

Vaccinations and Screening

Introduction

Vaccination

Vaccination is the safest and most effective way to protect the population from vaccine preventable diseases. As well as protecting the individual from these diseases, they are less likely to transmit the infection reducing the risk to unvaccinated people. The result of this is herd immunity. For each vaccine preventable disease, a certain proportion of the population need to be vaccinated to ensure herd immunity.

The adult vaccination programme in the UK covers the Pneumococcal Polysaccharide Vaccine (PPV), Influenza and Shingles. These vaccine programmes offer protection to the older population who are at increased risk.

Screening

Screening is a way of identifying an increased risk of a particular condition in apparently healthy people. There are a range of screening programmes in the UK but this section will consider cancer screening for bowel, breast and cervical cancer. Screening looks for early signs that cancer is developing. This then means that cancer can be picked up at an early stage allowing early interventions that can either stop the cancer developing (such as with cervical cancer) or provide early opportunities for treatment.

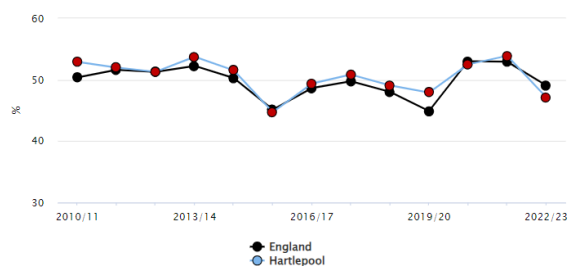
Main Issues

Hartlepool's flu vaccination coverage for all at risk individuals in 2022/23 is 47.1%. This is below the minimum recommended population coverage of 55%, and has been below this level for the entirety of the 13 year data collection period. However, during this same period neither the England nor north east regional average has exceeded 55%. Hartlepool has largely mirrored the England pattern across the

reporting period. In the 2022/23 figures, Hartlepool have the 2nd lowest rate in the North east, though only Northumberland have exceeded the 55% target.

Population vaccination coverage: Flu (at risk individuals)

Proportion - %



Recent trend: → No significant change

Benchmarking against goal: <55% ≥55%

Period	Count	Value	Hartlepool		North East	England
			95% Lower CI	95% Upper CI		
2010/11	4,391	52.9%	51.8%	54.0%	52.0%*	50.4%*
2011/12	4,996	52.0%	51.0%	53.0%	53.7%*	51.6%*
2012/13	5,210	51.3%	50.3%	52.3%	51.8%*	51.3%*
2013/14	5,449	53.8%	52.8%	54.7%	53.2%*	52.3%
2014/15	5,656	51.5%	50.6%	52.5%	51.0%*	50.3%
2015/16	5,702	44.7%	43.8%	45.6%	45.1%*	45.1%
2016/17	5,541	49.4%	48.5%	50.3%	49.5%*	48.6%
2017/18	6,096	50.8%	49.9%	51.7%	50.6%*	49.7%
2018/19	5,993	49.1%	48.2%	50.0%	49.2%*	48.0%
2019/20	6,135	47.9%	47.1%	48.8%	46.9%*	44.9%
2020/21	7,829	52.5%	51.7%	53.3%	56.6%*	53.0%*
2021/22	7,578	53.9%	53.1%	54.7%	57.1%*	52.9%
2022/23	6,988	47.1%	46.3%	47.9%	51.6%*	49.1%

Source: <https://www.gov.uk/government/collections/vaccine-uptake#seasonal-flu-vaccine-uptake-figures>

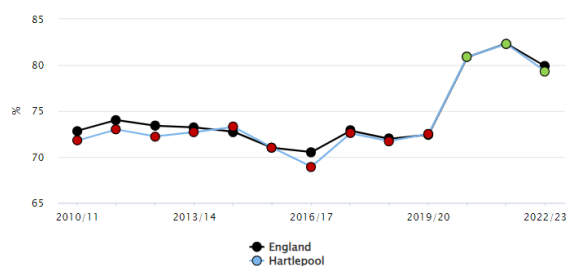
Population vaccination coverage: Flu (at risk individuals)

Proportion - %

Area	Recent Trend	Count	Value	95% Lower CI	95% Upper CI
England	↑	4,098,547	49.1	49.0	49.1
North East region	↑	208,135	51.6*	51.5	51.8
Northumberland	↑	23,110	59.4	58.9	59.9
North Tyneside	↑	15,875	54.5	54.0	55.1
County Durham	↑	41,529	54.1	53.7	54.4
Gateshead	↑	17,748	52.6*	52.0	53.1
Redcar and Cleveland	↑	11,120	52.2	51.6	52.9
South Tyneside	→	13,311	51.1	50.5	51.7
Stockton-on-Tees	↑	13,832	50.9	50.3	51.5
Darlington	↑	8,337	49.4	48.6	50.1
Sunderland	↑	24,015	49.3	48.9	49.7
Newcastle upon Tyne	↑	22,330	48.5	48.0	48.9
Hartlepool	→	6,988	47.1	46.3	47.9
Middlesbrough	→	9,940	41.9	41.3	42.6

Source: <https://www.gov.uk/government/collections/vaccine-uptake#seasonal-flu-vaccine-uptake-figures>

Focusing in on flu vaccination coverage just for the over 65s, Hartlepool's rate in 2022/23 was 79.3%, which is above the recommended level of population coverage of 75%. Hartlepool has surpassed the 75% target for the three years from 2020/21 to 2022/23, which is the same as both the England and north east rates. Hartlepool's rate again follows a similar pattern to England, both of which saw a large jump in 2020/21, which, even with a slight decline in 2022/23, is still higher than any pre-2020/21 rate in the reporting period.



Recent trend: ↑ Increasing & getting better

Benchmarking against goal: <75% ≥75%

Period	Hartlepool		95% CI		North East	England
	Count	Value	Lower CI	Upper CI		
2010/11	9,478	71.8%	71.0%	72.5%	74.5%*	72.8%*
2011/12	11,362	73.0%	72.3%	73.7%	75.8%*	74.0%*
2012/13	11,951	72.2%	71.6%	72.9%	74.8%*	73.4%*
2013/14	12,345	72.7%	72.0%	73.3%	74.9%*	73.2%
2014/15	12,672	73.3%	72.6%	73.9%	74.6%*	72.7%
2015/16	12,396	71.0%	70.3%	71.7%	72.1%*	71.0%
2016/17	12,133	68.9%	68.2%	69.6%	72.4%*	70.5%
2017/18	12,911	72.6%	71.9%	73.2%	74.2%*	72.9%
2018/19	13,004	71.7%	71.1%	72.4%	73.1%*	72.0%
2019/20	13,310	72.5%	71.8%	73.1%	73.8%*	72.4%
2020/21	14,984	80.9%	80.3%	81.4%	83.7%*	80.9%*
2021/22	15,553	82.3%	81.7%	82.8%	85.3%*	82.3%
2022/23	15,293	79.3%	78.7%	79.9%	82.5%*	79.9%

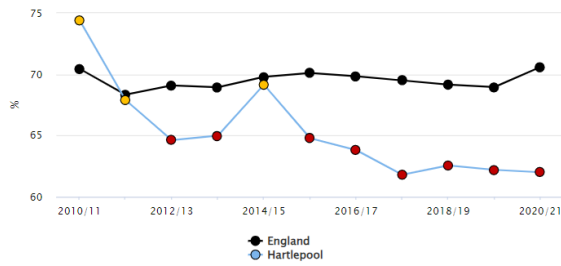
Source: <https://www.gov.uk/government/collections/vaccine-uptake#seasonal-flu-vaccine-uptake-figures>

For the 2022/23 data, Hartlepool is again, similar to the at risk individuals, the 2nd lowest rate for the 65+ population in the north east. However, all authorities in the north east have exceeded the 75% national target.

Area	Recent Trend	Count	Value	95% Lower CI	95% Upper CI
England	↑	8,563,418	79.9	79.8	79.9
North East region	↑	436,082	82.5*	82.4	82.6
Northumberland	↑	59,550	85.6	85.3	85.9
Redcar and Cleveland	↑	26,362	84.3	83.9	84.7
North Tyneside	↑	33,508	83.7	83.4	84.1
County Durham	↑	88,640	83.6	83.4	83.9
Stockton-on-Tees	↑	27,868	82.4	82.0	82.8
Gateshead	↑	34,343	82.0	81.7	82.4
Darlington	↑	18,740	82.0	81.4	82.4
Sunderland	↑	46,782	81.0	80.7	81.3
Newcastle upon Tyne	↑	37,675	80.9	80.5	81.2
South Tyneside	↑	26,156	80.3	79.9	80.8
Hartlepool	↑	15,293	79.3	78.7	79.9
Middlesbrough	↑	21,165	78.5	78.0	79.0

Source: <https://www.gov.uk/government/collections/vaccine-uptake#seasonal-flu-vaccine-uptake-figures>

The pneumococcal polysaccharide vaccine (PPV) protects against 23 types of Streptococcus pneumoniae bacterium and since 2003 has been available to anyone aged 65 or over. Since the start of the data collection period in 2010/11, apart from one year of substantial increase, Hartlepool's population coverage for PPV has been in general decline. The coverage rate in 2020/21 is 16.2% lower than it was at its peak in 2010/11, though the 2020/21 rate is the fourth year of relatively stable figures. Hartlepool is 12.8% lower than the England average in 2020/21, which is the biggest gap throughout the reporting period. Hartlepool has failed to reach the 75% target in any of the 11 years in the reporting period, and has not been rated amber since 2014/15. Hartlepool's 2020/21 rate is the lowest in the north east and the 8th lowest in England.



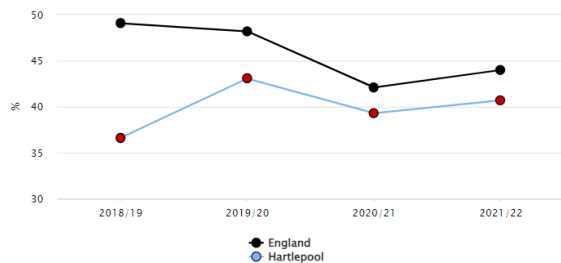
Recent trend: No significant change

Benchmarking against goal: <65% 65% to 75% ≥75%

Period	Hartlepool				North East	England
	Count	Value	95% Lower CI	95% Upper CI		
2010/11	4,752	74.4%	73.4%	75.5%	72.4%*	70.5%*
2011/12	6,325	67.9%	66.9%	68.8%	69.9%*	68.3%*
2012/13	6,606	64.6%	63.7%	65.5%	70.8%*	69.1%*
2013/14	10,967	65.0%	64.3%	65.7%	71.1%	68.9%
2014/15	10,619	69.1%	67.8%	70.5%	71.7%	69.8%
2015/16	11,117	64.8%	64.1%	65.5%	72.2%*	70.1%
2016/17	11,035	63.8%	63.1%	64.5%	72.1%	69.8%
2017/18	10,950	61.8%	61.0%	62.5%	71.0%	69.5%
2018/19	11,280	62.6%	61.9%	63.3%	70.7%	69.2%
2019/20	11,317	62.2%	61.5%	62.9%	70.9%	69.0%
2020/21	11,460	62.0%	61.3%	62.7%	73.7%	70.6%

Source: UK Health Security Agency (UKHSA)

Across the four reporting period for the Shingles vaccine for those aged 71, Hartlepool has failed to reach the 60% target or the 50% amber target, though the same is true for England as a whole. After a relatively large increase in 2019/20, 17.6%, from 36.6% in 2018/19 to 43.1% in 2019/20, Hartlepool’s rate has largely mirrored that of England as a whole.



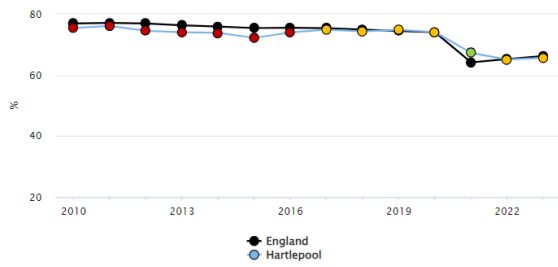
Recent trend: Could not be calculated

Benchmarking against goal: <50% 50% to 60% ≥60%

Period	Hartlepool				North East	England
	Count	Value	95% Lower CI	95% Upper CI		
2018/19	408	36.6%	33.8%	39.5%	49.8%	49.1%
2019/20	450	43.1%	40.1%	46.1%	50.8%	48.2%
2020/21	404	39.3%	36.4%	42.4%	46.5%	42.1%
2021/22	390	40.7%	37.6%	43.8%	49.9%	44.0%

Source: UK Health Security Agency (UKHSA)

Hartlepool’s cancer screening levels for breast cancer has again largely mirrored the England trend, and has been at least statistically similar to the England uptake since 2017, a run of seven consecutive years. Hartlepool’s 2023 rate of 65.6% is the 4th lowest in the north east and is comparable to Hartlepool’s 2022 rate of 65.1%.

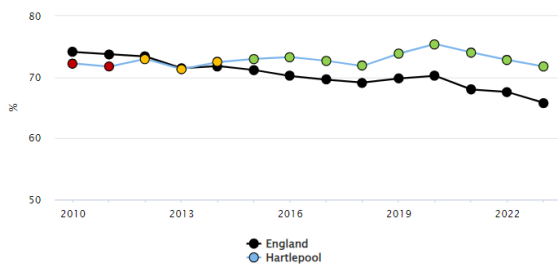


Recent trend: ↓ Decreasing & getting worse

Period	Count	Value	Hartlepool		England
			95% Lower CI	95% Upper CI	
2010	7,098	75.4%	74.6%	76.3%	76.9%
2011	7,305	76.1%	75.2%	76.9%	77.1%
2012	7,351	74.5%	73.6%	75.3%	76.9%
2013	7,461	74.0%	73.2%	74.9%	76.3%
2014	7,569	73.8%	73.0%	74.7%	75.9%
2015	7,604	72.2%	71.3%	73.0%	75.4%
2016	7,961	74.0%	73.1%	74.8%	75.5%
2017	8,281	74.9%	74.1%	75.7%	75.4%*
2018	8,313	74.3%	73.5%	75.1%	74.9%*
2019	8,528	74.9%	74.0%	75.6%	74.5%*
2020	8,508	74.1%	73.3%	74.9%	74.1%*
2021	7,807	67.3%	66.4%	68.1%	64.1%*
2022	7,636	65.1%	64.2%	65.9%	65.2%*
2023	7,835	65.6%	64.8%	66.5%	66.2%*

Source: NHS Digital data not in the public domain, from the Breast Screening Programme

Cervical cancer screening in Hartlepool for those aged 25 to 49 is on a nine year run of statistical superiority to the England average. Hartlepool’s 2023 rate of 71.8% is 9.1% higher than the England rate. Hartlepool, and England, have seen a year on year decline in rates for the last three years, Hartlepool has fallen from a high of 75.4% in 2020 to 71.8% in 2023, a decline of 4.8%. In the same time period the England rate has fallen by 6.3%.



Recent trend: ↓ Decreasing & getting worse

Period	Count	Value	Hartlepool		North East	England
			95% Lower CI	95% Upper CI		
2010	11,096	72.3%	71.5%	73.0%	76.4%*	74.1%*
2011	10,940	71.7%	71.0%	72.4%	75.8%*	73.7%*
2012	11,112	73.0%	72.3%	73.7%	76.3%*	73.4%*
2013	10,842	71.3%	70.6%	72.0%	74.2%*	71.5%*
2014	10,925	72.4%	71.7%	73.2%	74.6%*	71.8%*
2015	10,948	73.0%	72.3%	73.7%	74.3%*	71.2%*
2016	10,968	73.3%	72.6%	74.0%	73.8%*	70.2%*
2017	10,886	72.7%	71.9%	73.4%	73.3%*	69.6%*
2018	10,754	71.8%	71.1%	72.5%	73.0%*	69.1%*
2019	11,060	73.9%	73.2%	74.6%	74.2%*	69.8%*
2020	11,246	75.4%	74.7%	76.1%	74.9%*	70.2%*
2021	11,035	74.0%	73.3%	74.7%	73.1%*	68.0%*
2022	10,887	72.8%	72.1%	73.5%	72.7%*	67.6%*
2023	10,911	71.8%	71.0%	72.5%	70.8%*	65.8%*

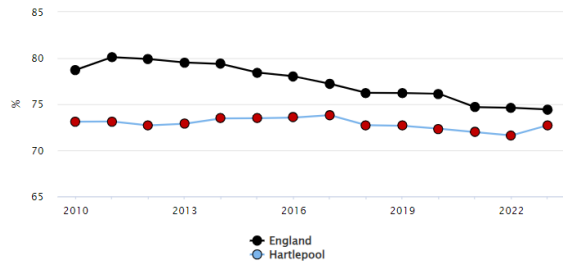
Source: NHS Digital data not in the public domain, from the Cervical Screening Programme

For those aged 50 to 64 in Hartlepool, cervical screening has not been statistically superior to the England rate at any point in the 13 year reporting period. Hartlepool’s rate across the reporting period has remained largely stable, with no more than 1.5%

change from year to year. The 2023 rate is 0.5% lower than the 2010 rate. The gap between Hartlepool and England in 2023 is 2.3%, this the smallest gap in the 13 year reporting period.

Cancer screening coverage: cervical cancer (aged 50 to 64 years old)

Proportion - %



Recent trend: ➔ No significant change

Period	Count	Value	Hartlepool		North East	England
			95% Lower CI	95% Upper CI		
2010	5,362	73.1%	72.1%	74.1%	79.8%*	78.7%*
2011	5,398	73.1%	72.1%	74.1%	79.3%*	80.1%*
2012	5,452	72.7%	71.7%	73.7%	79.5%*	79.9%*
2013	5,552	72.9%	71.9%	73.9%	79.0%*	79.5%*
2014	5,732	73.5%	72.5%	74.4%	78.9%*	79.4%*
2015	5,845	73.5%	72.5%	74.4%	78.3%*	78.4%*
2016	6,033	73.6%	72.6%	74.5%	77.8%*	78.0%*
2017	6,176	73.8%	72.9%	74.7%	77.1%*	77.2%*
2018	6,204	72.7%	71.8%	73.7%	76.3%*	76.2%*
2019	6,379	72.7%	71.7%	73.6%	76.3%*	76.2%*
2020	6,471	72.3%	71.4%	73.3%	76.5%*	76.1%*
2021	6,534	72.0%	71.0%	72.9%	75.6%*	74.7%*
2022	6,595	71.6%	70.7%	72.5%	75.7%*	74.6%*
2023	6,730	72.7%	71.8%	73.6%	75.6%*	74.4%*

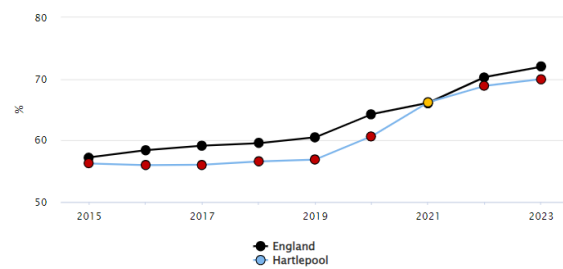
Source: NHS Digital data not in the public domain, from the Cervical Screening Programme

Bowel cancer screening in Hartlepool has increased year on year for the last seven years, from 56% in 2016 to 70% in 2023, an increase of 25%. However, throughout the nine year reporting period, Hartlepool has, apart from one year of statistical similarity in 2021, remained statistically worse than the England average.

Hartlepool's trend across the reporting period has largely mirrored that of England, though the gap between the two closed to 0.2% in 2021, but since then has again began to pull apart, with Hartlepool 2.8% lower than England in 2023.

Cancer screening coverage: bowel cancer

Proportion - %



Recent trend: ➔ Increasing & getting better

Period	Count	Value	Hartlepool		North East	England
			95% Lower CI	95% Upper CI		
2015	8,260	56.3%	55.4%	57.1%	60.0%*	57.3%*
2016	8,389	56.0%	55.2%	56.8%	60.1%*	58.4%*
2017	8,588	56.1%	55.3%	56.8%	60.5%*	59.2%*
2018	8,896	56.6%	55.8%	57.4%	61.0%*	59.5%*
2019	9,230	56.9%	56.1%	57.7%	61.9%*	60.5%*
2020	10,033	60.7%	59.9%	61.4%	65.6%*	64.3%*
2021	11,239	66.2%	65.5%	66.9%	69.1%*	66.1%*
2022	11,797	68.9%	68.2%	69.6%	72.5%*	70.3%*
2023	12,171	70.0%	69.3%	70.7%	74.0%*	72.0%*

Source: NHS Digital data not in the public domain, from the Bowel Screening Programme

Current Services

- Hartlepool is a member of the Tees Cancer Locality group - a locality multidisciplinary group that meets to ensure good quality cancer services are provided for the populations of Hartlepool, Stockton , South Tees, Hambleton , Richmond and Whitby (CC) areas; within community , social , primary and secondary care settings in conjunction with tertiary centres, voluntary organisations and the Northern Cancer Alliance . The purpose of this group is to oversee implementation of the national cancer strategy across the population areas, with the benefit of sharing knowledge, expertise and resources to benefit local areas to improve patient pathway processes, patient outcomes and experiences. The group advises commissioning organisations on the priorities for resourcing across the whole cancer agenda, this includes screening , prevention, treatment and living beyond cancer. Data shared in the group helps to inform local plans to achieve performance assurance against national targets.

Future Intentions

To help improve cervical screening uptake at practice levels and support GP practice staff to increase screening uptake. The 'No Fear campaign' is being launched across the region and work is planned to support practices to become no fear sites.

- Work directed from the Bowel cancer Screening Programme Board and Tees Cancer locality Group is supporting setting up a website for information around bowel screen. There is work planned in practices as part of the 'reduce your risk' work for bowel screening as part of a Teesside approach to screening.
- Work directed from the Breast screening Programme continues to offer screening and support for breast screening
- As part of the Public Health Strategy for Hartlepool the future intention is to support more companies to become involved with the Better Health at Work award (BHAWA). This will encourage employees to access health information, be more informed and access screening initiatives provided in the workplace.