

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