Health Protection Assurance 2014-2015
Annual Report of Director of Public Health

Introduction and purpose of the report

This chapter of the DPH Annual Report is an update about relevant health protection activity from April 2014 to March 2015. The report does not describe roles and responsibilities or the assurance arrangements for health protection as they were described in detail last year and have not changed.

The Health Protection Assurance Working Group continues to oversee health protection arrangements and performance as the key mechanism for ensuring robust health protection arrangements.

Performance against all relevant targets is included in the performance report attached.

Issues to note in 2014/15 are:

Seasonal influenza vaccination 2014/15

Flu immunisation was offered to everyone at risk (under Chief Medical Officer guidance) so that:

- An uptake of 75% was reached or exceeded for people aged 65 and over
- For patients aged 6 months to under 65 in clinical risk groups no numerical target was given.

In 14/15, Gateshead achieved an uptake of 74.9% amongst people aged 65 and over which was a slight increase of 0.1% on the figure for 2013/14 but is now the second year in succession that Gateshead has been below the 75% target. For people in the at risk category groups the uptake was 55.1% (down from 57.1% in 2013/14). However, despite the drop, Gateshead is still considered significantly better than the England (50.3%) and North East (51.0%) coverage rates.

Primary school aged children pilots

This school-based programme engaged with primary school age children in reception to year 6 across the borough. Children in at risk groups were excluded from the pilot and referred to their GP to receive their vaccination.

In total, 74 schools in Gateshead (including two special schools and four Jewish schools) held vaccination sessions. A total of 8,776 children were vaccinated, an uptake rate of 58.2%. The uptake rate in special schools was around 47%, and in Jewish schools was around 53%.

Frontline health and social care workers

The seasonal influenza immunisation campaign for Gateshead council employees working in social care (with direct service user contact) identified 3303 eligible employees.

The overall percentage of eligible employees vaccinated, 57.2%, was down from 62.9% in 2013/14.

Sexual health

Sexually Transmitted Infections (STIs)

The importance of improving sexual health is acknowledged by the inclusion of three indicators in the Public Health Outcomes Framework (PHOF). These indicators are:

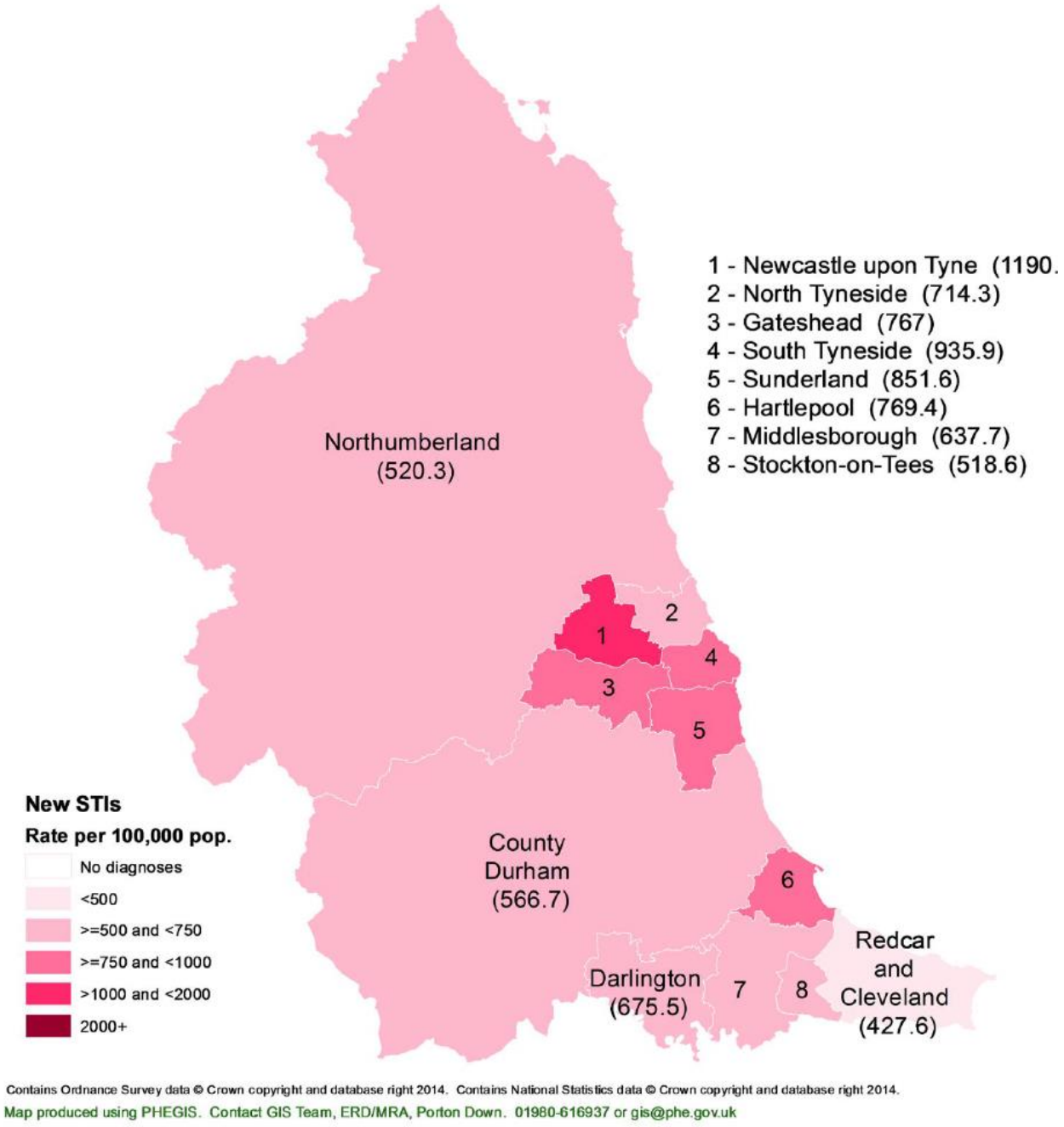
- Under 18 conceptions
- Chlamydia diagnoses (15-24 year olds); and
- People presenting with HIV at a late stage of infection.

The 'Local Authority Sexual Health Epidemiology Report' LASER for Gateshead 2014 is due to be published mid October 2015. Details of this will be made available within the final version of this report.

The most recent published data is at regional level (North East Annual Report 2014):

- The number of new STIs diagnosed in North East residents **decreased** by 12% between 2013 and 2014.
- Numbers of three of the five major STIs **increased**: syphilis increased by 13%, gonorrhoea by 11% and genital herpes by 1%.
- Numbers of chlamydia **decreased** by 21% (though still most prevalent disease) and genital warts by 5%.
- Men and women have **similar rates** of new STIs
- Where gender and sexual orientation are known, **men who have sex with men** (MSM) account for 7% of North East residents diagnosed with a new STI in a GUM clinic (67% of those diagnosed with syphilis and 23% of those diagnosed with gonorrhoea).
- STIs **disproportionately affect young people**. North East residents aged between 15 and 24 years accounted for **78% of all new STI diagnoses in 2014.**
- Black ethnic groups are more affected by STIs than other ethnic groups. **Black Caribbeans have the highest rate of new STIs**: 1,341 per 100,000. This is 2.3 times the rate seen in the white ethnic group.

Map of new STI rates per 100,000 residents by upper tier local authority in the NE: 2014



Health Care Acquired Infections

Information on infection rates at NHS England Local Area Team level show trends across the Cumbria, Northumberland and Tyne and Wear geography:

Rate of infection per 100 000	2009/10	2010/11	2011/12	2012/13	2013/14
MRSA	3.4	2.5	1.5	2	1.2
MSSA	N/A	N/A	17.8	18.4	20
E. coli	N/A	N/A	N/A	75.4	74.5
C. difficile	75.9	48.8	39.1	35.2	31.3

The Clinical Commissioning Group (CCG) has responsibility for health care acquired infections which are reported to the CCG Governing Body as part of the performance management framework. The DPH is a member of the CCG Governing Body

Air Quality

Air quality, and particular contaminants, may have a profound impact upon health. The Environment Act 1995 requires the Council to review and assess the air quality in Gateshead, looking specifically at seven air pollutants that are detailed in the Government's National Air Quality Strategy. These are:

- Nitrogen Dioxide (NO2)
- Fine Particles (PM10)
- Carbon Monoxide (CO)
- Sulphur Dioxide (SO2)
- Benzene
- 1,3 Butadiene
- Lead

The assessments form part of the Local Air Quality Management guidance which works towards achieving National Air Quality objectives.

The levels of these pollutants must be assessed to determine whether they exceed specific Air Quality Objectives (AQO). Where pollutant levels exceed the AQO the Council is required to take steps to improve air quality by declaring an Air Quality Management Area (AQMA) and producing an Air Quality Action Plan.

The Council operates an extensive air quality monitoring network in locations where there is a risk of the air quality standards being exceeded and where there is relevant exposure in the form of housing, offices, schools or hospitals.

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

The review of 2013 monitoring data has shown that NO2 levels have again fallen below the annual mean objective level within the AQMA (40µg/m3) and that there are no exceedences of the annual mean objective level outside of the AQMA. The current AQMA boundary remains appropriate for now but will be subject to review.

Concentrations of NO2 outside of the AQMA are all below the objectives at relevant locations, therefore there is no need to proceed to a Detailed Assessment.

The Council switched from monitoring PM10 to PM2.5 at two locations in 2011 in response to the growing body of evidence on the impact that PM2.5 has on health and particularly cardiovascular disease. Although the measured concentrations of PM2.5 suggest compliance with the National Air Quality Objectives the levels measured on the A1 Dunston are at the limit of the World Health Organisation's guideline annual mean for the second year in succession.

Emergency preparedness, resilience and response

The main aims of the Northumbria Local Resilience Forum and the Local Health Resilience Partnership Groups continue to ensure that there is an appropriate level of preparedness to enable effective multi-agency response to emergencies, and that there are robust reporting and monitoring arrangements.

The Gateshead Multi-Agency Resilience and Emergency Planning (MAREP) Group plays a key role in bringing these different responder organisations together to discuss these 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 Group has continued to receive regular health updates and items throughout the last year. The main focus has been in relation to the threat of the Ebola virus with regular national situation report updates provided and involvement in the development of local plans and preparations in the event of an outbreak in the north east area. Subsequently a Northumbria Local Resilience Forum Protocol for decontamination and the disposal of waste was developed; an Extraordinary Meeting was held to discuss control and coordination arrangements in the event of an outbreak and a joint Public Health England/Local Resilience Forum exercise was held to prepare for a possible confirmed Ebola Case.

Locally within Gateshead an exercise took place within the Health Protection Group in relation to providing that assurance of the local health protection arrangements for responding to incidents and outbreaks.

Training and Exercising

Co-ordinated by the Council's Resilience Team, the Multi-Agency Local Resilience Forum (LRF) Norland Series Exercise took place in November 2014 which tested our generic emergency planning arrangements. The exercise was designed to give delegates the opportunity to focus on tactical and operational elements of the response to a scenario to an aircraft specifically a helicopter crash. This scenario is identified within both the Northumbria and Gateshead Community Risk Registers as a medium risk. The session allowed participants to liaise with officers from partner organisations whilst operating under

joint communication and command principles. Positive feedback from the exercise has been received with all aims and objectives on the day achieved.

The Northumbria Local Resilience Forum in conjunction with Public Health England undertook an exercise to prepare for a possible confirmed Ebola case in the UK. The exercises had the aim of reviewing local preparedness and response arrangements to a suspected/confirmed Ebola case in their area, with a focus on the multi-agency response; including command, control and co-ordination arrangements, media handling, and community impacts. Local health preparedness and response arrangements were also reviewed during the exercises, covering advice and guidance, notification of a suspected case, patient management and transport, and personal protective equipment (PPE). Decontamination (including public spaces) was covered by the majority of local resilience forums. All lessons identified were brought together in joint Department for Communities and Local Government / Department of Health reports from the exercises that were undertaken.

Other highlights during this year include:

- Hosted by Public Health England in conjunction with the Local Resilience Forum a North East Chemical Fatality Workshop took place. The aim was improving the awareness of the response to and recovery from Deliberate Individual Chemical Exposure (DICE) incidents and highlighted the potential health issues of an incident.
- A Government Decontamination Service (GDS) briefing has also been held. This session provided Local Authorities and responders with the information needed to be able to understand the GDS roles and responsibilities; reduce recovery timeliness and how to access the GDS framework in relation to CBRN (Chemical, Biological, Radiological and Nuclear) incidents.

Major issues in 2014/15

Major issues to note include:

Ebola

An outbreak of Ebola Virus Disease (EVD), a rare viral haemorrhagic fever, started in December 2013 in Guinea and spread to other countries in west Africa. The most affected were Guinea, Liberia and Sierra Leone. The virus is spread through contact with blood and fluids from infected individuals and has a high fatality rate. To date there is no vaccine and no cure.

As the disease spread within west Africa, greater numbers of healthcare professionals volunteered their time to treat the infected in those countries. A handful of healthcare workers became infected during their stay in Africa. Some were repatriated for treatment while others did not develop symptoms until their return to their home country. The perceived risk of Ebola to the general public in the UK rose, due in part to the nature of press coverage of the disease, and as the disease continued to spread in west Africa. The actual risk to the general public in the UK remained at all times very low.

By October 2014, the worsening of the outbreak led to increased public concern. Perceived risk had increased to the point that the LRF held an extraordinary meeting. Public Health England (PHE) led on preparedness in response to the outbreak including

the establishment of a number of working groups. Gateshead Council nominated the DPH as lead officer. All internal and external communications regarding Ebola were shared amongst a number of members of the Gateshead Multi-Agency Resilience and Emergency Planning Group. The Council received a small number of enquiries about Ebola which were handled by liaison between the Resilience Team, Public Health and Public Health England.

- A number of incidents occurred within screening programmes during 2014/15, these were managed by NHS England, working with providers and the Director of Public Health was notified in every case as part of the assurance framework.

Infectious disease outbreaks

There was a sudden increase in cases of salmonella during September 2014 linked to two premises in Gateshead. In both cases, Environmental Health Officers provided rigorous investigations and instigated follow-up actions to correct poor hygiene practices.

There was a high exceedance of Salmonella cases across the region at the beginning of September 2014. There were a total of 26 cases identified, 13 of which were positive for Salmonella Enteritidis PT56. Investigation of the cases revealed a link to a restaurant in the Gateshead area. Officers visited the premises and took food and environmental samples. The inspection found a number of issues and poor practices that the owner was required to resolve. All of the food samples were satisfactory, but the environmental swabs were positive for bacteria, which indicated poor hygiene practices. Officers continued to visit the restaurant and work with the owner until all issues were resolved.

Whilst reviewing the investigations into the Salmonella cases Environmental Health Officers identified a second outbreak linked to a local children's nursery. Initially two cases of Salmonella were identified in children who attended the nursery. Investigations at the nursery identified a third case of Salmonella from earlier in the month. Investigation showed there to have been a high level of absence due to diarrhoea amongst both children and staff. This high level had not been reported to PHE as required by current standards. No issues were identified within the kitchen and it was not thought to be the source of infection. Environmental Health Officers and PHE staff carried out joint visits and found cross contamination issues around nappy changing and toilet facilities. Advice and training were given to staff and a letter sent out to parents. Practices at the nursery were changed and the nursery monitored until absences returned to normal levels.

Scarlet Fever

Public Health England (PHE) has reported a continued substantial increase in scarlet fever notifications across England for 2014/2015. This is the second year in a row of exceptional activity. A total of 754 new cases were reported in England last week (2 to 8 March 2014) and 5746 since the season began in September 2014 (week 37 in 2014 to week 10 2015). This compares to 2833 cases for the same period last season 2013/2014.

Scarlet fever is mainly a childhood disease and is most common between the ages of 2 and 8 years. It was once a very dangerous infection, but although much less serious now, complications can arise, particularly in those who remain untreated. There is currently no vaccine for scarlet fever

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

- Diabetic Retinopathy
- Abdominal Aortic Aneurysm
- Cancer screening programmes (breast, bowel and cervical)
- Antenatal and new born screeniing

NHS England has established programme boards for each progamme, DsPH are informed of any specific issues as they arise, see example below.

Diabetic Eye Screening

A serious incident was identified where a patient was diagnosed with high grade retinopathy, but had not been referred to the Diabetic Eye Screening Programme by their GP practice. Sight loss due to retinopathy is avoidable, if picked up early through screening and so it is important that all patients with diabetes are referred to the screening programme and are given the opportunity to be screened. As a further failsafe measure, NHS England has introduced a regular data extraction from GP systems to find diabetic patients who are not known to the screening programme and so their records can be checked to make sure they are invited for screening, if eligible.

Work plan for 2015-16

The major themes the Public Health Protection Assurance Working Group will consider in 15/16 are:

- Screening programmes, to increase uptake and ensure quality
- Flu immunisation, to increase uptake
- Sexual health, to improve outcomes and reduce health inequalities

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.

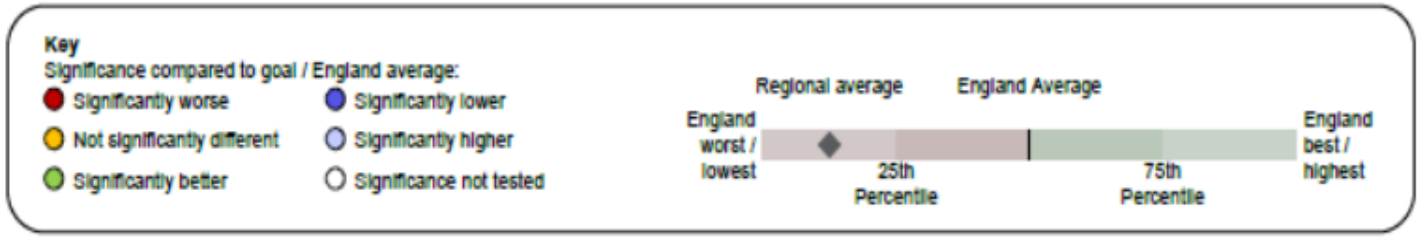
Conclusion

The arrangements established in April 2013 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.

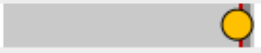
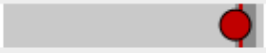
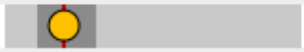
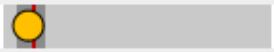
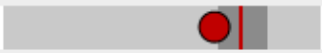
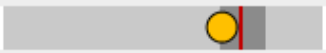
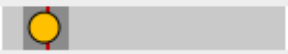
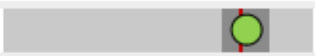
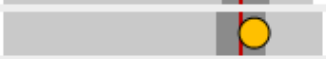
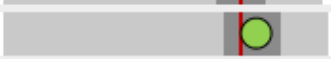
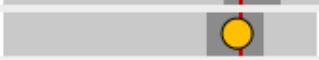
Carole Wood
Director of Public Health

Appendix 1 – Performance tables



Indicator	Period	Gateshead		Region	England	England		
		Count	Value	Value	Value	Worst/ Lowest	Range	Best/ Highest
Syphilis diagnosis rate / 100,000	2014	19	9.5	5.7	7.8	132.1		0.7
Gonorrhoea diagnosis rate / 100,000	2014	157	78.5	54.1	63.3	633.9		8.7
Chlamydia detection rate / 100,000 aged 15-24 (PHOF indicator 3.02) <1,900 1,900 to 2,300 ≥2,300	2014	517	2,186	2,025	2,012	945		4,270
Chlamydia proportion aged 15-24 screened	2014	5,749	24.3%	25.8%	24.3%	10.9%		48.7%
All new STI diagnoses (exc Chlamydia aged <25) / 100,000	2014	1,004	773	669	829	3,190		383
HIV testing coverage, total (%)	2014	3,896	69.3%	65.0%	68.9%	20.8%		86.1%
HIV late diagnosis (%) (PHOF indicator 3.04) <25% 25% to 50% ≥50%	2011 - 13	7	25.9%	37.7%	45.0%	77.3%		25.9%
HIV diagnosed prevalence rate / 1,000 aged 15-59 <1 1 to 2 ≥2	2013	154	1.30	0.90	2.14	0.37		14.70
Population vaccination coverage - HPV (%) (PHOF indicator 3.03xii) <previous year's England value ≥previous year's England value	2013/14	910	93.5%	91.3%	86.7%	51.1%		96.6%

HIV & STI

Indicator	Period	Gateshead		Region	England	England		
		Count	Value	Value	Value	Worst/ Lowest	Range	Best/ Highest
Syphilis diagnosis rate / 100,000	2014	19	9.5	5.7	7.8	132.1		0.7
Gonorrhoea diagnosis rate / 100,000	2014	157	78.5	54.1	63.3	633.9		8.7
Chlamydia detection rate / 100,000 aged 15-24 (PHOF indicator 3.02) <1,900 1,900 to 2,300 ≥2,300	2014	517	2,186	2,025	2,012	945		4,270
Chlamydia detection rate / 100,000 aged 15-24 (PHOF indicator 3.02) (Male)	2014	193	1,604	1,422	1,355	599		3,016
Chlamydia detection rate / 100,000 aged 15-24 (PHOF indicator 3.02) (Female)	2014	324	2,790	2,655	2,664	1,114		5,539
Chlamydia proportion aged 15-24 screened	2014	5,749	24.3%	25.8%	24.3%	10.9%		48.7%
Chlamydia diagnostic rate / 100,000	2014	743	372	363	375	162		1,224
Chlamydia diagnostic rate / 100,000 aged 25+	2014	222	155	128	173	67		1,003
Genital warts diagnosis rate / 100,000	2014	291	145.5	140.9	128.4	283.2		75.5
Genital herpes diagnosis rate / 100,000	2014	137	68.5	54.1	57.8	187.7		13.9
New STI diagnosis rate / 100,000	2014	1,534	767	712	797	392		2,921
All new STI diagnoses (exc Chlamydia aged <25) / 100,000	2014	1,004	773	669	829	3,190		383
STI testing rate (exc Chlamydia aged < 25) / 100,000	2014	21,385	16,461	13,683	15,366	7,922		58,803
STI testing positivity (exc Chlamydia aged <25) %	2014	1,004	4.7%	4.9%	5.4%	3.4%		13.5%
HIV testing uptake, total (%)	2014	4,577	79.0%	81.8%	77.5%	22.0%		94.2%
HIV testing uptake, MSM (%)	2014	420	95.2%	95.7%	94.5%	81.6%		99.0%
HIV testing uptake, women (%)	2014	2,456	75.0%	78.6%	71.5%	15.5%		92.2%
HIV testing uptake, men (%)	2014	2,121	84.1%	86.0%	84.8%	48.3%		96.4%

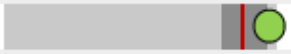
HIV & STI

HIV late diagnosis (%) (PHOF indicator 3.04) <25% 25% to 50% ≥50%	2011 - 13	7	25.9%	37.7%	45.0%	77.3%		25.9%
HIV diagnosed prevalence rate / 1,000 aged 15-59 <1 1 to 2 ≥2	2013	154	1.30	0.90	2.14	0.37		14.70
Proportion of TB cases offered an HIV test (TB Strategy Monitoring Indicators) <50th-percentile of UTLAs ≥50th to <90th ≥90th	2013	-	-	55.2%	83.3%	-	-	-
Antenatal infectious disease screening – HIV coverage (PHOF indicator 2.21i) Region only	2013/14	-	-	99.5%	98.9%	-	-	-
Population vaccination coverage - HPV (%) (PHOF indicator 3.03xii) <previous year's England value ≥previous year's England value	2013/14	910	93.5%	91.3%	86.7%	51.1%		96.6%

Health protection

Indicator	Period	Gateshead		Region	England	England		
		Count	Value	Value	Value	Worst/ Lowest	Range	Best/ Highest
3.01 - Fraction of mortality attributable to particulate air pollution	2012	-	4.2%	4.1%	5.1%	3.0%		7.7%
3.02 - Chlamydia detection rate (15-24 year olds) <1,900 1,900 to 2,300 ≥2,300	2014	517	2,186	2,025	2,012	945		4,270
3.02 - Chlamydia detection rate (15-24 year olds) (Male)	2014	193	1,604	1,422	1,355	599		3,016
3.02 - Chlamydia detection rate (15-24 year olds) (Female)	2014	324	2,790	2,655	2,664	1,114		5,539
3.03i - Population vaccination coverage - Hepatitis B (1 year old)	2013/14	0	*	-	-	-	-	-
3.03i - Population vaccination coverage - Hepatitis B (2 years old)	2013/14	0	*	-	-	-	-	-
3.03iii - Population vaccination coverage - Dtap / IPV / Hib (1 year old) <90% ≥90%	2013/14	2,177	96.2%*	96.4%	94.3%	78.6%		98.4%
3.03iii - Population vaccination coverage - Dtap / IPV / Hib (2 years old) <90% ≥90%	2013/14	2,264	97.9%*	97.9%	96.1%	81.6%		99.1%
3.03iv - Population vaccination coverage - MenC <90% ≥90%	2012/13	2,233	96.1%*	96.0%	93.9%	75.9%		98.8%
3.03v - Population vaccination coverage - PCV <90% ≥90%	2013/14	2,162	95.6%*	96.4%	94.1%	78.2%		98.3%
3.03vi - Population vaccination coverage - Hib / MenC booster (2 years old) <90% ≥90%	2013/14	2,171	93.9%*	96.0%	92.5%	76.6%		98.1%
3.03vi - Population vaccination coverage - Hib / Men C booster (5 years) <90% ≥90%	2013/14	2,159	90.8%*	95.2%	91.9%	72.7%		98.1%
3.03vii - Population vaccination coverage - PCV booster <90% ≥90%	2013/14	2,189	94.7%*	95.7%	92.4%	76.4%		98.5%

Health protection

3.03viii - Population vaccination coverage - MMR for one dose (2 years old) <90% ≥90%	2013/14	2,186	94.6%*	95.5%	92.7%	78.3%		98.3%
3.03ix - Population vaccination coverage - MMR for one dose (5 years old) <90% ≥90%	2013/14	2,323	97.7%*	96.7%	94.1%	74.8%		98.6%
3.03x - Population vaccination coverage - MMR for two doses (5 years old) <90% ≥90%	2013/14	2,175	91.5%*	92.9%	88.3%	63.8%		97.4%
3.03xii - Population vaccination coverage - HPV <previous year's England value ≥previous year's England value	2013/14	910	93.5%	91.3%	86.7%	51.1%		96.6%
3.03xiii - Population vaccination coverage - PPV <previous year's England value ≥previous year's England value	2013/14	22,540	73.8%	71.1%	68.9%	52.8%		77.6%
3.03xiv - Population vaccination coverage - Flu (aged 65+) <75% ≥75%	2014/15	29,367	74.9%	74.6%	72.7%	61.7%		80.1%
3.03xv - Population vaccination coverage - Flu (at risk individuals)	2014/15	13,818	55.1%	51.0%	50.3%	38.4%		63.6%
3.04 - People presenting with HIV at a late stage of infection <25% 25% to 50% ≥50%	2011 - 13	7	25.9%	37.7%	45.0%	77.3%		25.9%
3.05i - Treatment completion for TB	2012	-	*	-	83.3%	-	-	-
3.05ii - Incidence of TB	2011 - 13	20	3.3	5.3	14.8	113.7		0.5
3.06 - NHS organisations with a board approved sustainable development management plan	2013/14	2	33.3%	32.8%	41.6%	0.0%		83.3%
3.07 - Comprehensive, agreed inter-agency plans for responding to health protection incidents and emergencies	2014/15	-	100%	100%	95.2%	0.0%		100%