Gateshead Council

HEALTH AND WELLBEING BOARD
3 March 2017

TITLE OF REPORT: **Health Protection Assurance Annual Report 2015/16**

Purpose of the Report

1. To provide assurance to the Health & Wellbeing Board on the delivery of the Council's statutory duties regarding health protection assurance.

Background

2. Health protection describes those activities and arrangements that seek to protect the population from risks to health arising from biological, environmental or chemical hazards. It includes:

    - Prevention - screening, immunisation and vaccination schemes to prevent the incidence of diseases
    - Surveillance – systems of disease notification, identifying outbreaks
    - Control – management of individual cases of certain diseases to reduce the risk of spread
    - Communication – communicating messages and risks during urgent and emergency situations).

3. The Director of Public Health (DPH), employed by Gateshead Council, is responsible for the exercise of the local authority's public health functions. This includes those conferred upon the Council by Regulation 8 of the Local Authorities (Public Health Functions and Entry to Premises by Local Healthwatch Representatives) Regulations 2013 to promote "the preparation of or participation in appropriate local health protection arrangements". This report forms part of those arrangements.

4. The attached report (Appendix 1) provides further detail of those arrangements and activity from ***April 2015 to March 2016***. A brief summary is provided below.

Immunisation

5. NHS England commissions the full range of child and adult immunisation programmes for Gateshead. Key points to note include:

    - Uptake of the routine childhood immunisation programme is amongst the highest in England;
    - By 12 months, 95.2% of children in Gateshead had been immunised against diphtheria, tetanus, pertussis, polio and haemophilus influenza type b (93.6% in England);
    - By 24 months, 92.4% (91.9%) had received measles, mumps and rubella (MMR) vaccine (dose 1);
    - An increase nationally in cases of one type of meningitis (MenW) prompted the addition of a new vaccination to the national programme. The new vaccination, MenACWY, is offered to young people and "freshers" starting university. By the

end of August 2016, 93.6% of Year 9 students in Gateshead had been vaccinated;

- A new vaccine for Meningitis B was introduced to the national childhood immunisation programme;
- In 2015/16, seasonal flu vaccine was offered to:
  - Those aged 65 years and over
  - Those aged six months to under 65 in clinical risk groups
  - All pregnant women
  - All two, three, and four year olds
  - All children in school years 1 and 2
  - Those in long-stay residential care homes or other long stay care facilities
  - Carers
  - Frontline health and social care workers;
- Gateshead continued to pilot flu vaccinations for primary school children in reception and years one to six inclusive;
- Targets for uptake in the adult population were 75% of the eligible population. Ambitions for uptake amongst children were 40-60% of those eligible;
- Headline facts for flu vaccine uptake Gateshead in 2015/16:
  - Uptake amongst those aged 65+ is down locally and nationally and below the 75% target;
  - Uptake amongst those under 65 and at risk is down locally and nationally;
  - There is significant variation between GP practices in uptake amongst those aged under 65 and at risk (37.9 – 60.0%);
  - Uptake amongst pregnant women is down locally compared to last year but still up compared to 2013/14;
  - Uptake amongst children is down locally and nationally;
  - Uptake amongst Gateshead NHS Foundation Trust health care workers is up;
  - Uptake amongst the primary school pilot continues to be good.

Screening

6. The screening programmes, commissioned by NHS England, for which the Director of Public Health has an assurance role are:

   - Cancer screening programmes (breast, bowel and cervical)
   - Diabetic Retinopathy
   - Abdominal Aortic Aneurysm
   - Ante natal and newborn

7. For several programmes, data is not available at the Gateshead level, and/or the most recent data is not for 2015/16. In these circumstances, assurance for Gateshead is limited to the overall assurance we have in respect of the programme or the period for which we do have data.

8. Uptake of the cancer screening programmes continues to be good and comparable with or higher than levels of uptake nationally. There are recognised inequalities in the uptake of cancer screening programmes. Work is underway locally to address some of these inequalities.

9. Data for the Diabetic Eye Screening Programme is unavailable at a Gateshead level. Performance, reported at North of Tyne and Gateshead area level, suggests that uptake exceeds 80%. The Screening and Immunisation Team are also aware

of inequalities in the uptake of the service, with lower uptake amongst younger age groups and those from more deprived socioeconomic areas.

10. Uptake of the Abdominal Aortic Aneurysm screening programme shows a decrease in coverage from 78.2% in 2014/15 to 76.4% in 2015/16.

11. The Antenatal and Newborn screening programme covers six areas:
    a. Fetal anomaly
    b. Sickle cell and thalassemia
    c. Infectious diseases in pregnancy
    d. Newborn infant physical examination
    e. Newborn hearing screening
    f. Newborn bloodspot screening

12. Coverage of the Ante-Natal and Newborn screening programme is high for those areas where data is available, although this does not reflect geographic inequalities within the borough:
    - At the Gateshead Health NHS Foundation Trust, 86.2% of eligible babies received the newborn infant physical examination (NIPE) within 72 hours of birth in 2015/16 (England 94.9%);
    - Newborn bloodspot coverage across the Newcastle Gateshead CCG area continues to be high at 98.0% for 2015/16 (England 95.6%);
    - Newborn hearing screening coverage across Gateshead, South Tyneside and Sunderland continues to be high at 99.1% for 2015/16 (England 98.2%).

    However, data is not available for all key performance indicators for NIPE, and for the remaining areas of the newborn programme as the Gateshead Health NHS Foundation Trust are not able to provide data to meet the national programme standards nor for all the performance indicators.

Surveillance

13. Public Health England's Health Protection Team continues to work with a wide variety of partners to ensure that adequate systems are in place to detect the existence of certain communicable diseases, and to ensure that appropriate agencies are notified.

14. The Council's Environmental Health Team noted increases in the number of cases of food poisoning notified in 2015/16 compared to the previous year.

15. Surveillance of Healthcare Associated Infections showed an increase in rates of E. coli and C. difficile infections.

Control

Tuberculosis

16. Gateshead's population has a low incidence of tuberculosis but the prevalence of the disease per head of population has increased significantly since 2013.

Scarlet fever and invasive Group A Streptococcal infections

17. Cases of scarlet fever rose in the North East from 536 in 2014/15 to 667 in 2015/16. The bacterium responsible for scarlet fever can also cause potentially lethal infections called invasive group A streptococcal infections (IGAS), cases of which in the North East increased from 79 in 2011 to 269 in 2014.

Sexually transmitted infections (STIs)

18. Gateshead Council commissioned a new Integrated Sexual Health Service from 1st April 2015. The service is based in the town centre with clinics across the Borough.

19. Overall 1325 new sexually transmitted infections (STIs) were diagnosed in residents of Gateshead, a rate of 660.8 per 100,000 residents (compared to 767.6 per 100,000 in England):

    - 54% of diagnoses of new STIs in Gateshead were in young people aged 15-24 years (compared to 45% in England)
    - For cases in men where sexual orientation was known, 24.6% of new STIs in Gateshead were among men who have sex with men
    - There were 11 new HIV diagnoses in Gateshead. The diagnosed HIV prevalence was 1.5 per 1,000 population aged 15-59 years (compared to 2.26 per 1,000 in England).

Emergency preparedness, resilience and response (EPRR)

20. Planning for emergency situations, such as extreme weather events, outbreaks or terror incidents, takes place at regional and local levels:

    - The Local Health Resilience Partnership (LHRP) is responsible for ensuring that the arrangements for local health protection responses are robust and resilient. The LHRP works with the Local Resilience Forum (LRF) and multiagency partners, to develop collective assurance of local arrangements.
    - Public Health England co-ordinate the health management of the response to biological, chemical, radiological and environmental incidents, including specialist services which provide management advice and/or direct support to incident responses.
    - The Gateshead Multi-Agency Resilience and Emergency Planning Group brings together different organisations to discuss multi-agency emergency preparedness, response and resilience issues. The group ensures that Gateshead is adequately prepared to respond to disruptive challenges and that there is an appropriate level of engagement from all organisations

21. The Director of Public Health continues to be part of regional on-call arrangements to chair the Scientific and Technical Advice Cell (STAC), convened by Public Health England to co-ordinate such advice in the event of an emergency incident.

Excess winter deaths

22. In Gateshead in winter 2014/15, there were 170 excess winter deaths, compared to 70 in 2013/14. Data for 2015/16 will be available later in 2017.

23. There is significant variation in the numbers of excess winter deaths between different years. It is not always apparent why this is the case. Winter of 2014/15 had the highest number of excess winter deaths in England and Wales since 1999/00 with 41 300 more people dying in the winter months compared with the non-winter months.

24. The majority of deaths occurred amongst people aged 75 and over. There were more excess winter deaths in females than in males in 2014/15, as in previous

years. Respiratory diseases were the underlying cause of death in more than a third of all excess winter deaths in 2014/15.

Air quality

25. Gateshead Council monitors the levels of two pollutants at a number of locations across the Gateshead - nitrogen dioxide and PM2.5 particles.

26. As a result of measured levels of Nitrogen Dioxide (NO_2) exceeding the annual objective level, the council declared an Air Quality Management Area (AQMA) in April 2005 within Gateshead Town Centre. This was extended in April 2008.

27. Since 2011, the levels of NO_2 have fallen below the maximum permitted levels. Gateshead Council does not currently proposing to revoke the Gateshead Town Centre AQMA at this point, although it may be appropriate to do this following the next annual review if levels remain below the objective level.

28. The mean annual concentrations of PM2.5 have been measured at two locations since 2012. Figures indicate that PM2.5 levels have reduced since 2014/15 and remain below Air Quality Objectives, European Limit Values and World Health Organisation guidelines at both monitoring locations.

Communications

29. Communications are a vital element of health protection arrangements. Good communications demonstrate accountability and provide confidence, especially when responding to an incident.

30. A good example of the value of clear communications arose subsequently to an incident in January 2016. Residents living near the Path Head landfill site near Blaydon reported a persistent bad smell in the air. Subsequent investigation of the problem by the Council and the Environment Agency showed that high levels of rainfall in December and January had flooded the site and overwhelmed some of the environmental controls in place. This resulted in low levels of hydrogen sulphide gas being emitted by the site.

31. This gas has a characteristic “bad eggs” smell and can be detected at very low concentrations. Using measurements taken by the Environment Agency, Public Health England confirmed that the levels of the gas present did not pose a risk to health, although the odour itself was likely to make some people feel unwell sometimes.

32. The Council worked with the Environment Agency and Public Health England to make sure that the company responsible for running the site, Suez, worked quickly to re-establish control over gas emissions. Communications proved to be a significant element of the response to concerns raised by local residents.

33. Gateshead Council, PHE and the Environment Agency agreed a clear communications plan to give people concise and regular updates of the impact of the smell on health and wellbeing, and actions being taken to resolve the situation.

Conclusions

34. Existing Health Protection Assurance arrangements are generally working well and have been effective in dealing with all aspects of health protection.

35. There remain specific data issues in the newborn screening programme provided by Gateshead Health NHS Foundation Trust but, having discussed this issue with the Quality Assurance team at Public Health England, I am assured that there are appropriate manual processes and failsafes in place to ensure women are receiving appropriate antenatal screening. Nevertheless, I am concerned at the time that is being taken for NHS England and Public Health England to resolve this with the Trust. I am therefore asking Public Health England to provide me with a report on the action plan, progress to date and outlining the time-scale for this to be addressed.

Recommendations

36. Gateshead Health and Well-being Board are asked to consider and confirm whether this report provides reasonable assurance that the Director of Public Health's responsibilities to protect the health of the local population are being delivered.

Contact: Alice Wiseman, Director of Public Health, (0191) 4332777
alicewiseman@gateshead.gov.uk

Appendix 1

Health Protection Assurance - Annual Report 2015/16

Introduction and purpose of the report

This report provides an overview of health protection arrangements and relevant activity in the borough of Gateshead from April 2015 to March 2016. The report supports the Director of Public Health's statutory remit to provide assurance to the Gateshead Health and Wellbeing Board and Gateshead Council in relation to health protection of the local population.

The Board should receive an annual report summarising the local position on health protection issues and priorities (noting the scope of issues set out in the background section of this report).

Background

Health protection describes those activities and arrangements that seek to protect the population from risks to health arising from biological, environmental or chemical hazards. It includes:

- Prevention - screening, immunisation and vaccination schemes to prevent the incidence of diseases
- Surveillance – systems of disease notification, identifying outbreaks
- Control - management of individual cases of certain diseases to reduce the risk of spread
- Communication – communicating messages and risks during urgent and emergency situations).

The Director of Public Health (DPH) is responsible for coordinating the Council's contribution to health protection issues. This includes planning for and responding to threats to the public's health. Public Health England's Health Protection Teams are responsible for the provision of specialist expert functions to respond directly to incidents and outbreaks and to support the Council in understanding and responding to threats. NHS England is responsible for the commissioning of screening, immunisation and vaccination schemes.

The DPH therefore has a local leadership role in providing assurance that robust arrangements are in place to protect the public's health. This means identifying any local issues and issuing advice appropriately. The responsibility and accountability to act upon that advice rests with the appropriate responsible organisation.

Improvements to the quality of local arrangements are achieved through a process of challenge and escalation. This may involve the organisation responsible, their commissioners or the Health and Wellbeing Board.

Arrangements in place to assure the Council that its responsibilities are being delivered

The Health Protection Assurance Working Group was established by the DPH to support her assurance role, as reported in detail in the 2014/15 annual Health Protection report. The Health Protection Assurance Working Group considers all aspects of public health protection.

The performance reports in the attached Appendices demonstrate the level of performance against each activity. Targets are not set for all indicators.

Prevention

Immunisation and screening programmes are commissioned by NHS England. The activity is co-ordinated by Public Health England's Screening and Immunisation Team. A Programme Board for each screening and immunisation meets regularly.

This meeting is attended by a Public Health representative who reports to the regional meeting of the Directors of Public Health. Further assurance is achieved through the attendance of NHS England's Public Health Commissioning Lead at the regional meeting of the Directors of Public Health.

Immunisation
Immunisation programmes help to protect individuals and communities from particular diseases. There are programmes for children and adults.

The national universal childhood immunisation programme offers protection against thirteen different vaccine preventable programmes.

The adult immunisation programme is offered to people reaching a certain age and/or those who may be at particular risk due to underlying medical conditions or lifestyle risk factors.

The full vaccination programme can be found in Appendix A. Performance for Gateshead can be found in Appendix B.

A key point to note for 2015/16 is that uptake in Gateshead for the routine childhood programme is amongst the highest in England:

- By 12 months, 95.2% of children in Gateshead had been immunised against diphtheria, tetanus, pertussis, polio, haemophilus influenza type b (93.6% in England)
- By 24 months, 92.4% (91.9%) had received measles, mumps and rubella (MMR) vaccine (dose 1)

Meningitis
Significant changes to the immunisation programme for meningitis were introduced in 2015.

The MenACWY immunisation was added to the national immunisation programme in August 2015 in response to the rising number of meningococcal W (MenW) cases aimed at teenagers and young adults. Catch-up campaigns were arranged to reach older teenagers and "freshers" at university.

In Gateshead, from September 2015 up to 31 Aug 2016, 93.6% (1839) of Year 9 students (aged 13-14) were vaccinated, and 78.7% (1567) of Year 11 students (aged 15-16). National cumulative MenACWY vaccine coverage at the end of August 2016 for the urgent catch-up cohort (ie. those born between 1 September 1996 and 31 August 1997) in England is 35.2%.

Additionally, in September 2015 a new vaccine against Meningitis B was offered for new babies as part of the routine childhood immunisation programme.

Seasonal influenza
Influenza remains a potentially life-threatening illness, and it is because of this that a national vaccination programme offers flu jabs to older people and to those with other clinical risk factors.

The purpose of the vaccination programme is to reduce the number of cases of severe flu and the numbers of deaths resulting from infection. The programme therefore:

- provides direct protection to recipients, thus preventing a large number of cases of flu, and
- provides indirect protection by lowering flu transmission within the community as a whole

In 2015/16, flu vaccine was offered to:

- those aged 65 years and over
- those aged six months to under 65 in clinical risk groups
- all pregnant women
- all two, three, and four year olds
- all children in school years 1 and 2
- those in long-stay residential care homes or other long stay care facilities
- carers

- primary school aged children in school years 1 to 6 in areas that previously participated in primary school pilots in 2014/15.

Additionally, Gateshead was part of a South of Tyne and Wear (Gateshead, South Tyneside and Sunderland) pilot site for the 2013/14 season which saw flu vaccination offered in primary school to children in reception and years one to six inclusive. The pilot continued in 2014/15 for children in reception and years one to six. The offer of vaccination in school continued to be available for children in years one to six in the former pilot area in 2015/16. Reception age children were offered vaccination through General Practice.

NHS England, which is responsible for the national flu vaccination programme, set out an ambition to immunise 75% of all adults eligible for the vaccine, and 40-60% for all groups of children.

Headline facts for flu jab uptake Gateshead in 2015/16:

- Uptake amongst **those aged 65+ is down** locally and nationally and below the 75% target
- Uptake amongst **those under 65 and at risk is down** locally and nationally
- There is **significant variation between GP practices** in uptake amongst those aged under 65 and at risk (37.9 – 60.0%)
- Uptake amongst **pregnant women is down locally** compared to last year but still up compared to 2013/14
- Uptake amongst **children is down** locally and nationally
- Uptake amongst **Gateshead NHS Foundation Trust health care workers is up**

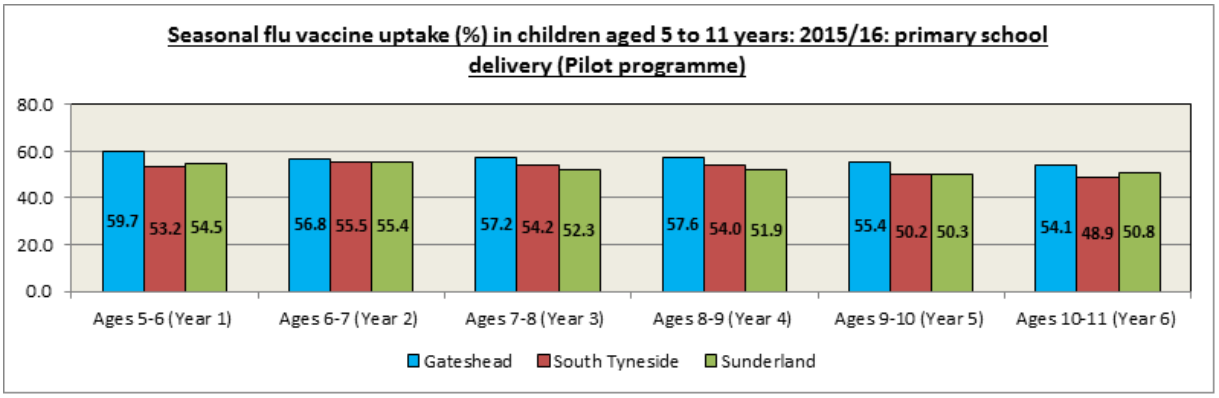
Vaccine uptake - adults

Eligible Group	2013/14 (%)	2014/15 (%)	2015/16 (%)
Aged 65+	74.8	74.9	72.6
Aged under 65 and at clinical risk	57.1	55.1	50.3
Pregnant women	36.9	48.3	46.1
Gateshead FT staff	62.9	55.8	70.6

Vaccine uptake - children

Eligible Group	2013/14 (%)	2014/15 (%)	2015/16 (%)
2 years old	47.8	38.7	40.5
3 years old	45.6	43.3	42.7
4 years old	N/A	51.5	34.4

The 2015/16 pilot programme for ages 5-11 years in primary schools showed uptake in Gateshead to be consistently higher across all of the age groups when compared to Sunderland and South Tyneside.



Screening programmes
Screening is the process of identifying people who appear healthy but may be at increased risk of a disease or condition.

Screening programmes protect the health of the population by carrying out tests on individuals to determine whether they have or are likely to develop particular, often life threatening, conditions. Individuals are selected for screening programmes based on eligibility criteria including age, gender and pre-existing conditions.

The screening progammes which are commissioned by NHS England and for which the DPH has an assurance role are:

- Cancer screening programmes (breast, bowel and cervical)
- Diabetic Retinopathy
- Abdominal Aortic Aneurysm
- Ante natal and newborn

The performance of screening programmes is given in Appendix C. This does not include information for some of the ante natal and newborn screening programmes (HIV, thalassaemia, sickle cell anaemia) as Gateshead coverage data for these for the year 2015/16 remain unavailable.

Cervical Screening
The cervical screening programme is offered to women aged 25 to 49 every three years and to women aged 50 to 64 every five years.

In 2016, 74.8% of eligible women in Gateshead had been adequately screened in the last 3.5 or 5.5 years, slightly down on 2015 (74.8%). This is similar to the North East (75.2%) and higher than England (72.7%).

The national, regional and local trend for uptake of cervical screening has shown a general downward trend since 2010.

Breast Screening
The aim of breast screening is to reduce mortality by finding breast cancer at an early stage when any changes in the breast are often too small to feel.

Screening is offered to women aged 50 to 70 every three years. Women aged over 70 can self-refer.

In Gateshead, the coverage of the breast screening programme increased from 78.5% of eligible women in 2015 to 78.9% in 2016. This is higher than the coverage across the North East (77.3%) and England (75.5%).

In Gateshead, the trend has increased since 2013, while nationally the trend has decreased.

Bowel Cancer Screening
The Bowel Cancer Screening Programme aims to detect bowel cancer at an early stage when treatment is more likely to be effective. It is offered to men and women aged 60 to 74 every two years. Those aged 75+ can request screening.

In 2016, 60.4% of eligible people were screened, higher than across the North East (59.4%) and England (57.9%).

Newcastle Gateshead CCG's Practice Engagement Programme, designed to improve patient outcomes for a range of different indicators, saw 15 Gateshead practices working to increase uptake of bowel cancer screening. The number of eligible adults having a recorded bowel cancer screening result rose by

8.57% since the start of the scheme, which equates to an additional 17,221 results being recorded. Note that this indicator is measured as a rolling 30 month period.

Cancer screening and health inequalities

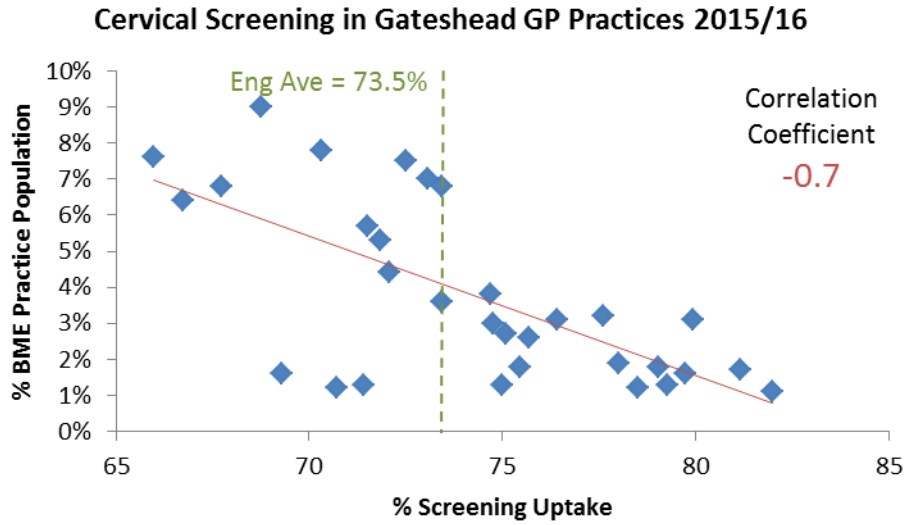
National evidence suggests that there are discernible inequalities in the uptake of cancer screening programmes for different groups. These differ between different programmes and different groups, but broadly, uptake for the three cancer screening programmes (breast, bowel and cervical) tends to be "inversely related" to deprivation and to the proportion of a practice's patients that are from a black or minority ethnic (BME) community.

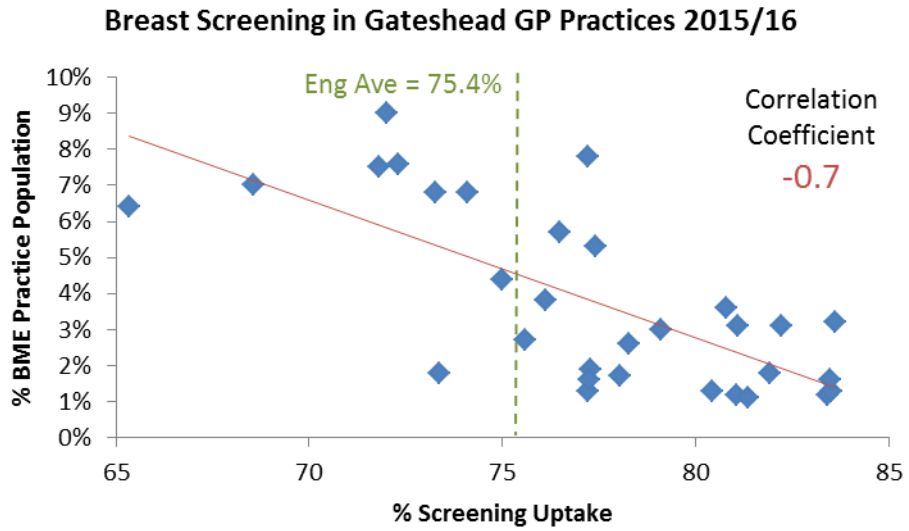
This means that the uptake of cancer screening programmes is generally lower amongst patients of practices in more deprived areas and in practices that have a relatively high number of BME patients. This is true locally, as demonstrated in the scatter plots below. These plot practice screening rates for each of the three cancer programmes by deprivation and by the proportion of their patient list who are from BME communities.

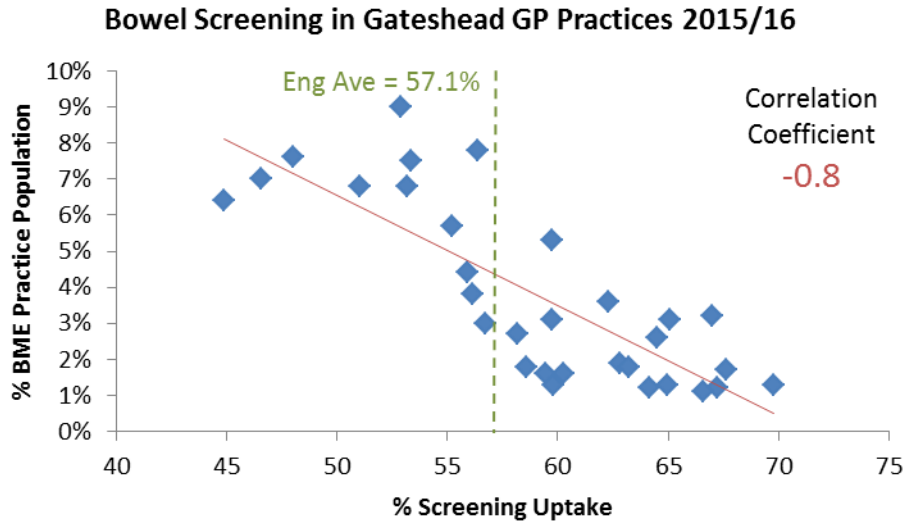
There may be a number of reasons for this, including health literacy (for example lower awareness of the importance of screening), or access to services (for example the cost of travel). The lower uptake amongst BME communities may be explained by deprivation rather than any specific factors related to ethnicity, such as language barriers.

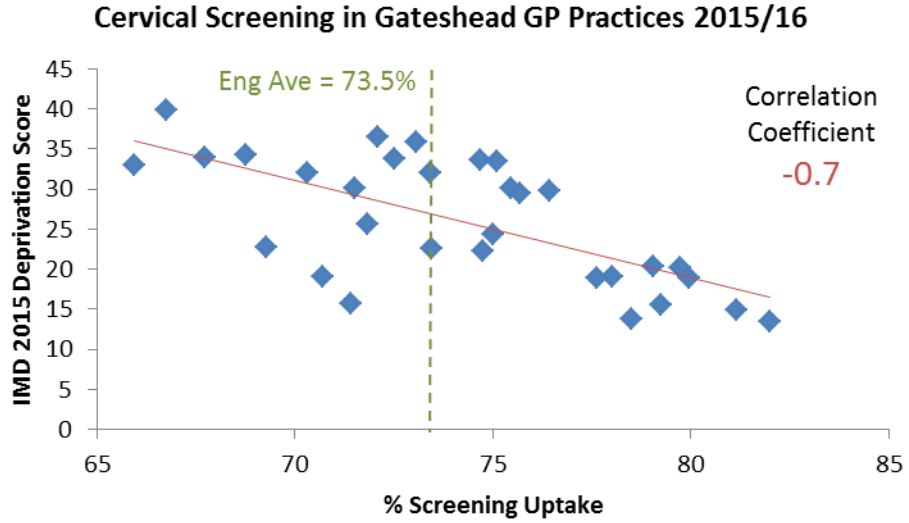
However, it should be noted there are exceptions to this – some practices serving more deprived areas or with high numbers of BME patients manage to achieve uptake levels above the national uptake rates, and at levels similar to practices in less deprived areas and with lower number of BME patients.

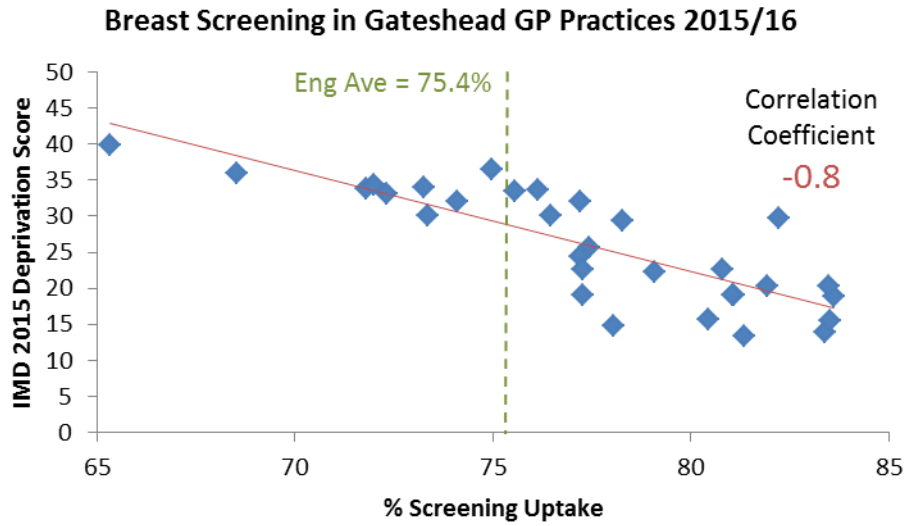
Work is in hand with partners in the NHS, Public Health England and third sector organisations to share good practise and raise uptake of cancer screening programmes across the whole of Gateshead.

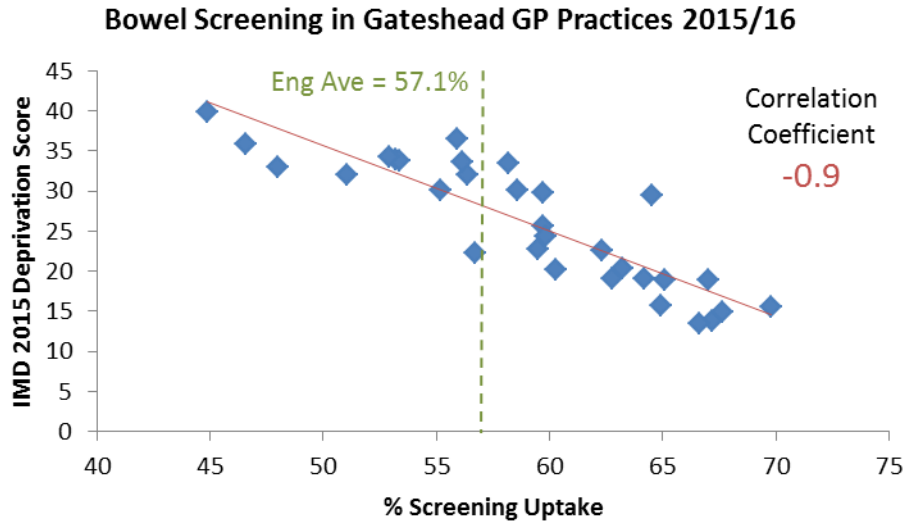



Breast Screening in Gateshead GP Practices 2015/16
Eng Ave = 75.4%
Correlation Coefficient
-0.7
% BME Practice Population
10%
9%
8%
7%
6%
5%
4%
3%
2%
1%
0%
65
70
75
80
85
% Screening Uptake


Bowel Screening in Gateshead GP Practices 2015/16
Eng Ave = 57.1%
Correlation Coefficient
-0.8
% BME Practice Population
10%
9%
8%
7%
6%
5%
4%
3%
2%
1%
0%
40
45
50
55
60
65
70
75
% Screening Uptake


Cervical Screening in Gateshead GP Practices 2015/16
Eng Ave = 73.5%
Correlation Coefficient
-0.7
IMD 2015 Deprivation Score
45
40
35
30
25
20
15
10
5
0
65
70
75
80
85
% Screening Uptake



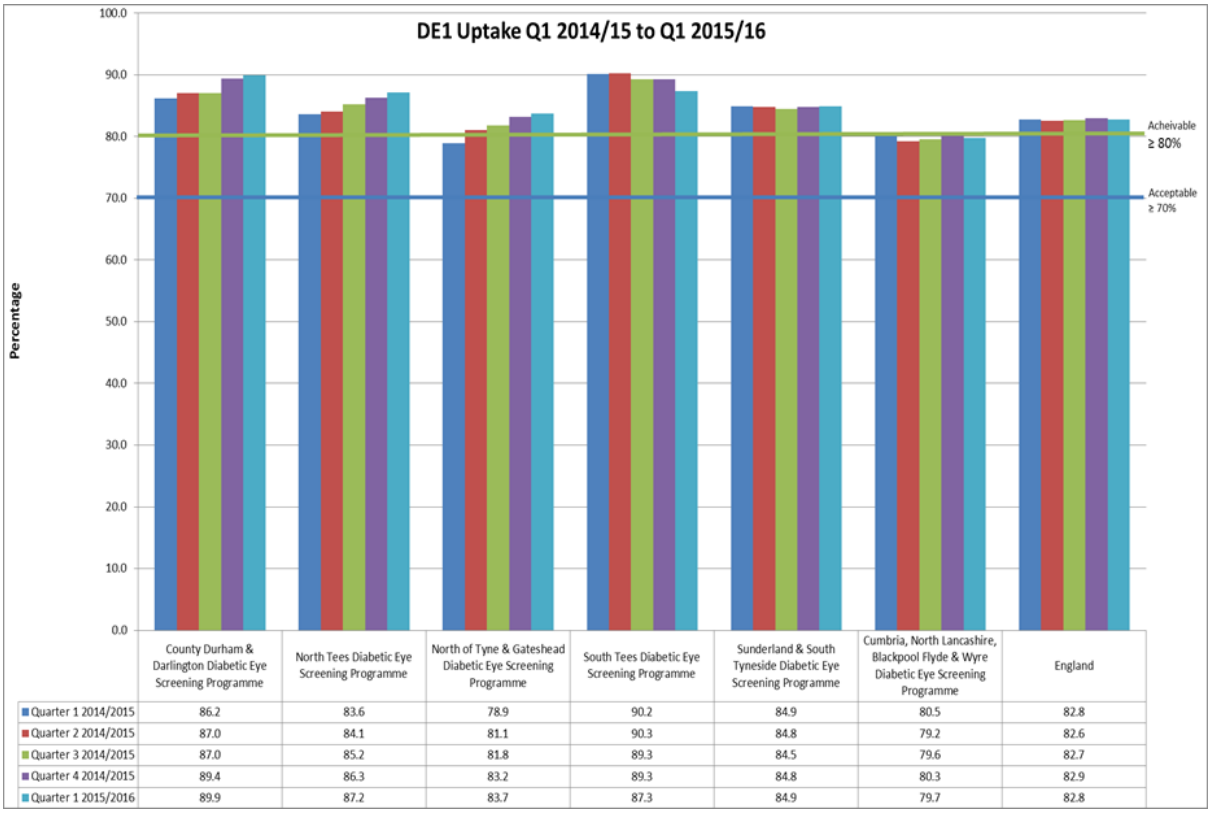


Diabetic Eye Screening

People with diabetes are at risk of damage to their eyes from a condition called diabetic retinopathy. The condition occurs when high sugar levels affect small blood vessels at the back of the eye (the retina). Damage to the blood vessels in a particular part of the retina can lead to a condition (diabetic maculopathy) that can lead to sight loss if it is not treated.

Diabetic retinopathy is one of the most common causes of sight loss among people of working age. The condition does not usually cause noticeable symptoms in the early stages. It can be detected by examining the blood vessels at the back of the eye and, if present, treated.

Early detection and treatment can slow or stop further vision loss. This is why the NHS Diabetic Eye Screening Programme was introduced. Everyone aged 12 and over with diabetes is offered screening once a year. In North of Tyne and Gateshead, diabetic eye screening is carried out by Medical Imaging UK Ltd. (rebranded as EMIS Care from April 2016).



	County Durham & Darlington Diabetic Eye Screening Programme	North Tees Diabetic Eye Screening Programme	North of Tyne & Gateshead Diabetic Eye Screening Programme	South Tees Diabetic Eye Screening Programme	Sunderland & South Tyneside Diabetic Eye Screening Programme	Cumbria, North Lancashire, Blackpool Flyde & Wyre Diabetic Eye Screening Programme	England
Quarter 1 2014/2015	86.2	83.6	78.9	90.2	84.9	80.5	82.8
Quarter 2 2014/2015	87.0	84.1	81.1	90.3	84.8	79.2	82.6
Quarter 3 2014/2015	87.0	85.2	81.8	89.3	84.5	79.6	82.7
Quarter 4 2014/2015	89.4	86.3	83.2	89.3	84.8	80.3	82.9
Quarter 1 2015/2016	89.9	87.2	83.7	87.3	84.9	79.7	82.8

Fig. 1 – Diabetic Eye Screening Uptake

Reporting of uptake of the Diabetic Eye Screening Programme is only available at North of Tyne and Gateshead level. Fig. 1 shows that the North of Tyne and Gateshead programme achieves an uptake of well above the 70% minimum standard and, at the beginning of 2015/16, was starting to exceed the 80% achievable uptake rate. The provider for the service is required to demonstrate a continuous increase in uptake rates.

From the 1st April 2016 service improvements are being implemented to increase the effectiveness of the screening programme. The new service improvements will include:

- More access to screening locations for more people.
- Slit Lamp surveillance screening.
- An increase in clinical leadership.
- Choice-driven appointment booking process.

Areas for further improvement include:

- introducing a CQUIN for local programmes to target the younger diabetics whose uptake is poor
- consideration of issues arising from a Health Equity Audit for all screening programmes

A Health Equity Audit of the North of Tyne and Gateshead programme showed inequalities in uptake of screening between different age groups and between those living in the least and most socioeconomically deprived areas. The Screening and Immunisation Team is working with the recommendations arising from the audit to improve uptake.

Abdominal aortic aneurysm screening

Abdominal aortic aneurysm (AAA) screening is a way of detecting a dangerous swelling (aneurysm) of the aorta – the main blood vessel that runs from the heart, down through the abdomen to the rest of the body.

Screening is a way of detecting an aneurysm early and can cut the risk of dying from an abdominal aortic aneurysm by about half.

This swelling is far more common in men aged over 65 than it is in women and younger men, so men are invited for screening in the year they turn 65.

The most recent data (2015/16) for the programme shows a decrease in coverage in Gateshead compared to the previous year from 78.2% to 76.4%. Uptake is lower than England (79.9%) and the North East (77.6%).

Ante-natal and new born screening programmes
Ante-natal and new borne screening programmes include:

- NHS foetal anomaly screening programme (FASP)
- NHS infectious diseases in pregnancy screening (IDPS) programme
- NHS newborn and infant physical examination (NIPE) screening programme
- NHS newborn blood spot (NBS) screening programme
- NHS newborn hearing screening programme (NHSP)
- NHS sickle cell and thalassaemia (SCT) screening programme

The foetal anomaly screening programme was extended to offer screening for two more anomalies. From April 2015, women are offered screening tests for Edwards' and Patau's syndromes. Children with these syndromes usually die before or soon after birth. The screening test improves the choices available to parents sooner.

Performance data is included in Appendix C for those programmes for which data are available.

Coverage of the Ante-Natal and Newborn screening programme is high for those areas where data is available, although this does not reflect geographic inequalities within the borough:

Key points to note are:

- At the Gateshead Health NHS Foundation Trust, 86.2% of eligible babies received the newborn clinical physical examination within 72 hours of birth in 2015/16 (England 94.9%);
- Newborn bloodspot coverage across the Newcastle Gateshead CCG area continues to be high at 98.0% for 2015/16 (England 95.6%);
- Newborn hearing screening coverage across Gateshead, South Tyneside and Sunderland continues to be high at 99.1% for 2015/16 (England 98.2%).

However, data is not available for all key performance indicators for NIPE, and for the remaining areas of the newborn programme as the Gateshead Health NHS Foundation Trust are not able to provide data to meet the national programme standards nor for all the performance indicators.

Surveillance
Effective surveillance systems ensure the early detection and notification of particular communicable diseases. Public Health England's Health Protection Team obtains data from a wide variety of sources, including healthcare staff, hospitals, sexual health services, local authority environmental health teams, care homes, schools and nurseries. This information is closely monitored to make sure that individual cases of disease are effectively treated and prevented from spreading, and that outbreaks of infections are monitored, analysed and controlled.

Gateshead Council's Environmental Health team are an important resource in identifying and investigating cases and outbreaks of, especially, foodborne infections, including food poisoning.

Throughout the year the Council received notification of 242 cases of campylobacter, an increase of 30 over the previous year. Other food related infectious disease notifications rose by 50 to 153 cases. This includes all cases of Salmonella reported to the Council and four outbreaks investigated throughout the year. The incidence of food poisoning tends to increase during the summer months.

Case Study
In December 2015 the Council was notified of a number of gastro intestinal illnesses in staff across two sites of a children's day nursery within the borough. Investigations revealed the common source was the Christmas Dinner provided to staff and children at the two sites. All affected staff were found to be suffering from Clostridium perfringens. Analysis of staff faecal samples and the suspected food source showed them to be contaminated with C. perfringens from the same source. It was decided to prosecute the company for its failings, but before the case could be finalised the company went into liquidation.

Improvements in the use of DNA analysis of samples has led to an improvement in linking cases together and linking cases to any food recovered during the investigation of a food poisoning outbreak. This could have the result of linking cases across the country, not just locally. It is also having the effect of proving that cases are not linked together, even if the organism is the same species. This has had a significant impact on the investigation of outbreaks.

The Council now records all reported cases of food related infectious disease on a secure electronic database. This enables easier handling of cases and comparison of yearly statistics. It also assists in the early identification of exceedances and links between cases, suggesting possible outbreaks.

Healthcare Associated Infections (HCAIs)
Public Health England (PHE) monitors the numbers of certain infections that occur in healthcare settings through routine surveillance programmes, and advises on how to prevent and control infection in establishments such as hospitals, care homes and schools.

PHE also monitors the spread of antibiotic resistant infections and advises healthcare professionals about controlling antimicrobial resistance.

Trends in rates of infections for the Newcastle and Gateshead CCG are given below:

Rate of infection per 100 000 people	2013/14	2014/15	2015/16
MRSA	1	1	2
MSSA	20.9	18.2	23.4
E. coli	65.6	78.3	81.0
C. difficile	29.3	35.9	40.5

Control – Specific Disease
Tuberculosis (TB)
Tuberculosis (TB) is an infection that can be caught by breathing in bacteria from someone who has infectious TB.

People who live in areas with high levels social deprivation are most vulnerable to developing TB. These include those who are homeless, poor housing, live in poverty or are drug users.

More than 6 500 cases of TB were reported across England in 2014, and of these over 2 500 occurred in London.

Gateshead has small numbers of cases of TB, with a significant rise in cases between 2013 and 2014:

Year	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14
No of TB Cases	7	6	7	6	2	3	8	4	7	14	3	9	12	9	21

Once diagnosed, patients are supported by a Specialist Health Visitor to ensure that they limit their risk of transmitting the infection and to ensure that they comply with and complete their treatment regimen.

Scarlet fever IGAS

Cases of scarlet fever, a common and usually mild childhood bacterial infection, continued to rise for the third season in a row during 2015/16. In the North East, notifications rose from 536 in 2014/15 to 667 in 2015/16.

The bacterium responsible for scarlet fever can also cause potentially lethal infections called invasive group A streptococcal infections (IGAS).

Cases of this more serious infection have also increased across the North East from 79 in 2011 to 269 in 2014. Each case is extensively investigated by the local Health Protection Team with contacts followed up and offered advice and/or treatment as necessary.

Sexually transmitted infections (STIs)

Gateshead Council is responsible for commissioning comprehensive, open access sexual health services.

A new model Integrated Sexual Health Service was commissioned by the Council from 1st April 2015. Based in Gateshead town centre, it is supported by local clinics and outreach services (http://www.gatesheadsexualhealth.co.uk/).

Gateshead data regarding STIs in 2015 (unless otherwise specified) shows that:

- Overall 1325 new sexually transmitted infections (STIs) were diagnosed in residents of Gateshead, a rate of 660.8 per 100,000 residents (compared to 767.6 per 100,000 in England).
- Gateshead has the 119th highest rate (out of 326 local authorities in England) of new STIs excluding chlamydia diagnoses in 15-24 year olds; with a rate of 695.9 per 100,000 residents (compared to 815 per 100,000 in England).
- 54% of diagnoses of new STIs in Gateshead were in young people aged 15-24 years (compared to 45% in England). This includes those tested in specialist sexual health clinics (SHCs) only.
- For cases in men where sexual orientation was known, 24.6% of new STIs in Gateshead were among men who have sex with men (MSM) (specialist SHCs only).
- The chlamydia detection rate per 100,000 young people aged 15-24 years in Gateshead was 1760.9 (compared to 1,887 per 100,000 in England).
- Gateshead has the 46th highest rate (out of 326 local authorities in England) for gonorrhoea, which is a marker of high levels of risky sexual activity. The rate of gonorrhoea diagnoses per 100,000 in this local authority was 69.8 (compared to 70.7 per 100,000 in England).
- In Gateshead, an estimated 8.6% of women and 8.8% of men presenting with a new STI at a specialist SHC during the 5 year period from 2010 to 2015 were re-infected with a new STI within 12 months.
- Among specialist SHC patients from Gateshead who were eligible to be tested for HIV, 68.2% were tested (compared to 67.3% in England)
- There were 11 new HIV diagnoses in Gateshead. The diagnosed HIV prevalence was 1.5 per 1,000 population aged 15-59 years (compared to 2.26 per 1,000 in England).
- In Gateshead, between 2013 and 2015, 42.3% of HIV diagnoses were made at a late stage of infection (CD4 count <350 cells/mm^3 within 3 months of diagnosis) compared to 40.3% in England.

Emergency preparedness, resilience and response (EPRR)

Local health protection arrangements must also plan for, and respond to, a wide range of incidents and emergencies that could affect health or patient care. These could be anything from extreme weather conditions to an outbreak of an infectious disease, a major transport accident or a terror attack.

Planning takes place at regional and local levels:

- The Local Health Resilience Partnership (LHRP) is responsible for ensuring that the arrangements for local health protection responses are robust and resilient. The LHRP works with the Local Resilience Forum (LRF) and multiagency partners, to develop collective assurance of local arrangements.
- Public Health England co-ordinate the health management of the response to biological, chemical, radiological and environmental incidents, including specialist services which provide management advice and/or direct support to incident responses.
- The Gateshead Multi-Agency Resilience and Emergency Planning Group brings together different organisations to discuss multi-agency emergency preparedness, response and resilience issues. The group ensures that Gateshead is adequately prepared to respond to disruptive challenges and that there is an appropriate level of engagement from all organisations

The Director of Public Health continues to be part of regional on-call arrangements to chair the Scientific and Technical Advice Cell (STAC), convened by Public Health England to co-ordinate such advice in the event of an emergency incident.

Excess winter deaths in 2014/15 and 2015/16

Detailed information on excess winter deaths at a local level is not usually available until the following year. This section of the report will detail what is now known about excess winter deaths in 2014/15, and what is currently known about excess winter deaths in 2015/16.

The ONS standard method defines the winter period as December to March, and compares the number of deaths that occurred in this winter period with the average number of deaths occurring in the preceding August to November and the following April to July:

EWM = winter deaths - average non-winter deaths

The EWM index is calculated so that comparisons can be made between sexes, age groups and regions, and is calculated as the number of excess winter deaths divided by the average non-winter deaths, expressed as a percentage:

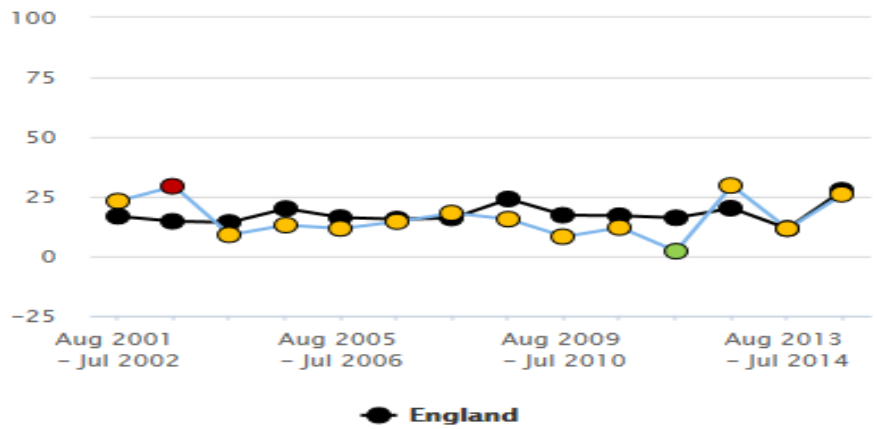
$$\textbf{EWM Index} = \frac{\textbf{EWM}}{\textbf{Average of non-winter deaths}} \times 100$$

In Gateshead in winter 2014/15, there were 170 excess winter deaths, compared to 70 in 2013/14.

There is significant variation in the numbers of excess winter deaths between different years. It is not always apparent why this is the case. Winter of 2014/15 had the highest number of excess winter deaths in England and Wales since 1999/00 with 41 300 more people dying in the winter months compared with the non-winter months.

The majority of deaths occurred amongst people aged 75 and over. There were more excess winter deaths in females than in males in 2014/15, as in previous years. Respiratory diseases were the underlying cause of death in more than a third of all excess winter deaths in 2014/15.

The excess winter mortality index was highest in the South West in 2014/15 and joint lowest in Yorkshire and The Humber, and Wales.



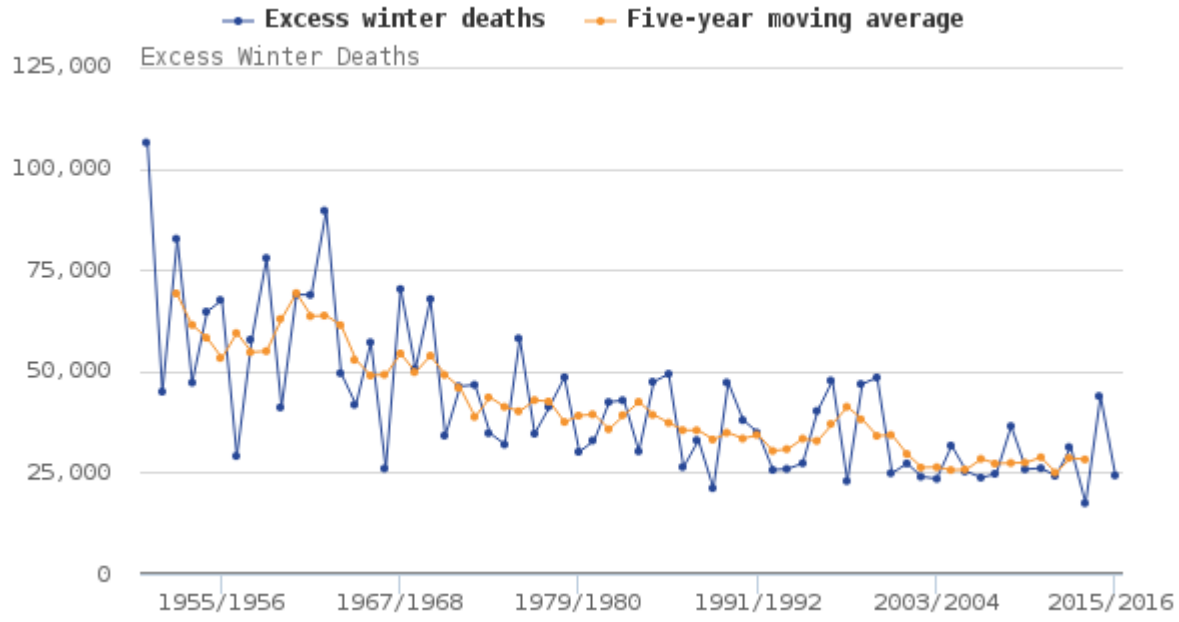
Excess winter deaths index for Gateshead (single year, all ages) (Persons)

Colder temperatures were not the main cause of the increase in winter deaths in 2014/15, as the mean monthly temperature was above average from September through to January and similar to, or slightly below, the average for all other months.

The predominant influenza virus in winter 2014/15 was a strain of flu (H3N2) that had a particularly noticeable effect on the elderly, resulting in numerous care home outbreaks and far higher levels of excess mortality than the last notable H3N2 season of 2008/09. Although uptake of the flu vaccine was close to target amongst people aged 65 and over, the vaccine was less effective.

There is some evidence that those living in poorer quality housing are more likely to die during the winter months. This has been attributed to generally poorer housing standards, being in fuel poverty, and being unable to heat one's home to a reasonable temperature at an affordable price.

Excess winter mortality in England and Wales was back in line with average trends in 2015/16. There were an estimated 24 300 excess winter deaths more than one third of which were caused by respiratory diseases.



Source: Office for National Statistics

Specific figures for excess winter mortality in Gateshead in 2015/16 will be available later in 2017.

Air quality

Poor air quality is associated with a number of adverse health impacts. It is recognised as a contributing factor in the onset of heart disease and cancer. Additionally, air pollution particularly affects the most vulnerable in society: children and older people, and those with heart and lung conditions. There is also often a strong correlation with equalities issues, because areas with poor air quality are also often the less affluent areas.

The Environment Act 1995 requires the Council to review and assess the air quality in Gateshead. There are two pollutants in particular that cause problems with air quality in Gateshead and are related substantially to the use of transport. They are nitrogen dioxide (NO2) and particulate matter less than 2.5 microns in size (PM2.5) - both have short and long term effects on human health.

Gateshead Council monitors these two pollutants at a number of locations across the Gateshead Borough using automatic and non-automatic monitoring arrangements. Some of these monitoring locations represent the worst case scenario of road traffic flows/congestion in Gateshead but in areas where there are residents who are exposed to these pollutants. By monitoring and understanding pollutant concentrations in these locations we can be satisfied that other areas in the borough will be well below air quality objective standards.

As a result of measured levels of Nitrogen Dioxide (NO2) exceeding the annual objective level, the council declared an Air Quality Management Area (AQMA) in April 2005 within Gateshead Town Centre. This was extended in April 2008.

Air pollutants are monitored on a daily basis in Gateshead and the results are reported per calendar year to the Department for Environment, Food and Rural Affairs (DEFRA).

Since 2011, the levels of NO2 have fallen below the air quality annual mean objective and the monitoring data for 2015 shows that NO2 levels continue to remain below the mean objective level of 40µg/m3 within the AQMA. The monitoring data also indicates that there were no exceedances of the annual mean objective outside of the AQMA in 2015/16. Gateshead Council does not currently proposing to revoke the Gateshead Town Centre AQMA at this point, although it may be appropriate to do this following the next annual review if levels remain below the objective level.

The mean annual concentrations of PM2.5 have been measured at two locations since 2012. Figures indicate that PM2.5 levels have reduced since 2014/15 and remain below Air Quality Objectives, European Limit Values and World Health Organisation guidelines at both monitoring locations.

Communications

Communications are a vital element of health protection arrangements. Good communications demonstrate accountability and provide confidence, especially when responding to an incident.

A good example of the value of clear communications arose subsequently to an incident in January 2016. Residents living near the Path Head landfill site near Blaydon reported a persistent bad smell in the air. Subsequent investigation of the problem by the Council and the Environment Agency showed that high levels of rainfall in December and January had flooded the site and overwhelmed some of the environmental controls in place. This resulted in low levels of hydrogen sulphide gas being emitted by the site.

This gas has a characteristic “bed eggs” smell and can be detected at very low concentrations. Using measurements taken by the Environment Agency, Public Health England confirmed that the levels of the gas present didn’t pose a risk to health, although the odour itself was likely to make some people feel unwell sometimes. Even if environmental odours are not directly related to any known hazards to human health, psychophysical well-being can be negatively influenced by exposure. Also, some people may be hypersensitive to chemicals that cause odours. This can induce physical and mental distress, which can in turn affect risk perception.

The Council worked with the Environment Agency and Public Health England to make sure that the company responsible for running the site, Suez, worked quickly to re-establish control over gas emissions. It became clear that regaining control would require substantial works on the site that would take some weeks to complete. This meant that the smell was likely to persist.

Communications proved to be a significant element of the response to concerns raised by local residents. Gateshead Council, PHE and the Environment Agency agreed a clear communications plan to give people concise and regular updates of the impact of the smell on health and wellbeing, and actions being taken to resolve the situation.

Actions extended well into 2016 which led to a significant reduction in complaints about odour from the site.

Reporting

This report will be presented to Cabinet, the Gateshead Health and Wellbeing Board and to the Newcastle/Gateshead Clinical Commissioning Group, to ensure that NHS partners are aware of the Council's Health Protection Assurance role and facilitate and reinforce multiagency cooperation.

The Director of Public Health reports to the Chief Executive of Gateshead Council and is a member of the Health and Wellbeing Board and the CCG Governing Body.

Conclusion

Existing Health Protection Assurance arrangements are working well and have been effective in dealing with all aspects of health protection.

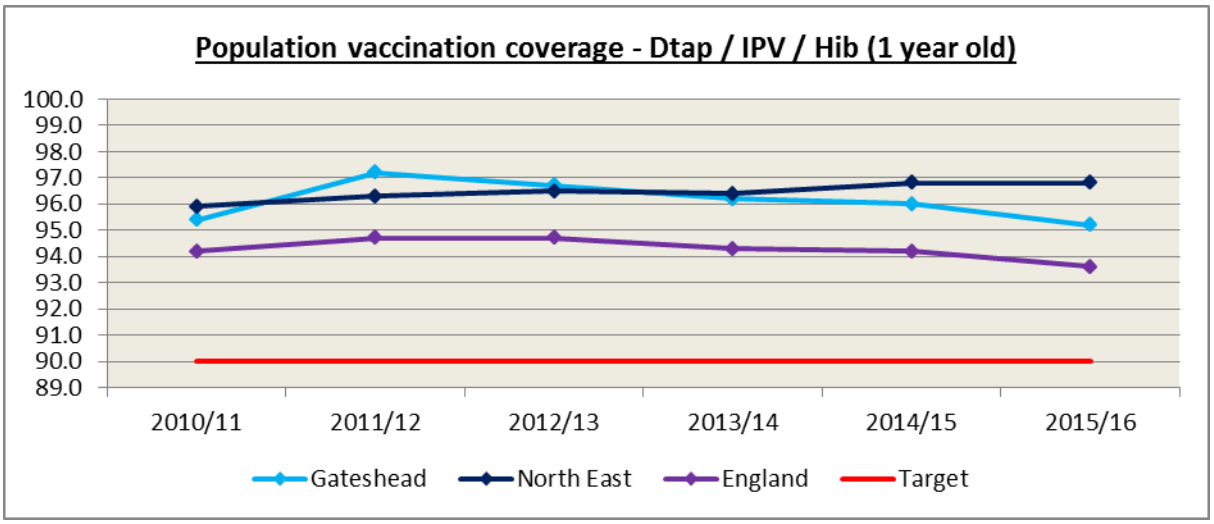
As the changes across the health and social care economy are embedded, it is important to keep the arrangements in Gateshead under review.

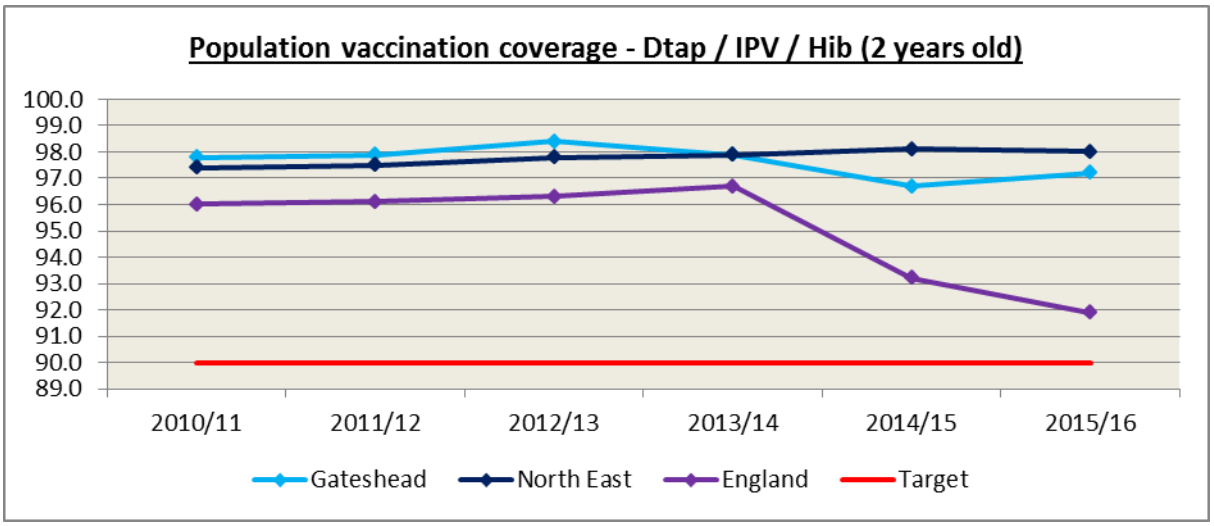
Alice Wiseman
Director of Public Health

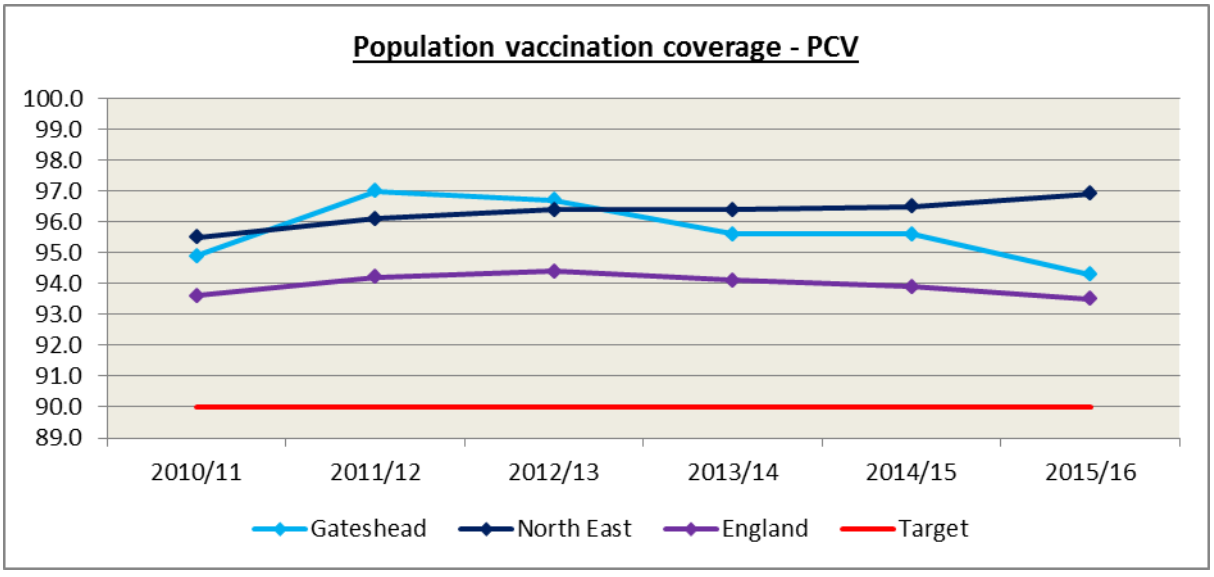
Programme	Organism/disease protected against
Routine programme Pre-school childhood programme (different components given on five occasions)	Diphtheria, tetanus, pertussis, polio, haemophilus influenza type b, pneumococcal disease, meningitis C, meningitis B, measles, mumps and rubella and rotavirus
Routine programme Annual for 2 to 6 year olds (and all children in school years 1 and 2 for winter 2015/16)	Seasonal influenza
Routine programme School-based programme	Booster – tetanus, diphtheria and polio and menACWY
Routine programme School-based programme – girls only	Human papilloma virus (HPV)
At risk programme. Annual. Offered to all people over 65 and those in nationally defined clinical at risk groups	Seasonal influenza
At risk programme. Offered to those over 65, usually on a one off basis, and those in nationally defined clinical at risk groups	Pneumococcal disease
At risk programme. Offered to all people aged 70	Shingles
At risk programme. Offered to all pregnant women who are 20 weeks pregnant	Pertussis (Whooping cough)
At risk programme. Offered to all pregnant women during flu season, at any stage of pregnancy	Seasonal influenza
At risk programme. Offered to babies of mothers found to have Hepatitis B as a result of the antenatal infectious diseases screening programme	Hepatitis B
At risk programme. Offered to babies with a parent or grandparent who was born in a country where the annual incidence of TB is 40/100,000 or greater	Tuberculosis
At risk programme. People in prison	Hepatitis B, other vaccines that are indicated due to health or lifestyle factors, and any missed components of the childhood programme

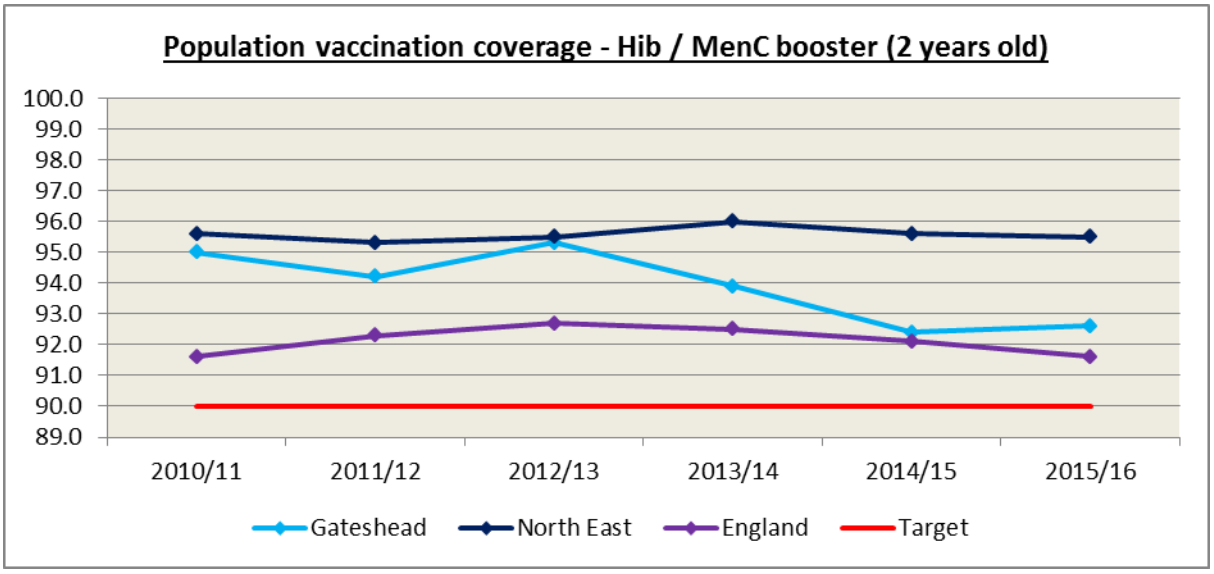
Dtap/IPV/Hib

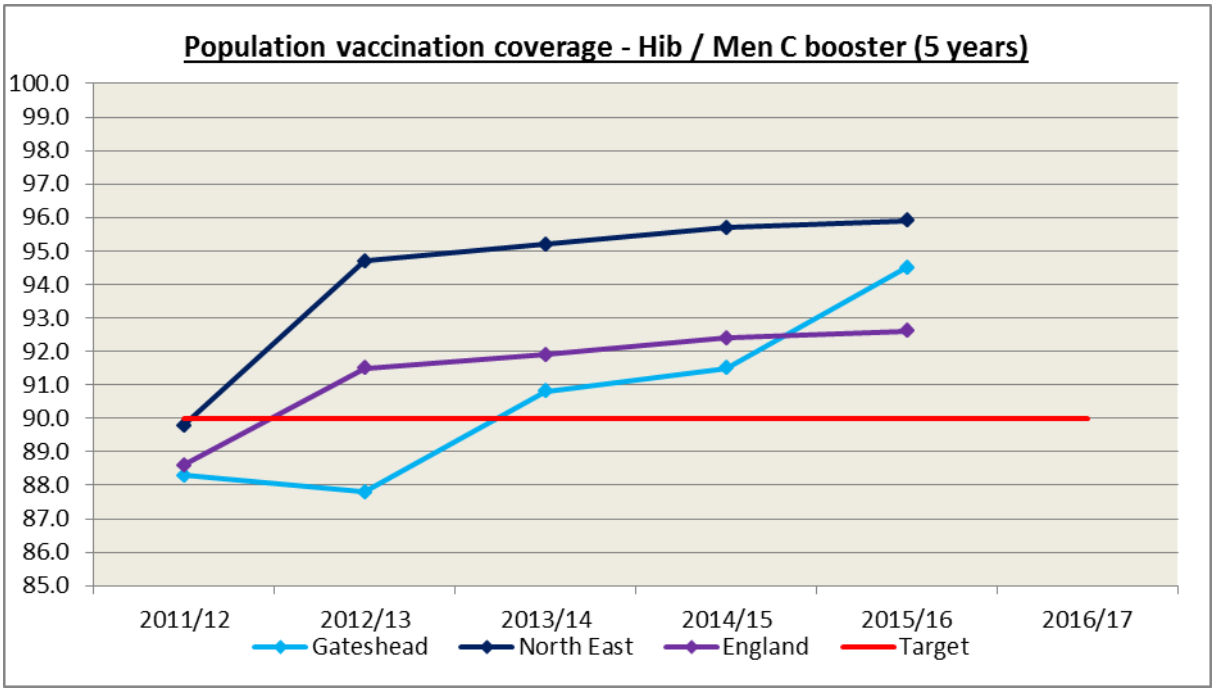
This single jab contains vaccines to protect against five separate diseases:
diphtheria, tetanus, whooping cough (pertussis), polio and Haemophilus influenzae type b (known as Hib – a bacterial infection that can cause severe pneumonia or meningitis in young children)








Population vaccination coverage - Hib / MenC booster (2 years old)
100.0
99.0
98.0
97.0
96.0
95.0
94.0
93.0
92.0
91.0
90.0
89.0
2010/11
2011/12
2012/13
2013/14
2014/15
2015/16
Gateshead
North East
England
Target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97.0
96.0
95.0
94.0
93.0
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90.0
89.0
88.0
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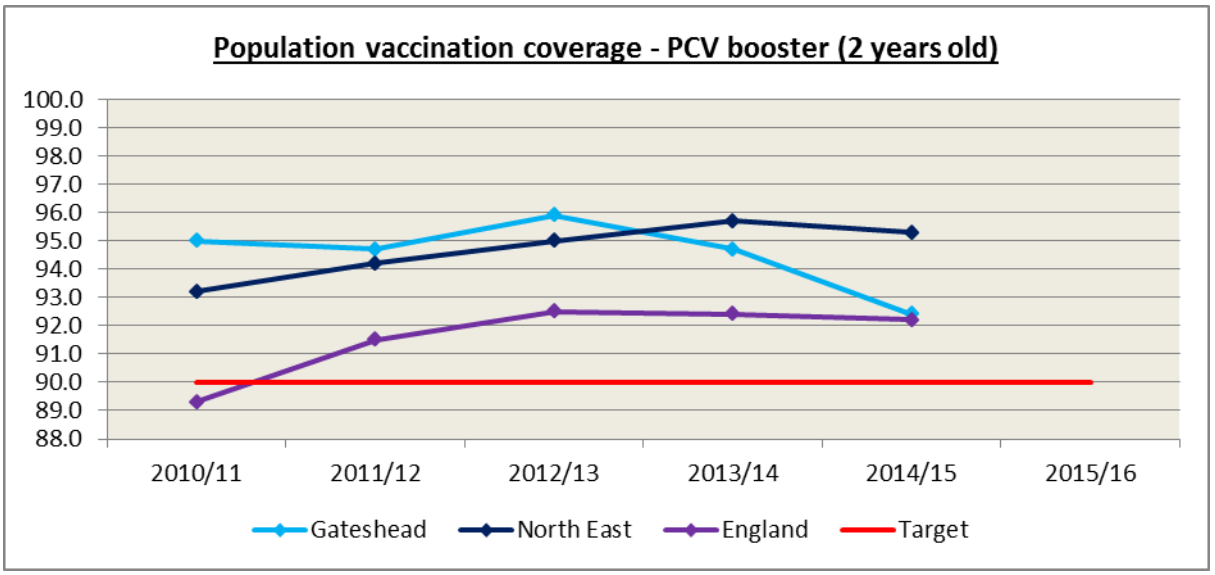
2012/13
2013/14
2014/15
2015/16
2016/17
Gateshead
North East
England
Target


Population vaccination coverage - PCV booster (2 years old)
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99.0
98.0
97.0
96.0
95.0
94.0
93.0
92.0
91.0
90.0
89.0
88.0
2010/11
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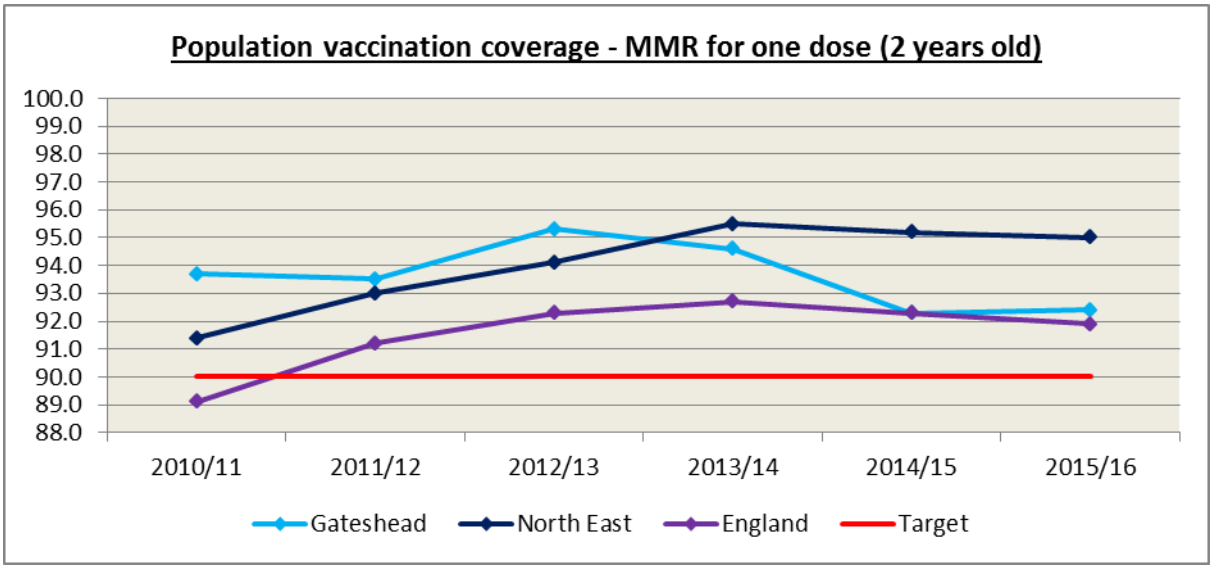
2013/14
2014/15
2015/16
Gateshead
North East
England
Target


Population vaccination coverage - MMR for one dose (2 years old)
100.0
99.0
98.0
97.0
96.0
95.0
94.0
93.0
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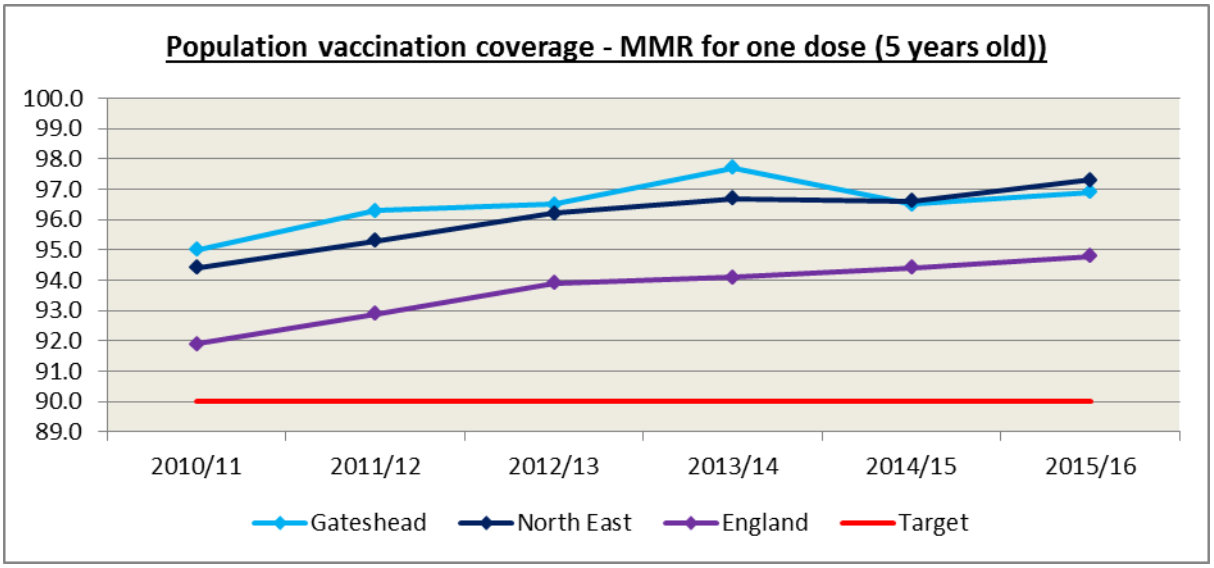
91.0
90.0
89.0
88.0
2010/11
2011/12
2012/13
2013/14
2014/15
2015/16
Gateshead
North East
England
Target


Population vaccination coverage - MMR for one dose (5 years old))
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99.0
98.0
97.0
96.0
95.0
94.0
93.0
92.0
91.0
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89.0
2010/11
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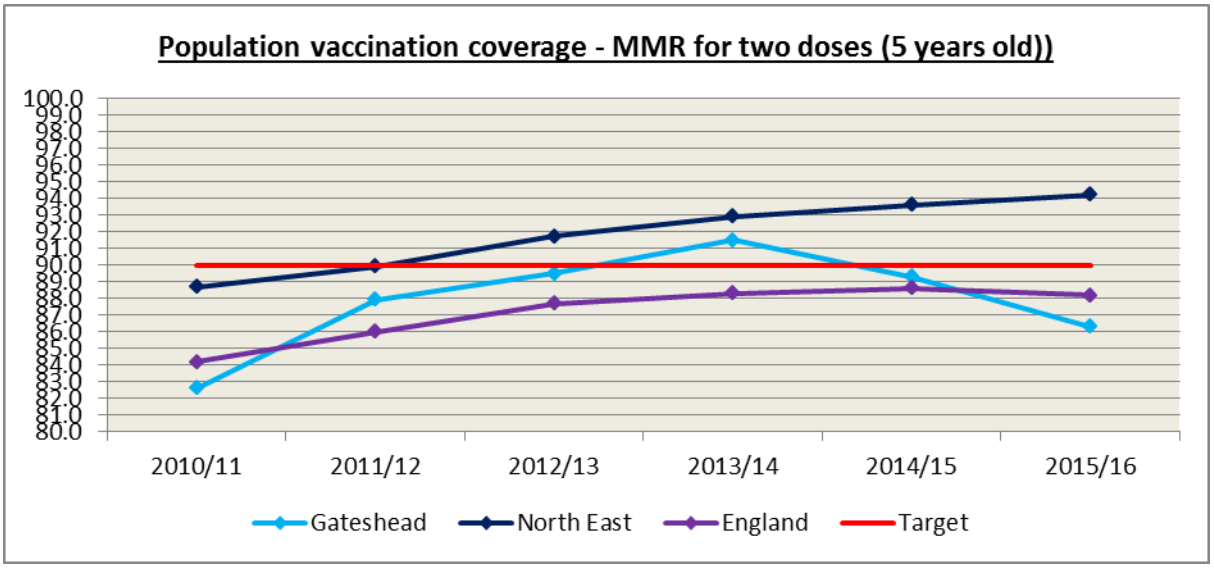
2012/13
2013/14
2014/15
2015/16
Gateshead
North East
England
Target


Population vaccination coverage - MMR for two doses (5 years old))
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98.0
97.0
96.0
95.0
94.0
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90.0
89.0
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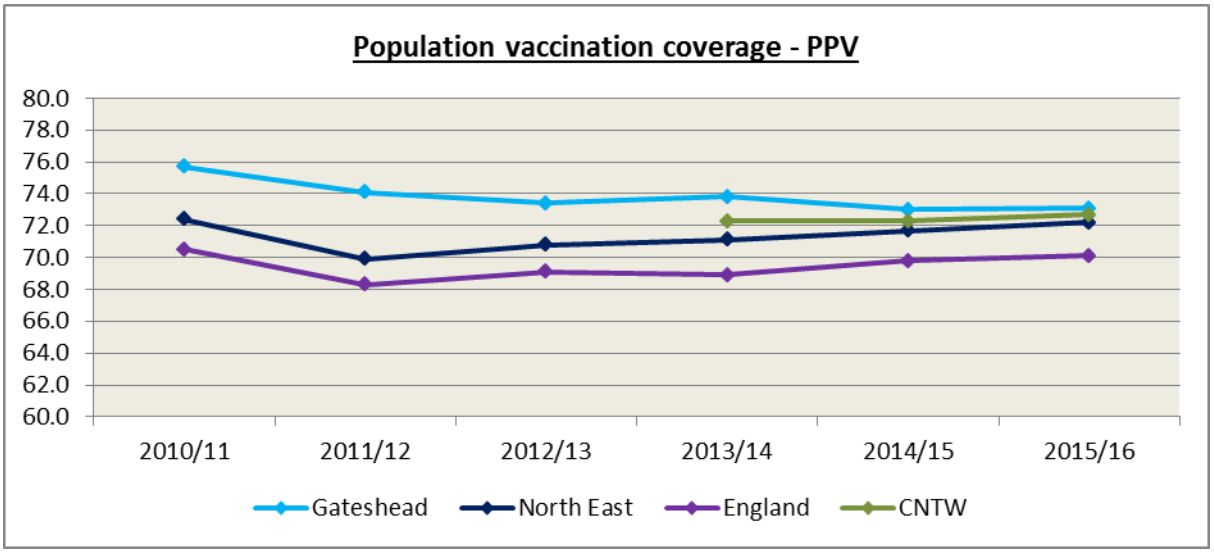
87.0
86.0
85.0
84.0
83.0
82.0
81.0
80.0
2010/11
2011/12
2012/13
2013/14
2014/15
2015/16
Gateshead
North East
England
Target


Population vaccination coverage - PPV
80.0
78.0
76.0
74.0
72.0
70.0
68.0
66.0
64.0
62.0
60.0
2010/11
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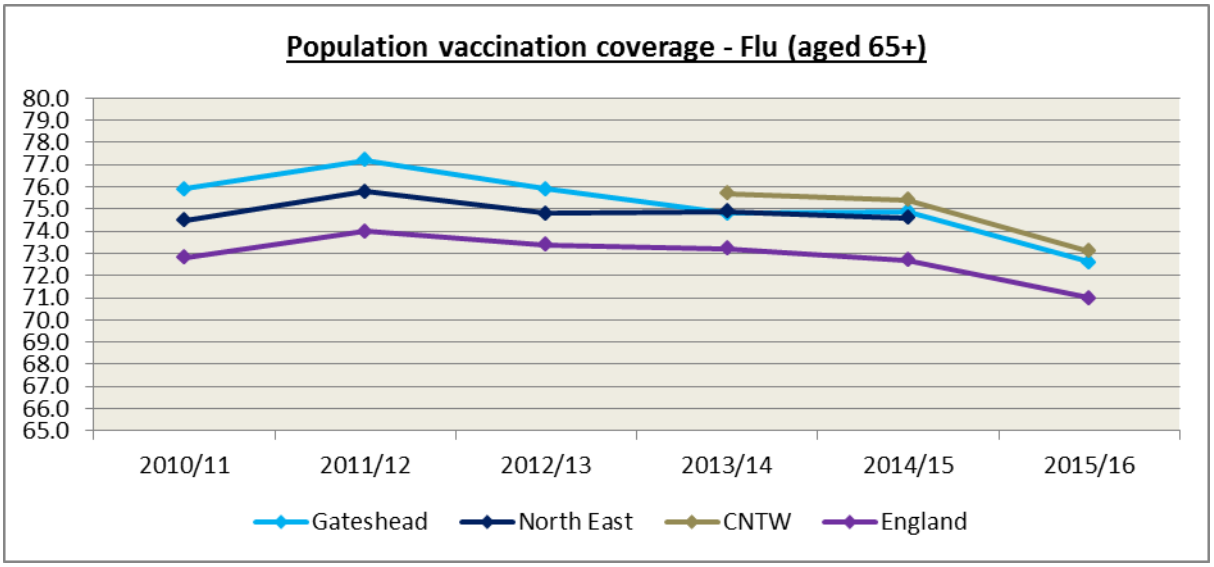
2012/13
2013/14
2014/15
2015/16
Gateshead
North East
England
CNTW


Population vaccination coverage - Flu (aged 65+)
80.0
79.0
78.0
77.0
76.0
75.0
74.0
73.0
72.0
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70.0
69.0
68.0
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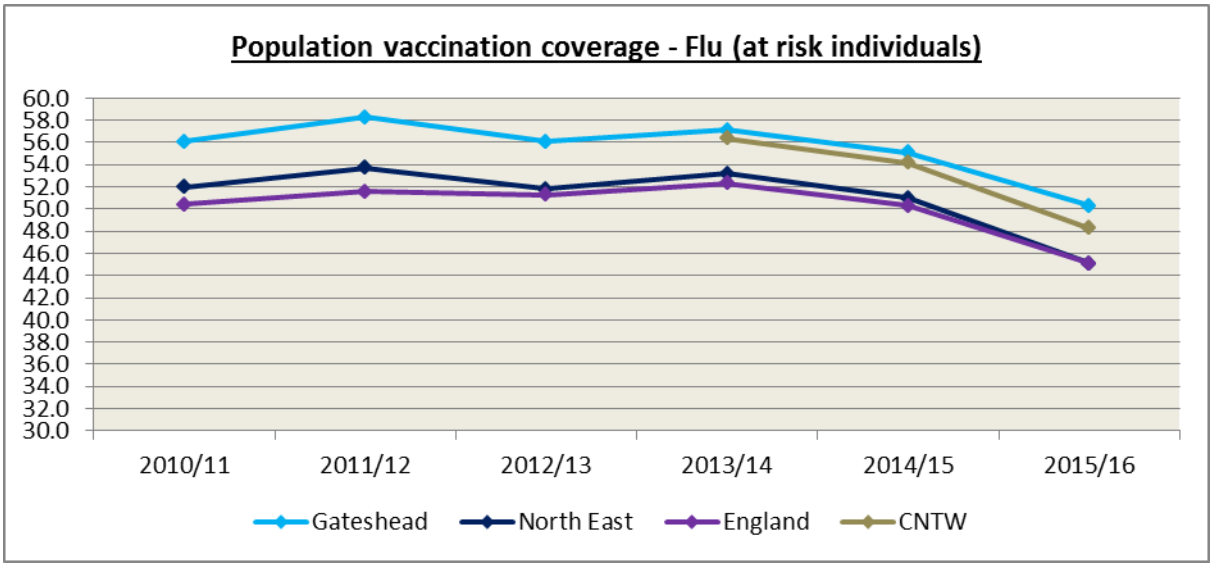
2013/14
2014/15
2015/16
Gateshead
North East
CNTW
England


Population vaccination coverage - Flu (at risk individuals)
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58.0
56.0
54.0
52.0
50.0
48.0
46.0
44.0
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38.0
36.0
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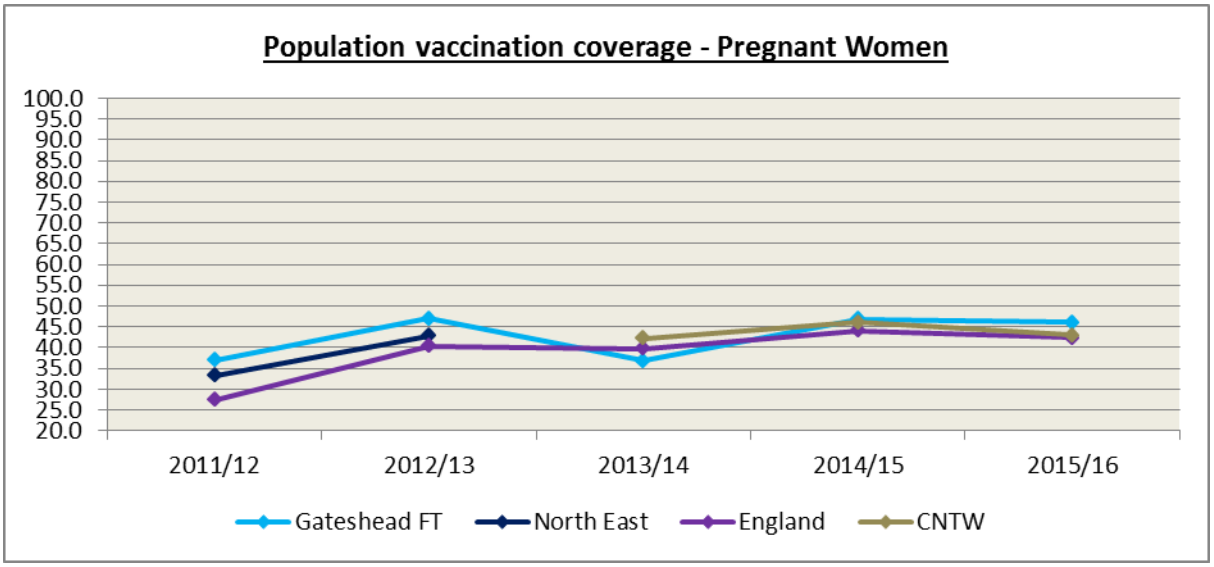
2013/14
2014/15
2015/16
Gateshead
North East
England
CNTW


Population vaccination coverage - Pregnant Women
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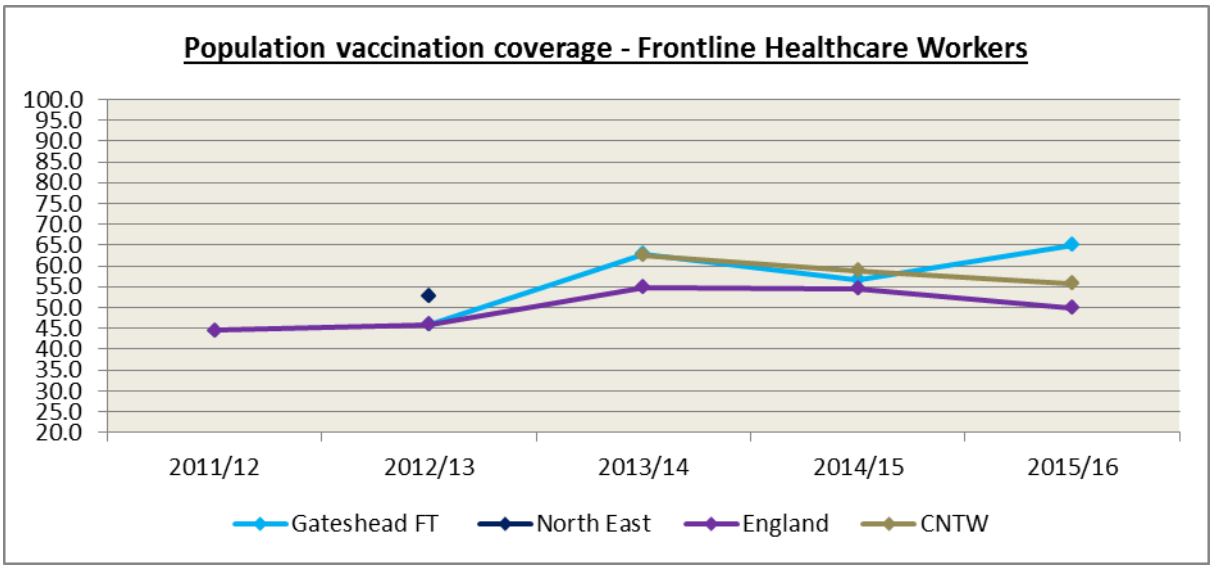
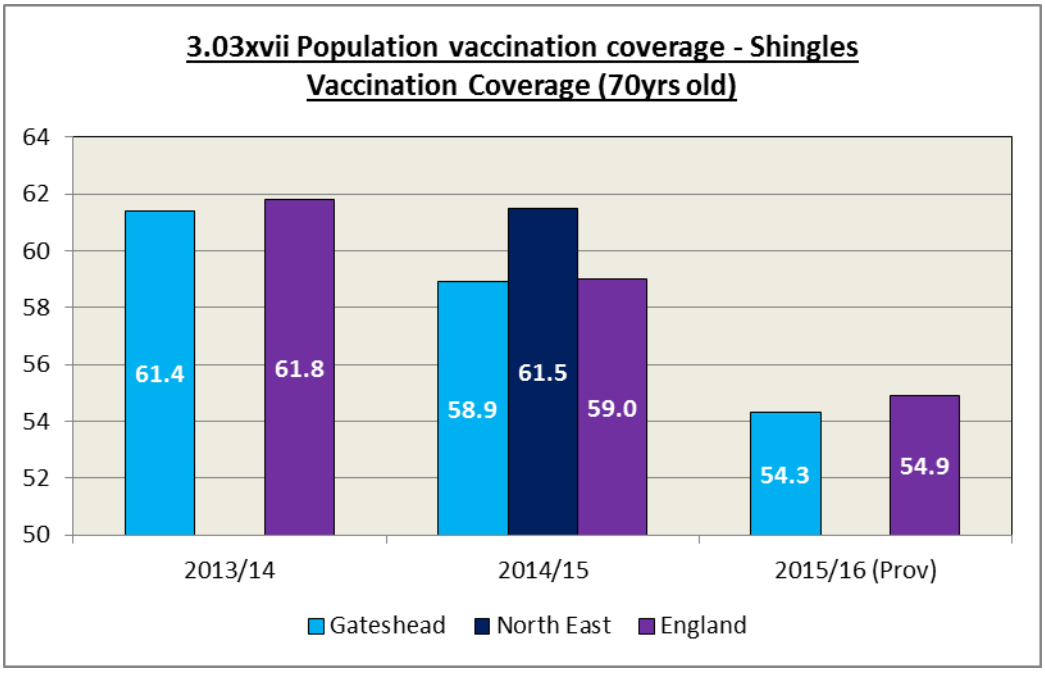
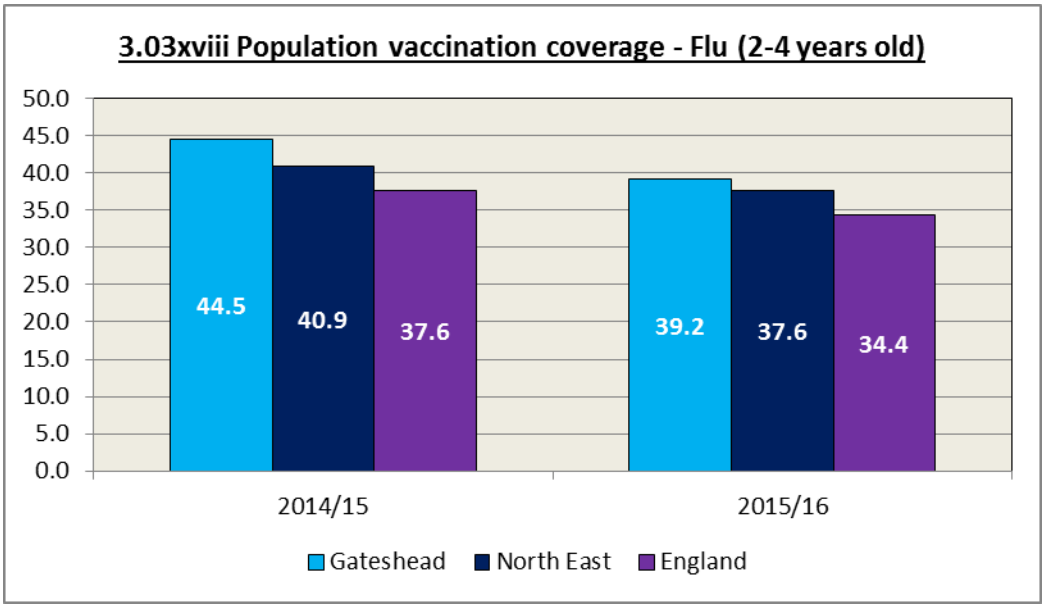
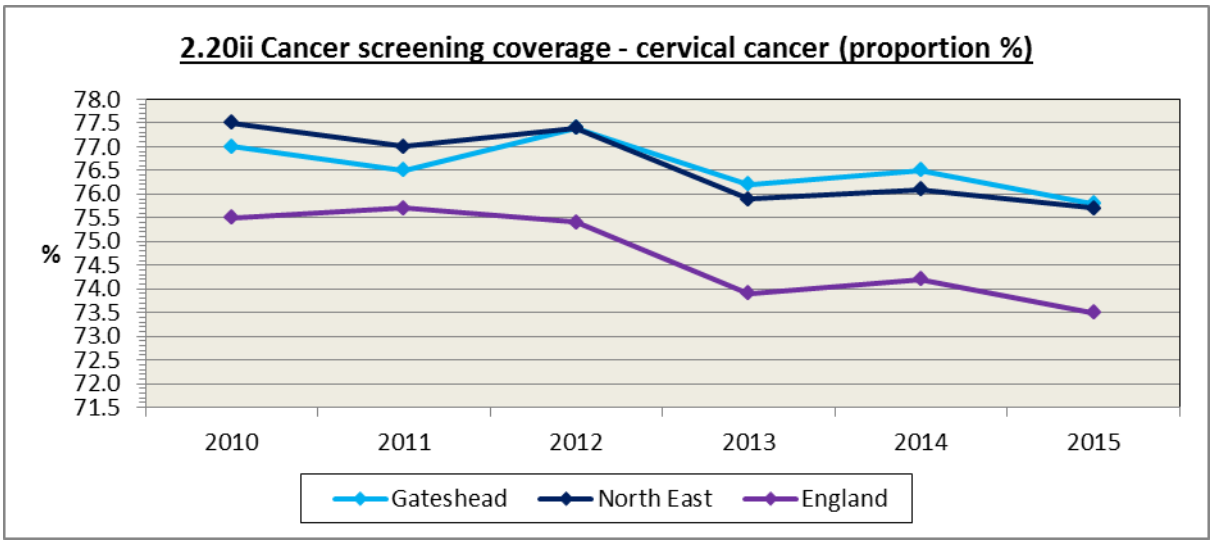
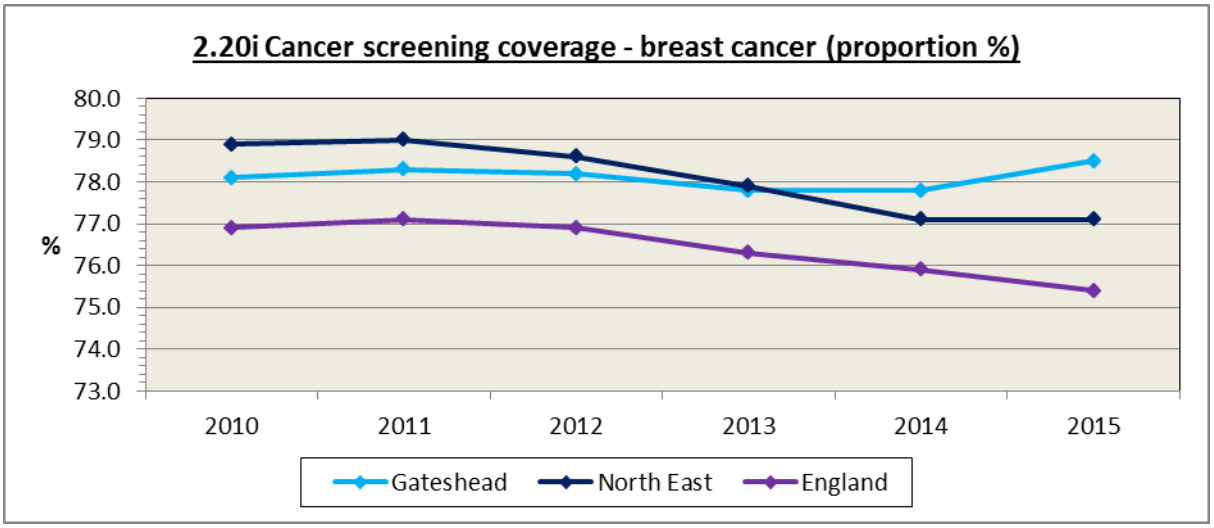
75.0
70.0
65.0
60.0
55.0
50.0
45.0
40.0
35.0
30.0
25.0
20.0
2011/12
2012/13
2013/14
2014/15
2015/16
Gateshead FT
North East
England
CNTW


Population vaccination coverage - Frontline Healthcare Workers
100.0
95.0
90.0
85.0
80.0
75.0
70.0
65.0
60.0
55.0
50.0
45.0
40.0
35.0
30.0
25.0
20.0
2011/12
2012/13
2013/14
2014/15
2015/16
Gateshead FT
North East
England
CNTW


3.03xvii Population vaccination coverage - Shingles Vaccination Coverage (70yrs old)
64
62
60
58
56
54
52
50
61.4
61.8
58.9
61.5
59.0
54.3
54.9
2013/14
2014/15
2015/16 (Prov)
Gateshead
North East
England

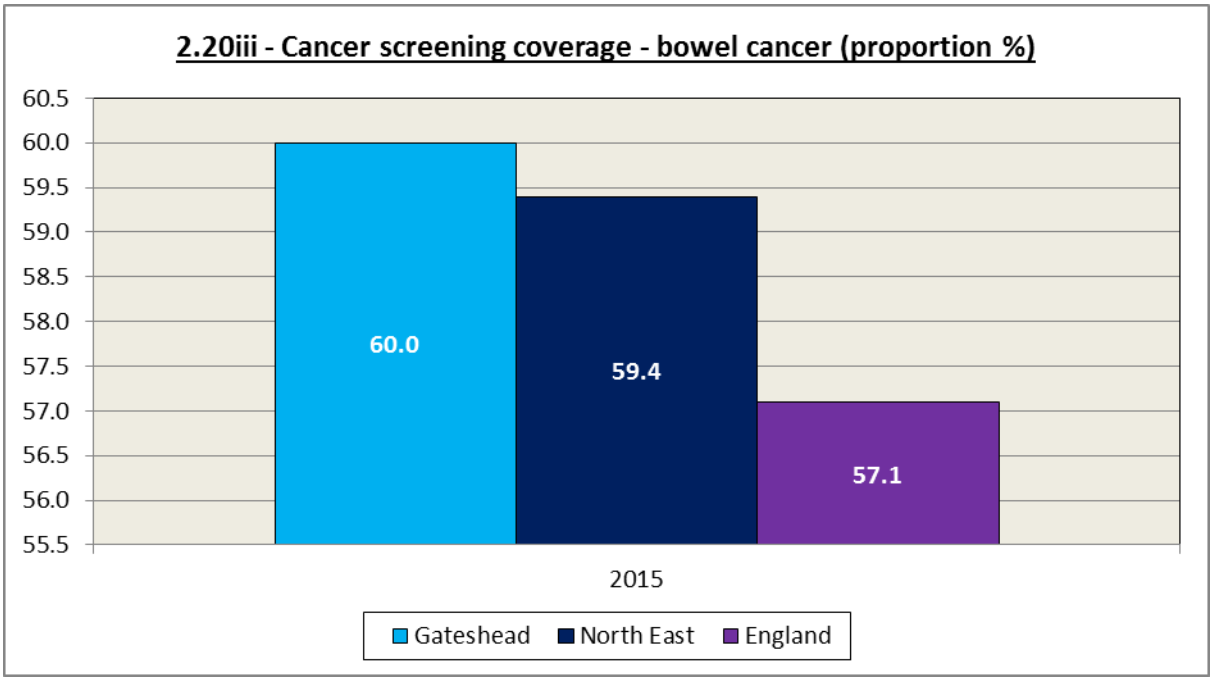

3.03xviii Population vaccination coverage - Flu (2-4 years old)
50.0
45.0
40.0
35.0
30.0
25.0
20.0
15.0
10.0
5.0
0.0
44.5
40.9
37.6
39.2
37.6
34.4
2014/15
2015/16
Gateshead
North East
England



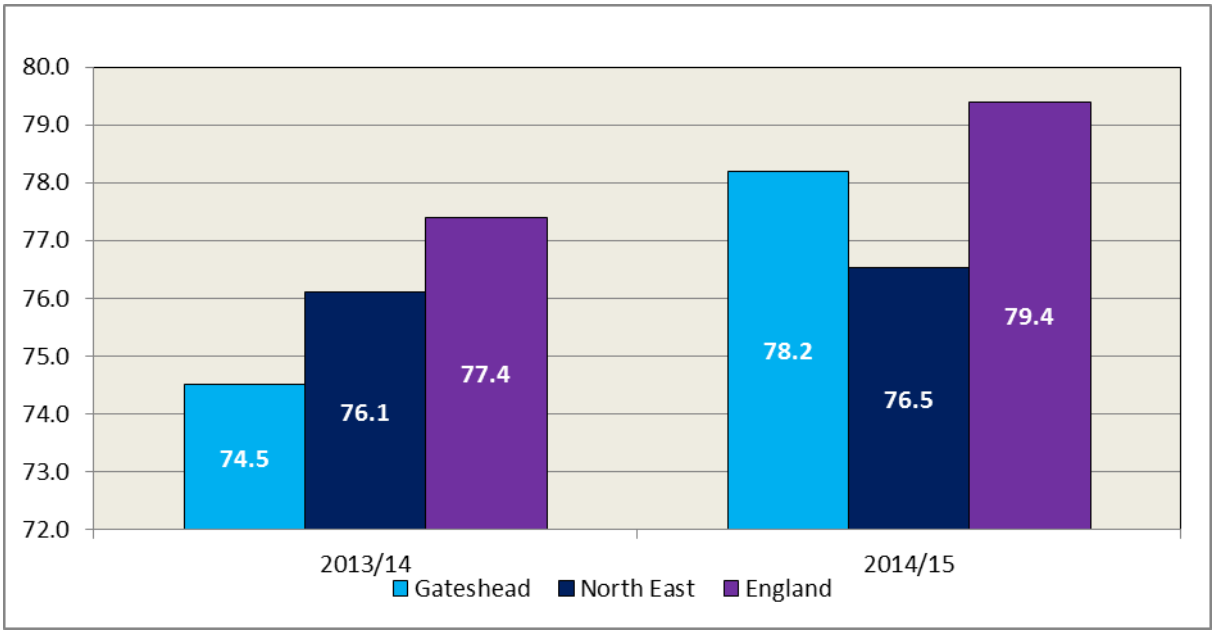


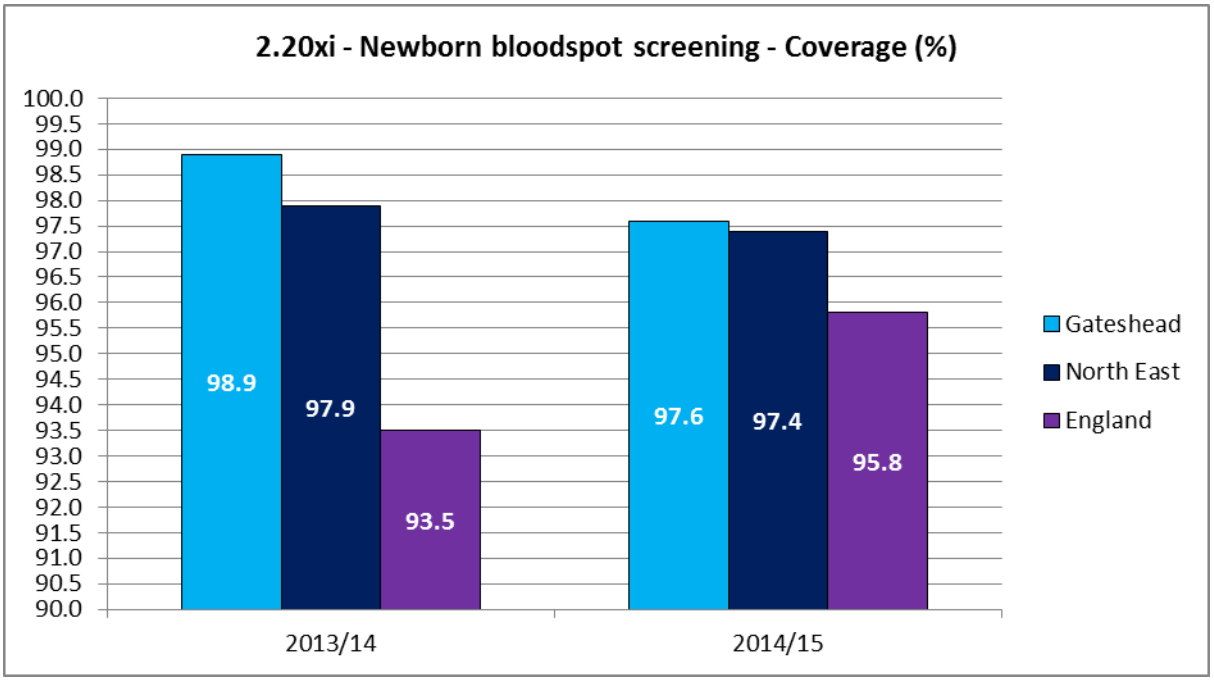
Uptake of the Diabetic Eye Screening Programme 2015-16 (01/04/2015 - 30/06/2015)

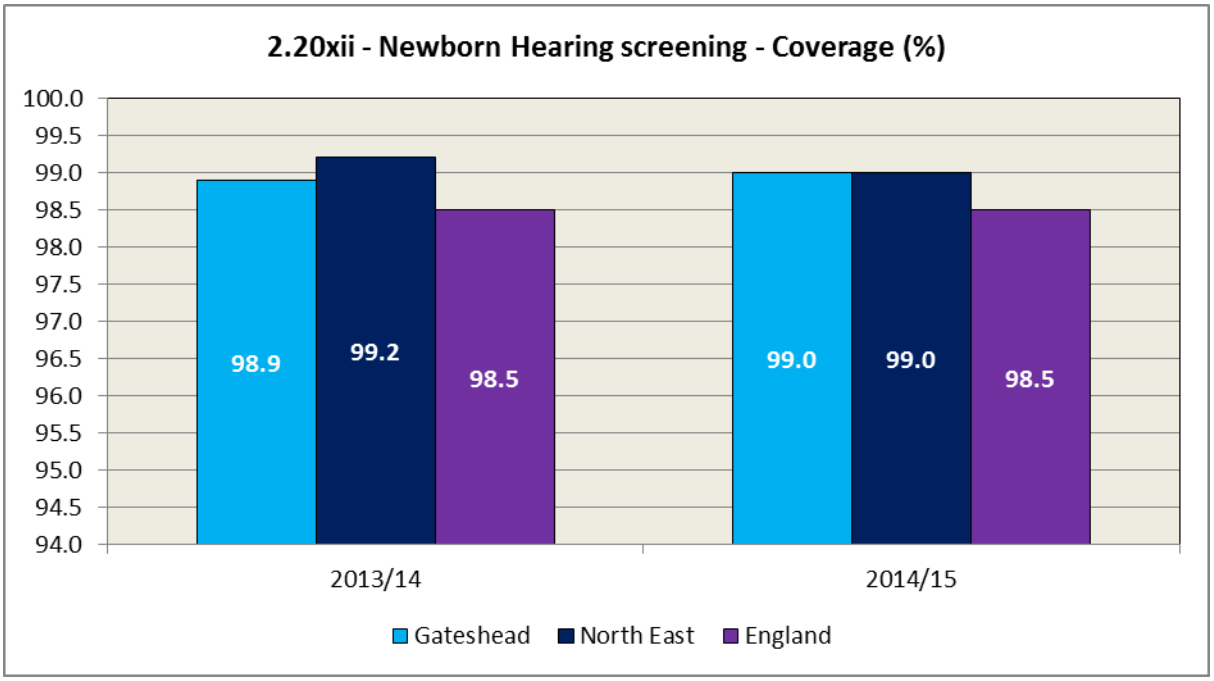
Area	Numerator	Denominator	Percentage (%)
North of Tyne & Gateshead Diabetic Eye Screening Programme	43,299	51,744	**83.7**
Sunderland & South Tyneside Diabetic Eye Screening Programme	20 339	23 953	**84.9**
North East	118,850	138,200	**86.0**



Abdominal Aortic Aneurysm Coverage




2.20xi - Newborn bloodspot screening - Coverage (%)
100.0
99.5
99.0
98.5
98.0
97.5
97.0
96.5
96.0
95.5
95.0
94.5
94.0
93.5
93.0
92.5
92.0
91.5
91.0
90.5
90.0
98.9
97.9
93.5
97.6
97.4
95.8
2013/14
2014/15
Gateshead
North East
England


2.20xii - Newborn Hearing screening - Coverage (%)
100.0
99.5
99.0
98.5
98.0
97.5
97.0
96.5
96.0
95.5
95.0
94.5
94.0
98.9
99.2
98.5
99.0
99.0
98.5
2013/14
2014/15
Gateshead
North East
England