DPH ANNUAL REPORT

2022

1 INTRODUCTION

For my annual report summarising 2022, I will cover three areas. The first is a discussion around Thrive Plymouth, reflecting back on the origins of the programme, and looking ahead to what the future holds. Were it not for the hold put on the programme due to Covid19, we would be reaching the start of the 10th year of our ten year programme; and so it is timely to review.
In the second Chapter, I have included some information on what is measured around the health of the population, and what that is telling us. The short story here is a mixed and complex picture, where the national and global situation needs to be taken into account since it impacts on the health and wellbeing of people in Plymouth. The third chapter reports on some of the indicators linked to Thrive Plymouth and of course to life expectancy (LE).
There are some very significant positives, with life expectancy in Plymouth, for men and women, the longest compared to our statistically similar areas (though shorter than for England on average). We also have the smallest gap in life expectancy between the most deprived and the wealthiest groups across all of these statistical neighbours and compared to England; this combination of high average life expectancy and a small gap is exactly what we would hope to see when health inequalities are successfully being reduced.
But this is against a backdrop of difficult times. First, there was a slowing down of the growth in life expectancy nationally, for around a decade, linked to austerity. See my DPH report for 2019 for more details around that. This was of course followed by a global pandemic; there have been 223,185 deaths with Covid19 on the death certificate in the UK to date (coronavirus.data.gov.uk). With the pandemic came multiple challenges, with mental health and wellbeing impacted as well as the economy, and now we have been plunged into a cost of living crisis with high inflationary costs of food and fuel. Wage rises have been behind and so every month the gap between household income and outgoings increases. Even when we see inflation reducing, it is unlikely that we will see costs fall as quickly – if at all – and so we will still see many households struggling.
In this context, it is clear that the challenge to continue to reduce inequality and to improve other factors such as the length of life lived in good health, should not be underestimated.
Finally, I have included, on our website, a number of updates around key public health topics, including those where the public health grant supports the commissioning of services. These include a range of varied services, from health visitors who do such a lot to help to set babies and their families on the right course for health and wellbeing, to treatment services, supporting those who already have challenges to their health which they are working to overcome.
Public health is not about a Director, or a team, or even the people working in those wider commissioned services. It is about everyone all pulling together to try to nudge things in the right direction, each of us knowing that our individual contribution is small, but together we can make a difference. We have seen this working in Plymouth, and I would like to thank all of those who have been working together across the city. Please keep going and when you remember the struggle, think of the voices of those who you have helped.

2 THRIVE PLYMOUTH

Thrive Plymouth was launched in November 2014. Its aim was to tackle the early development of chronic diseases and the shorter life expectancy of some groups across the population. It was evident that certain factors such as obesity, unhealthy diets, alcohol, a lack of physical activity and tobacco use was associated with the chronic diseases and so Thrive Plymouth was launched to tackle these; and most importantly the situations and circumstances that tend to lead to more harm linked to these behaviours in certain groups of the population.

Thrive Plymouth is a social movement, which has varying definitions along the lines of;

> *"a loosely organized but sustained campaign in support of a social goal, typically either the implementation or the prevention of a change in society's structure or values. Although social movements differ in size, they are all essentially collective. That is, they result from the more or less spontaneous coming together of people whose relationships are not defined by rules and procedures but who merely share a common outlook on society"*

Our many partners do not work with us because of contracts or legal requirements or money changing hands; they do so because the goal of supporting people – all people – to have healthier, happier and longer lives is one that we share.

Throughout Thrive Plymouth, we have built up a wide supportive network of collaborators who have joined the movement and have remained with us. We have previously described Thrive Plymouth as setting the destination and the route for a long voyage. We are all on the voyage together, but just in the way that you might expect a submarine to have differences to a sailing boat in how the journey is undertaken, we each use our own unique skills and experiences to guide our own journey. Our annual campaigns serve to add more partners to the journey, joining all the rest to widen the spread and the influence.

Thrive Plymouth is not a public campaign. Public campaigns have a tendency to widen - or at least continue - existing inequalities. Those who are most likely to hear, understand and take action on campaigns around their health are those who are already likely to be aware of the steps they can take to support their own health and acting on them. One of the points of Thrive Plymouth is recognising that we need to be there for those people who need us, which means working together as partners so that someone who is in contact with a person who might benefit from an intervention can signpost them to it.

2.1 The annual campaigns of Thrive Plymouth

Thrive Plymouth has gathered partners and collaborators though a series of Annual Campaigns. The annual campaigns of Thrive Plymouth included;

- 2014 Year 1 Healthy Workplaces
- 2015 Year 2 Healthy Schools
- 2016 Year 3 One You Plymouth – Health Improvement
- 2017 Year 4 Wellbeing
- 2018 Year 5 Connect through food

- 2019 Year 6 Arts, heritage, culture and hospitality
- Pause due to Covid19
- 2022 Listen and Reconnect

Late in 2019, we launched Year 6 of Thrive Plymouth to coincide with the Mayflower 400 commemorations, only to be diverted by Covid19 shortly into 2020. We had to put on hold any work around our annual campaign, and, to continue our nautical theme, we had to get on a warship, forging ahead under close command and control. Though we still had a similar destination – supporting health, tackling health inequalities, and in particular recognising that infectious diseases usually have an unequal distribution across the population – our roles in a world-wide emergency were very different.

As well as the health improvement interventions, the spirit of Thrive Plymouth certainly lived on; our many partners excelled themselves, whether gearing up to treat covid patients or sorting out community schemes to get food, medicines and some sort of companionship to those people who desperately needed it; and contributing in many other ways as well.

In 2022, we relaunched Thrive Plymouth with a year focussed on listening and reconnecting. There were a number of reasons for this, not least of which was that we had all developed so much as a system through the pandemic, and we wanted to understand what we had learnt about ourselves, each other, and the population groups that we serve, to be able to navigate a way forward. We also wanted to widen and embed the principles around asking people what they need, really listening to what they say, and then acting upon it. We have delivered training widely around Appreciative Inquiry and motivational interviewing, promoted tools to help with mental health and wellbeing such as Every Mind Matters, and worked to widen awareness of Compassionate Friends.

2.2 The Future of Thrive Plymouth

Looking back over the original papers that set out Thrive Plymouth in the first instance, there is much that has remained the same – our strong focus on the four factors that lead to premature deaths, namely smoking, eating unhealthy diets, drinking too much alcohol and not being physically active, and the recognition that all of us can benefit from making small changes, wherever our starting point.

Thrive Plymouth always recognised the impact of the wider determinants of health; where you live, the relationships that you have with others, your work and your income, and the wider societal issues around you. But our understanding of these wider determinants has strengthened.

Some of the key areas where Thrive Plymouth has evolved includes;

- We have consciously moved away from the language of behaviours and lifestyles unless recognising the context.
- This means a move away from the word ‘choice’; language is important, and use of the word ‘choice’ is really only appropriate when comparing like with like. Some people have almost unlimited choice; some have barely any. Some people are forced to make choices to prioritise their children going to bed without hunger over long term health goals.
- Mental health and wellbeing has become a central pillar of Thrive Plymouth

- Understanding and appreciating the role that mental health and wellbeing plays on our resilience to the challenges that life throws at us, and ability to lead healthier lives.
- Trauma informed – as a city, we have recognised the impact of trauma; the way in which experiences in our past, especially our childhood, can change the way in which our brain chemistry works.
- Using appreciative enquiry to understand more about what is important to people
- Developed the community support – each year of Thrive Plymouth has grown partners, wellbeing hubs, community empowerment, covid response

In widening out to the context we have also involved more of our directorate and our partners

In October 2023, we will enter the tenth year of Thrive Plymouth. We are working on a more in depth review of the outcomes from Thrive Plymouth; clearly, there are multiple factors which influence our lifestyle and our health, which cannot be cancelled out by a programme such as this and so it is not as simple as comparing these factors before Thrive Plymouth and now. The impact of national policies on health and life expectancy, a global pandemic and an economic downturn have all played a very significant role. However, there are a number of factors that we can surmise about Thrive Plymouth;

- Many organisations across the city have come together around this clear ambition, producing a diverse and strong partnership. There is a shared ownership of the problem, and a willingness for diverse organisations to work together and to give of their time freely towards this aim
- Our partners are all aware of the importance of tackling inequalities, of some of the barriers and difficulties faced by some of our communities, and also of many of the interventions that can and do help
- Programmes such as our Wellbeing Hubs, Social Prescribing, Community Builders and Volunteering have been developed using Thrive Plymouth to focus our attention on the factors that influence health
- Plymouth has a coherence to the work being carried out to achieve its ambition, through Thrive Plymouth. This sense of a coherent programme has supported us in seeking funding from various sources
- The funding for Thrive Plymouth is negligible, at around £5k per year. No one is employed specifically to run Thrive Plymouth, we see it as a part of all of the roles within the Public Health team.

I will therefore be recommending formally in the near future that Thrive Plymouth is continued for the foreseeable future.

3 LIFE EXPECTANCY AND HEALTHY LIFE EXPECTANCY

3.1 Life expectancy

Life expectancy is an estimate of how long someone might live; it can be calculated from any age e.g. LE at birth. We use LE at birth throughout this document.
It is worth noting that someone who has already survived past childhood will have a longer LE than given at birth. For example, if someone had a life expectancy at birth of 88 years but has lived to 88, then their life expectancy is now 93 years.
This is based on the age that people in the area die, and is calculated using death certification data; three years worth of data is used to help us to see trends.

3.1.1 Summary

Nationally, Life expectancy (LE) had been increasing, with a relatively steady gradient over the last 50 years. This gradient reduced over the last decade meaning that LE on average was increasing, but increasing slowly. Further analysis shows that LE was still increasing quickly for wealthier groups but was actually dropping for more deprived groups, for females in particular. This was reported on in the Plymouth DPH Annual Report 2019 'Building wellbeing and resilience in a time of austerity'
The Covid-19 pandemic caused a sudden reduction in LE; with a larger drop for men than for women. Again, this was larger in more deprived groups than in wealthier ones.
In Plymouth;
Smaller numbers make the trends more difficult to prove but we believe we had seen similar patterns in LE general trends pre-pandemic.
Our lower death rates due to Covid19 during the pandemic mean that for the pandemic year 2020, Plymouth's LE was very similar to England average. LE in Plymouth for both males and females compares very well to statistically similar neighbours. The inequality gap by deprivation was lower in Plymouth for female than for England, and the same for males.

3.1.2 What causes differences in life expectancy?

Life expectancy is a calculation of the average age that a baby born into the area might be expected to live to. Much information is contained within this, and it does not take account of the distribution of the death, purely the average. Therefore the life expectancy data which has to be interpreted along with other sources of information. It is worth considering historical data to put this into context.
Historically, there has been a persistent story of improvement since detailed records began. Childhood vaccinations and antibiotics made a huge positive difference, as did improvements in living and working conditions. As healthcare improved, and became accessible to all, we have continued to see improvements.
Though the main trend has been to improve, there have been variations to this. Some events had an immediate and marked effect; the two World Wars, and particularly virulent strains of influenza. Others have a more gradual impact, which can be much harder to spot, such as the rise of smoking where the impact can be seen from years to decades after the behaviour starts. It can be difficult to understand how much of a contribution each element makes, and of course different things can interact at the same time.
Since records began, women have tended to live longer than men. The extent of the gap has varied, as have the underlying patterns; in the 19th century, the gap was relatively small as infectious diseases (often but not always in childhood) killed many and so dominated the statistics. The gap

began to widen, peaking at over 6 years in 1971 as poor working conditions and smoking reduced men's LE, but improved maternity care and lower rates of TB increased women's LE.

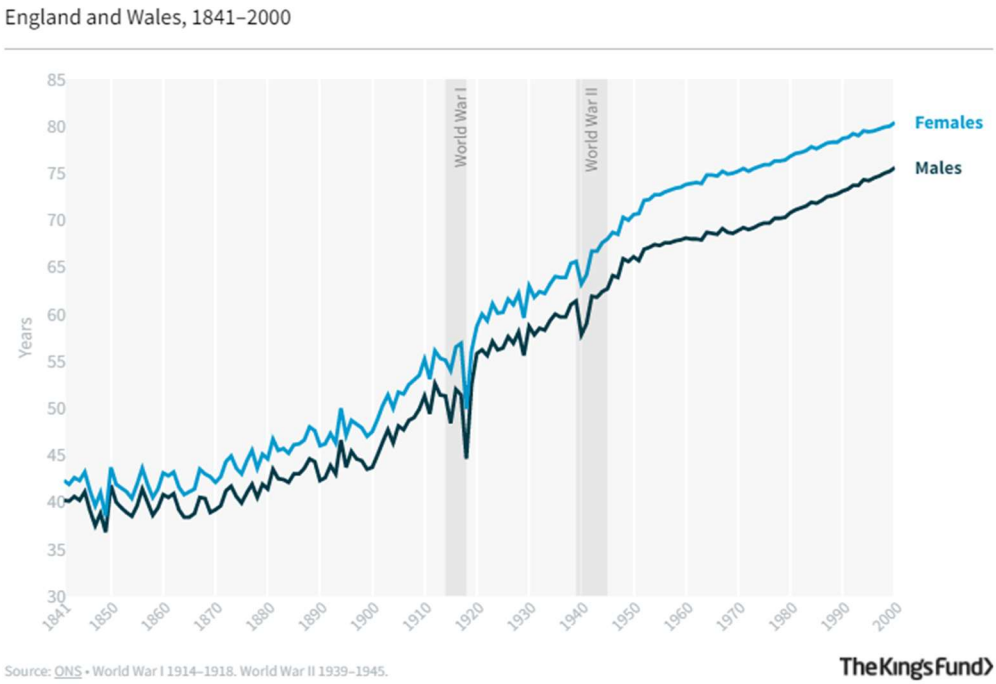


*Figure 1LE at birth, England and Wales, Kings Fund [**Error! Bookmark not defined.**]*

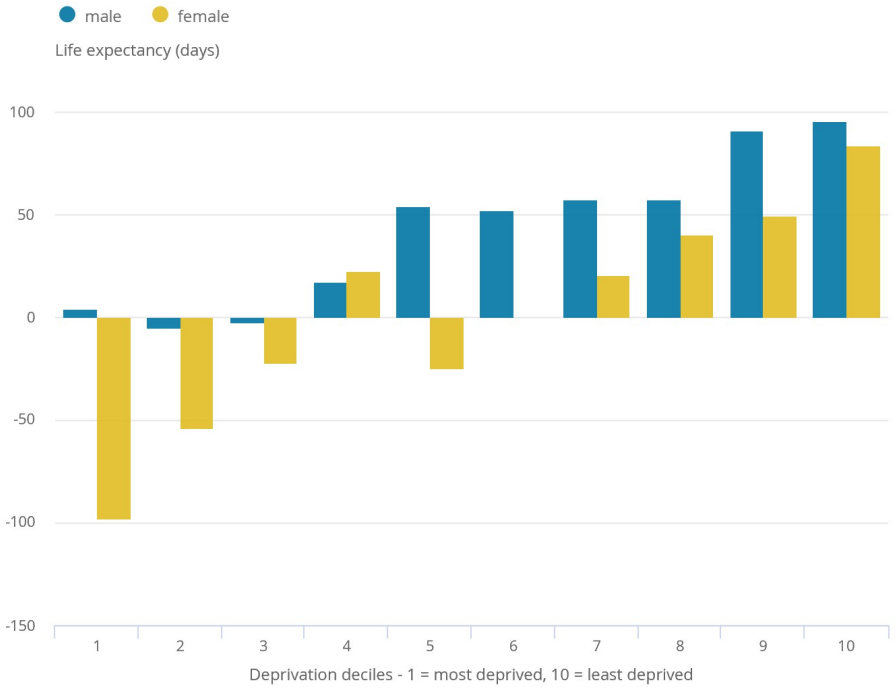
3.1.3 National trends pre-Covid-19

In my Annual Report 2019, I highlighted that there had been a slow-down in the increasing trend of life expectancy. This was highlighted by the Office of National Statistics

1. *Life expectancy at birth in the UK did not improve in 2015 to 2017 and remained at 79.2 years for males and 82.9 years for females.*
2. *ONS, September 2018*
3. *In England, the growth in the female inequality came from a statistically significant reduction in LE at birth of almost 100 days among females living in the most deprived areas between 2012 to 2014 and 2015 to 2017, together with an increase of 84 days in the least deprived areas.*
4. *ONS, March 2019*

The slowdown had been seen across the UK, at similar rates but with some slight differences in details of trends. The UK was not alone in seeing this slowdown of improvements; many other developed countries saw this too. However, the UK was second only to the US in terms of severity of the slowdown.

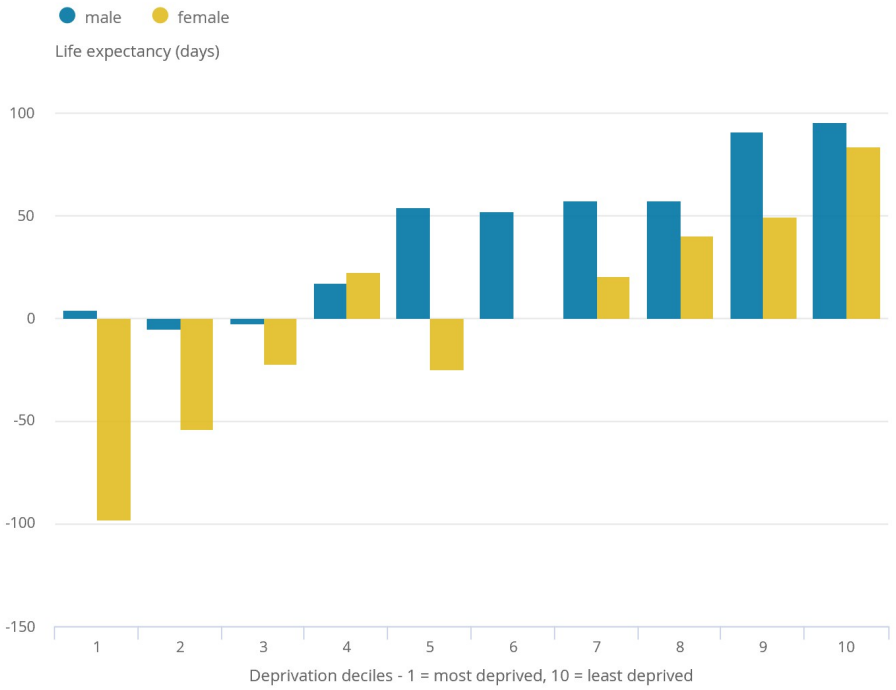
This was especially important as there was a very clear change with deprivation (see



Source: Office for National Statistics

Figure 2), which showed that LE had continued to grow for the less deprived groups (male and female) but had reduced for women in the more deprived groups.

Since then, further data has been released still covering the pre-covid-19 times, which uses data from 2017-2019. That showed a slight improvement in LE; positive news, although still well below the trajectory which might have been expected had the slow down not occurred.



Source: Office for National Statistics

Figure 2 Change in LE in days between 2012 to 2014 and 2015 to 2017, by national deprivation decile, England and Wales, 2015 to 2017, ONS published March 2019 Health state life expectancies by national deprivation deciles, England and Wales: 2015 to 2017, ONS, published March 2019

3.1.4 National trends through Covid-19

Clearly, an event as significant as a global pandemic such as Covid-19 might be expected to change life expectancy. This can clearly be seen, for example the Kings Fund report that:
By 2019, life expectancy at birth in England had increased to 79.9 years for males and 83.6 years for females. However, the Covid-19 pandemic caused life expectancy in 2020 to fall to 78.6 years for males and to 82.6 years for females, the level of a decade ago.
As can be seen on the graph, the data for 2021 is a little better, but still a very significant drop from pre-pandemic levels. Data for 2022 is not yet available.

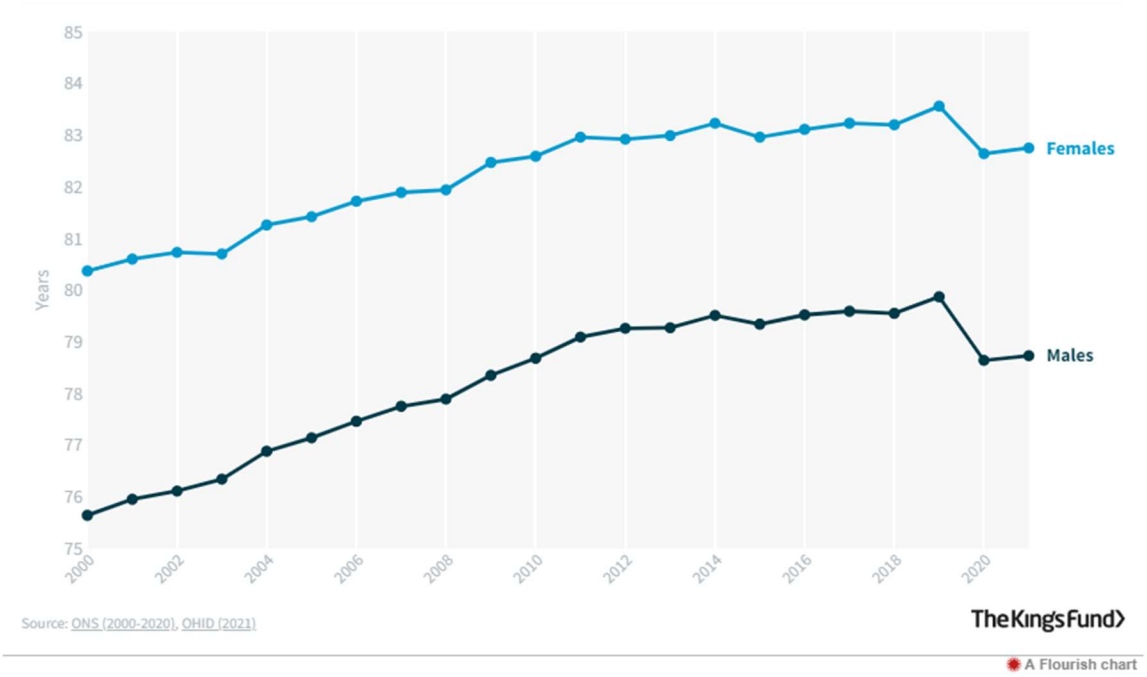


Figure 3 LE at birth for single years, including 2020 and 2021 (What is happening to Life expectancy? Updated Aug 2022, Kings Fund)

3.1.5 Forward Look

Life expectancy is calculated when all of the relevant data sources have been received, checked, analysed and then added to the calculation, and so is not available quickly or for part-years. However we can consider excess deaths – simply considering whether there have been more deaths in a given time period than we might expect from history.

Unfortunately England does have a continuing trend of having more deaths than might be expected when considering the 5 years pre-pandemic.
The graph below compares the data for every week since the start of the pandemic, with the average from the same week in the years 2015, 16, 17, 18 and 19 i.e. a five year average; this is referred to as the 'expected' number of deaths. The bottom curve shows the total numbers of deaths across England, with those known to be caused by Covid-19 highlighted in yellow. The

dotted line shows the expected deaths. In the top graph, each bar shows the mortality rate for that week minus that 'expected'; pale green (above the line) are excess deaths and the darker bars below the line are those under the average. Peaks can very clearly be seen that respond to the peaks of covid-19 caused by subsequent variants, but also it is notable that the deaths have been higher than expected since April 2022.

If we consider the time period since 'Living with Covid' which marked the end of the mitigations, due to the very widespread take-up of the vaccination, then we are still seeing excess deaths at the rate of 8% overall. Although the number of deaths is highest in older people, if we consider the ratios of those expected to those that we have seen, then from March 2022 til April 2023, there were;

- Overall excess of 8% more deaths than expected
- At 8% for young people (0-24 year olds)
- At 9% for 25 – 49 year olds
- highest for 50-64 year olds, at 13%
- Lowest in 75-84 year olds at 6%
- At 8% for those 85 and above

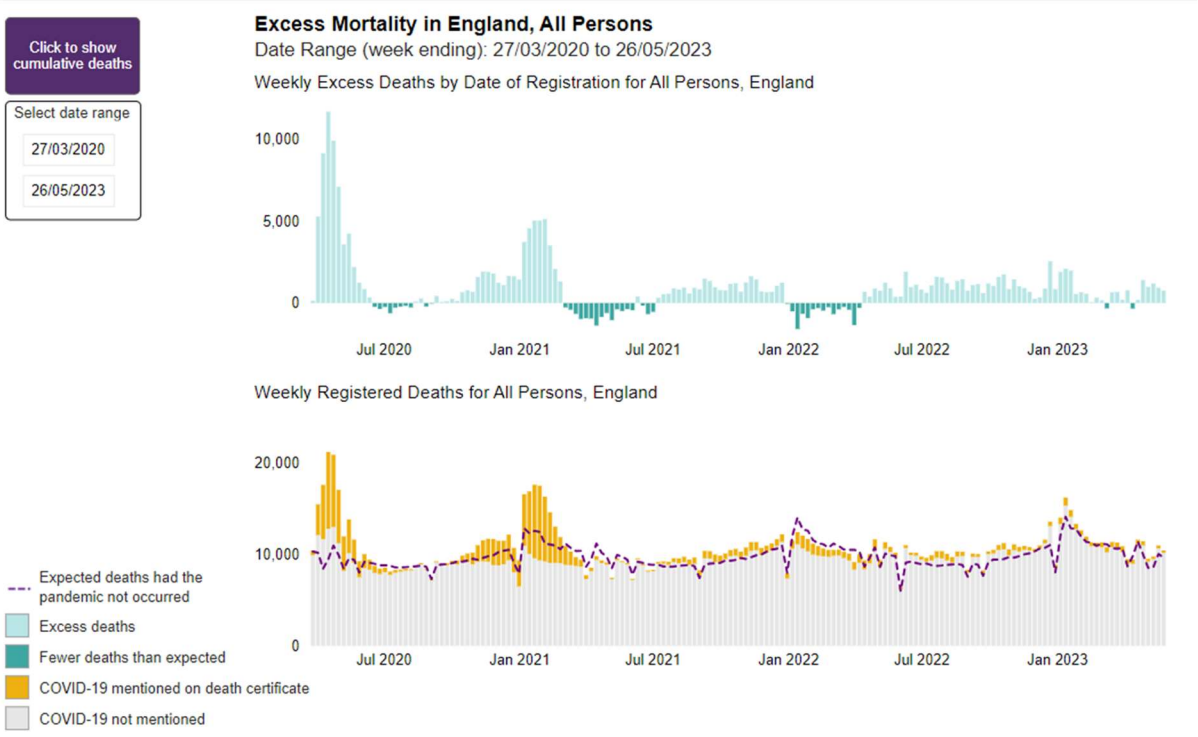


Figure 4 Excess mortality in England for all persons from the start of the pandemic, compared to the average mortality by week for the previous 5 years – our best estimate of what the mortality would usually be. Source; Excess Mortality Reports [*Public health profiles - OHID (phe.org.uk)*]

The reasons behind these excess deaths is being looked into but is probably related to a number of issues; this includes Covid19, both short term (i.e. on the death certificate) and longer term

impacts, such as cardiovascular issues for which the evidence base seems to be increasing. There have also been issues with access to care both within the pandemic and now with the NHS under increasing pressure. Further analysis is required before this can be fully understood.

3.1.6 Local trends in life expectancy

Comparative data at Local Authority level is provided by UK Health Security Agency as part of the Public Health Outcomes Framework (PHOF).

Calculations of LE for these smaller areas is less accurate and a single figure can be a little misleading. The three-year average is generally considered to be more accurate as it includes more data points, and when we look at this for Plymouth, both male and female LE are below that for England, with a gap of 0.6 years on average.

However, when we compare with other places that have similar populations[1], Plymouth compares favourably, having a longer LE for both men and women than these similar places. This is very positive – though it should be noted that there is some uncertainty in the estimate and the differences are small.

Life expectancy at birth	**Plymouth Value**	**England Value**	**Gap**	**Rank compared to similar areas**
Using three- year rolling average for 2018-2020				
Females	82.5	83.1	0.6	1 (i.e. longest)
Males	78.8	79.4	0.6	1 (joint longest LE)

Table 1Showing data taken from the UK HSA PHOF. The rank uses 15 comparator areas identified by Chartered Institute of Public Finance and Accountancy (CIPFA) and a high rank means that LE in Plymouth is high

When we look at the trend over time, unfortunately we see that LE in England dropped in 2018-2020 due to the impact of the pandemic in the 2020 data. Plymouth was impacted slightly less, and had fewer deaths than many other areas. This meant that the gap between Plymouth and England as a whole reduced. Although of course the reduction in the gap is a positive outcome, this has been achieved through the LE for England worsening which is not the way in which we would have wanted to see this come about.

It should be noted though that there is significant variation from year to year and these figures are estimates.

[1] The rank uses 15 comparator areas identified by Chartered Institute of Public Finance and Accountancy (CIPFA) and includes places such as Sheffield, Bolton and Wigan

3.1.7 Inequality in LE

Inequality in Life Expectancy is a measure of the gap in LE between the most deprived 10% of the population and the least deprived 10%. It is calculated using three year averages.
This shows that for both men and for women, the inequality in LE is lower in Plymouth than it is for England as a whole.

- For females, the gap is 7.9 years for England and 5.2 for Plymouth
- For males, the gap is 9.7 years for England, and is 8.7 years for Plymouth

For both men and women, inequality is smaller in Plymouth compared to England.

3.2 Healthy Life Expectancy

Healthy life expectancy (HLE) is a measure of how long a person would expect to live in good health based on contemporary mortality rates and prevalence of self reported good health. This is calculated from responses to a question on general health in the Annual Population Survey (APS) conducted by the Office for National Statistics (ONS).
This has only been calculated since 2011 and so is a relatively new data set, with limited trend data.

3.2.1 National Trends

HLE for England has shown little change since 2009-11 when the data was first calculated.

- HLE for males at birth in 2009-11 was 63.0 years. It reached a peak of 63.4 between 2012 and 2018, and has slight reduced since them to 63.1 years for 2018-20.
- HLE for females at birth in 2009-11 was 64.0 years. It has fluctuated a little and was 63.9 in 2018-20.

3.2.2 Local trends

HLE for Plymouth population is;

- 59.3 years for women (significantly lower than England). There has been a reduction over time, though this is not statistically significant, and there is no evidence of a worsening trend.
- 64.3 years for men (similar to England). There have been changes over time but these are small; previously (up until 2015-17) Plymouth was significantly below England but we have seen relative improvement and it is now similar.

When we consider Plymouth's HLE compared to similar areas using the CIPFA comparator areas, we see that;

- For females, despite having the highest ranking LE, the HLE is one of the worst compared to similar areas (12/16)

- For males, as well as having the highest LE of the comparators, Plymouth also has the highest HLE

This means that a female in Plymouth tends to report worse health than a similar woman (age, deprivation etc), but does not die any earlier.

3.2.3 Why is female HLE lower in Plymouth than we would expect?

Looking at the range of information available, there are some statistics around health and wellbeing that appear to support this HLE and some which do not, and no clear cause for this difference. For example;

- Plymouth does have a low disability-free LE for women – below the England average,
- Social isolation is highlighted as an issue for adults in Plymouth – often (but not always) women
- In terms of self reported wellbeing, Plymouth does not have low rates for satisfaction, happiness, or high rates for anxiety.
- Under 75 mortality rate considered preventable – Plymouth has higher rates than England, but is one of the lowest rates compared to similar areas.
- Health improvement
  - Adult obesity is slightly worse than England but mid table compared to similar areas
  - Adult smoking is much worse than England and high compared to similar areas
  - Physical inactivity is similar to England and mid table compared to similar areas
  - Admissions due to alcohol are similar to England and low compared to similar areas

Looking wider, there is emerging evidence that starts to point us towards considering issues such as childcare provision and the availability of employment in Plymouth.
Although there may be some pointers, there is no conclusive reason as to why Plymouth female HLE is low. HLE has not been used for long enough to have evidence from places who have managed to improve HLE; there is no concrete evidence to differentiate between the risk factors for LE and for HLE. And yet, there are large variations. This is an area for further work and research.

4 THRIVE PLYMOUTH INDICATORS

The following gives a brief over view of the indicators relevant for Thrive Plymouth. For a wider set of data and analysis, please see the Plymouth Report 2023

4.1 Smoking

Our smoking rate has shown a continuing downward trend. In 2021, our rates were showing as statistically similar to England, though still higher at 15.5%, compared to 13% for England. These figures are based on a sample and there is a wide range so although the estimate is 15.5%, it may lie between 11.4% and 19.5%.

There is considerable scope for these levels to drop further. We have recently been recognised nationally for some of the positive work that we have been doing around the use of vapes as a smoking cessation tool.

4.2 Healthy diets

Plymouth's figures for the number of adults who eat five portions of fruit and vegetables a day show that around 36% of us are managing this. This exceeds the England average of 32.5%.

4.3 Overweight and Obesity

Our figures for childhood overweight and obesity are higher than England, at 24.4% for those in Reception compared to 22.3% for England. This shows a slight drop over the last three years. Childhood obesity is very closely linked to deprivation, and if we compare Plymouth to other similar areas we sit around the middle of the table.
However, the very positive finding is that in Year 6 we have a smaller proportion than one might expect – at 35.1%, we sit below England (37%) and below all but one of our statistical neighbours. Even though this is positive, there is still an increasing trend over time.
Figures for estimates of adults overweight and obesity are 68.5% for Plymouth, slightly higher than England at 63.8%, and around the middle of the table compared to similar areas.

4.4 Physical activity

Physically active children and young people – we were doing extremely well around this indicator, very easily exceeding England levels, but in 21/22 have had a drop back to levels similar to England as a whole. There is no obvious reason for this and we hope to see it increase again.
Our numbers of physically active adults (i.e. reaching or exceeding the amounts recommended for good health) are almost the same as England, at 66.3%. Numbers of adults that are inactive is slightly above the England average at 23.6% (England 22.3%) – this is classed as similar as they are broad estimates.

4.5 Alcohol

We do not have figures for estimates of alcohol consumed. Instead, we look at the impacts of alcohol harm in terms of hospital admissions which are for conditions directly related to alcohol. Plymouth's figures sit a little below England for this, at 446 per 100,000; some of the lowest figures across our statistically similar neighbours.

4.6 Mental Health and Wellbeing

The prevalence of depression in adults who are seeing the GP for the condition is 15.4% of the registered population in Plymouth, compared to 12.7% for England as a whole (2021/22). This is comparable to our statistical neighbours. There has been an increasing trend for Plymouth and for England since these measurements were first recorded in 2012/13.

Emergency admissions for self-harm are higher than the England average, using figures for 2021/22 which is the most recent data; though this lower than the South West average.

Mental wellbeing measures tend to be self-reported through a variety of surveys such as the Annual Population Survey. The Plymouth scores for 21/22 in self-reported wellbeing measures (such as happiness, anxiety, satisfaction with life) are similar to those for England, however, only a small sample of data is collected from within Plymouth, and as a result it is difficult to conclude whether there are differences compared to England.

4.7 Summary

Overall then we have a mixed picture. For physical activity, alcohol harm and healthy diet (as measured by fruit and vegetable consumption), we are doing fairly well as a city. But there is plenty of room to improve around smoking, and healthy weight, and we are also concerned about mental health and wellbeing.

Also, we are very aware that the context has been changing since many of these metrics were measured, with increasing pressure on household budgets. Economic downturns and the impact on people's income tends to have a negative impact on health and wellbeing.

5 UPDATES ON KEY PUBLIC HEALTH TOPICS

Further information on the following Public Health topics is covered in the following sections. Rather than extend the length of the report, these are available on the website here; https://www.plymouth.gov.uk/director-public-health-annual-report-2022

1. Sexual Health
2. Health Improvement
3. Public Health Nursing
4. Substance misuse
5. Physical activity
6. CYP Healthy Weight

Councillor Mary Aspinall
Cabinet Member for Health and Adult Social Care