Appendix 1

Health Protection Assurance Report 2019

Executive Summary

1. North Tyneside has robust systems in place in the management of existing and emerging health protection issues. These systems are shared across health, social care, environmental health and public protection and transport and planning this framework is outlined in appendix 2.

2. An analysis of the data regarding health protection outcomes for screening, immunisation, communicable diseases and air quality has highlighted that there are areas that require improvement, and these form the priorities for 2019/20. These include:

- Uptake of cancer screening programmes is generally very good. However, there is evidence of variation at a local level in uptake for all of the cancer screening programmes and a decline in uptake of the cervical screening programme[1].

- Childhood immunisation programme in North Tyneside performs better than the regional and England average; however there is a decline in the number of five year olds who receive two doses of the measles, mumps and rubella (MMR) vaccination: 93.6% in 17/18 compared to 98.6% in 15/16[2] and the WHO target of >95% population coverage is not being achieved.

- There had been a decline in the numbers of girls receiving the Human Papilloma Virus (HPV) vaccination. However, North Tyneside has now improved coverage compared to England. Uptake of the HPV vaccine and booster is now over the 90% standard for two doses at year nine[3]. This is a positive result, from September 2019 the HPV vaccination programme will be extended to boys in year eight.

- The uptake of the influenza vaccination for clinical risk groups, pregnant women and frontline staff requires improvement. The school-based element of the childhood seasonal influenza vaccination programme is achieving significantly higher coverage in North Tyneside compared to the England average and exceeds the national standard.

- The formation of a joint local screening and immunisation oversight group (SIOG) for North Tyneside and Northumberland has now been established and provides strategic oversight for the delivery of screening and immunisation programmes in North Tyneside as well as addressing any issues relating to variation and decline in uptake.

- As part of the antimicrobial resistance work Public Health in partnership with the CCG and the wider local health economy need to be assured that NICE Guidance 63 - Antimicrobial stewardship: changing risk-related behaviours in the general population[4] is implemented in North Tyneside.

- Improving and monitoring air quality in North Tyneside will bring together public health, environmental health and transport.

- Local and national planning for Brexit will need to consider the implications for environmental health and port health functions.

Introduction

3. The Director of Public Health (DPH) has a statutory responsibility for the strategic leadership of health protection for North Tyneside Council[5]. The DPH, on behalf of the Council, should be assured that the arrangements to protect the health of their local communities are robust and are implemented appropriately. Guidance suggests that, through their DPH, Health and Wellbeing Boards will wish to be assured that acute and longer term health protection arrangements properly meet the health needs of the local population[6]. Accordingly, this report is to inform the Health and Wellbeing Board about arrangements and outcomes for health protection in North Tyneside.

4. The data presented in this report is based upon the most recent available data.

Programme	Time Period
Cancer and Non-Cancer Screening	2017/18
Routine Childhood Immunisation Programme	2017/18
At Risk Immunisation Programme	2017/18
School Based Immunisations Programme	Sep 2017 – August 2018
Seasonal Flu Vaccination	Oct 2018 – March 2019
Environmental Health and Food Safety	2018/19
Port Health	2018/19
Statutory Notifiable Diseases	2018
Health Care Associated Infections	2018/19
Excess Winter Deaths	2016/17

Background

5. Health protection is the domain of public health action that seeks to prevent or reduce the harm caused by communicable diseases, and to minimise the health impact of environmental hazards such as chemicals and radiation, and extreme weather events.

   This broad definition includes the following functions within its scope, together with the timely provision of information and advice to relevant parties, and on-going surveillance, alerting and tracking of existing and emerging threats:

   - National programmes for screening and immunisation which may be routine or targeted;

   - Management of environmental hazards including those relating to air pollution and food;

   - Health Emergency Preparedness Resilience and Response (EPRR), the management of individual cases and incidents relating to communicable disease (e.g. meningococcal disease, tuberculosis (TB), influenza) and chemical, biological, radiological and nuclear hazards;

   - Infection prevention and control in health and social care community settings and in particular, Healthcare Associated Infections (HCAIs);

- Other measures for the prevention, treatment and control of the management of communicable disease (e.g. TB, blood-borne viruses, seasonal influenza).

6. The DPH employed by North Tyneside Council, is responsible for the Council's contribution to health protection matters and exercises its functions in planning for, and responding to, emergencies that present a risk to public health. The DPH is also responsible for providing information, advice, challenge and advocacy to promote health protection arrangements by relevant organisations operating in the Local Authority area. This report forms part of those arrangements.

Health protection is a multi-agency function

7. Local Authorities are responsible for providing independent scrutiny and challenging the arrangements of NHS England (NHSE), Public Health England (PHE) and providers. The responsibility for the provision of the health protection function is spread across the following organisations:

8. **North Tyneside Council** through the leadership role of the DPH, has a delegated health protection duty from the Secretary of State to provide information and advice to relevant organisations to ensure all parties discharge their roles effectively for the protection of the local population[5]. This leadership role relates mainly to functions for which the responsibility for commissioning or coordinating lies elsewhere. The Council also provides local support for the prevention and investigation of local health protection issues through the Public Protection Environmental Health (EH) function.

9. **Screening and Immunisation Teams** (SITs) are employed by PHE and are embedded in NHSE. The SITs provide local leadership and support to providers in delivering improvements in quality and changes in screening and immunisation programmes. The SITs are also responsible for ensuring that accurate and timely data is available for monitoring vaccine uptake and coverage.

10. **PHE** brings together a wide range of public health functions and is responsible for delivering the specialist health protection response to cases, incidents and outbreaks; and provides expert advice to NHSE to commission immunisation and screening programmes, as well as several other responsibilities relating to surveillance and planning.

11. **NHS North Tyneside CCG** commissions treatment services (e.g. hospital inpatient treatment, nurses working with specific infections, such as TB) that comprise an important component of strategies to control communicable disease.

12. Emergency preparedness, resilience and response functions are provided by all category one responders; this includes the Local Authority, PHE, NHSE, Emergency Services and NHS Foundation Trusts. All of these agencies are represented on the Local Health Resilience Partnership (LHRP) and the Local Resilience Forum (LRF).

Screening

13. Screening is a strategy used in a population to identify the possible presence of an as-yet undiagnosed disease or increased risk of disease in individuals without signs or symptoms. The purpose of screening is to identify and intervene early to reduce potential harm. Each programme is underpinned by rigorous quality assurance and monitoring arrangements to

ensure that the target population benefit from the service and those individuals are not exposed to potential harms (e.g. failures to correctly identify individuals requiring further tests).

14. The screening programmes, commissioned by NHSE for which the DPH has an assurance role are:
    - Cancer screening programmes (breast, bowel and cervical)
    - Diabetic Retinopathy
    - Abdominal Aortic Aneurysm (AAA)
    - Antenatal and newborn screening programme

15. The most recent data for the adult and the ante-natal and newborn screening programmes are for 2017/18[2,7]. In these circumstances, assurance for North Tyneside is limited to the overall assurance we have in respect of the programme or the period for which we have data.

16. There are two key indicators that can be used as measures of assurances that can be used alongside the national uptake of screening programmes, these are:
    - National baseline indicators based upon the 2017-18 Public Health Function agreements
    - Clinical standards that are required to ensure patients safety and control disease.

17. Generally coverage of the cancer screening programmes are within the national standards. There is variation at a GP level and this does reflect the social gradient with GP practices serving more deprived areas having a lower population coverage rates. For all three of the cancer screening programmes coverage has remained stable compared to 2016/17. However there has been a noted decline nationally in the cervical screening programme, in particular amongst younger women.

18. Uptake of the AAA and cancer screening programmes in North Tyneside continues to be either similar or above the national average. The table below presents coverage for all of the adult screening programmes and highlights the variation at a GP practice level of uptake. The only programme operating below the national standard is cervical cancer screening.

19. Data for the Diabetic Eye Screening Programme is unavailable at a North Tyneside level. Performance, reported at North of Tyne and Gateshead area level, suggests that uptake exceeds the acceptable threshold of 75%. The SITs 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.

Table 1: Adult Screening Programme Coverage 2017/18[1]

Screening Programme	Standard		% Coverage (2017/18)		North Tyneside Range	
	Acceptable	Achievable	England	North Tyneside	Highest GP	Lowest GP
Cervical Cancer (25-64 years)	75%	80%	71.4%	76.4%	82.9%	69.2%
Breast Cancer (50-70 years)	70%	80%	74.9%	77.4.5%	83.3%	57.2%
Bowel Cancer (60-74 years)	55%	60%	57.4%	59.9%	67.3%	48.2%
AAA (men 65 years)	75%	85%	80.8%	82.2%	NA	NA
Diabetic eye screening*	75%	85%	82.7%	81.9%*	NA	NA

*North of Tyne and Gateshead diabetic eye screening programme data (2017/18)

20. The Antenatal and Newborn screening programme covers six areas:
    - Fetal anomaly
    - Sickle cell and thalassemia
    - Infectious diseases in pregnancy
    - Newborn infant physical examination
    - Newborn hearing screening
    - Newborn bloodspot screening

21. Data on the coverage of the entire Ante-Natal and Newborn screening programme is not available at a North Tyneside level and is presented for 2017/18.

22. In Northumbria Health Care NHS Foundation Trust 99.1% of eligible babies received the newborn infant physical examination (NIPE) within 72 hours of birth in 2017/18 and 94% at Newcastle upon Tyne Hospitals NHS Foundation Trust. (England 95.4%).

23. Newborn bloodspot coverage across the North Tyneside CCG area continues to be high at 98.9% for 2017/18 (England 96.7%).

24. Antenatal and newborn screening coverage for North Tyneside is within the national standards. The only exception is the NIPE coverage for babies born in Newcastle NHS Foundation Trust; which is just below the lower threshold of 95%.

Table 2: Antenatal and newborn screening coverage[1]

Screening programme	National Standard		% Coverage (2017/18)	
	Lower	Standard	England	North Tyneside
Infectious Diseases in Pregnancy (HIV Coverage)	≥95%	≥99%	99.6	99.4
Sickle Cell and Thalassaemia	≥95%	≥99%	99.6	99.6
Newborn Blood Spot Screening	≥95%	≥99%	96.7	98.9
Newborn Hearing Screening	≥98%	≥99.5%	98.9	98.8
Newborn and Infant Physical Examination Screening	≥95%	≥99.5%	95.4	99.1* 94.0**

*Data for Northumbria Healthcare NHS FT ** Data for Newcastle upon Tyne Hospitals NHS FT

Immunisation and vaccination

25. Immunisation remains one of the most effective public health interventions for protecting individuals and the community from serious diseases. The national routine childhood immunisation programme currently offers protection against 13 different vaccine-preventable infections (a full schedule is attached in appendix 3). In addition to the routine childhood programme, selective vaccination is offered to individuals reaching a certain age or with underlying medical conditions or lifestyle risk factors.

26. NHSE is responsible for commissioning local immunisation programmes and accountable for ensuring local providers of services will deliver against the national service specification and meet agreed population uptake and coverage levels as specified in the Public Health Outcomes Framework and Key Performance Indicators[7].

Routine childhood immunisation programme

27. Uptake in North Tyneside for the routine childhood programme remains among the highest in England: In 2017/18 coverage for routine childhood immunisation programme in North Tyneside is presented in table 3 below.

28. Achieving population coverage of >95% is important as this is the point at which the entire population is protected, including the 5% that are not vaccinated. This is referred to as herd immunity.

Table 3: Coverage routine childhood immunisation programme North Tyneside 2017/18[1,7]

Vaccine and booster programme	Age cohorts					
	12 months		24 months		5 years	
	England	NT	England	NT	England	NT
Diphtheria, tetanus, pertussis, polio, haemophilus influenza type b (DTaP/IPV/Hib)	93.0%	96.8%	95.2%*	98.7%*	95.9%	97.5%
Men B	92.6%	96.6%				
Rotavirus	90.3%	95.8%				
PVC	93.5%	97.8%	91.2%*	97.1 %*		
MenC/Hib			91.3%*	97.1%*	92.9%	96.2%
Measles, mumps and rubella (MMR)			91.0%	96.8%	87.4%**	93.6%**
DTaP/IPV*					86.1%	92.7%

*Boosters
** Two doses MMR

<90% Coverage | 90% to 95% Coverage | ≥95% Coverage

29. North Tyneside achieves a coverage rate of >95% for all of the childhood immunisation programmes, with the exception of two doses of MMR at 5 years of age and the DTaP/IPV booster. A programme of work was undertaken in 2018 to improve MMR2 coverage in North Tyneside and early indications (Q1-3 2018/19) indicate that MMR2 coverage is over the 95% heard immunity threshold (95.2%).

Table 4: HPV and Td/IPV Booster September 2017 – August 2018 [3,8]

Vaccine and booster programmes	Age Cohorts							
	Year 8 - HPV Year 9 - Td/IPV and MenACWY				Year 9 - HPV Year 10 Td/IPV and MenACWY			
	England		NT		England		NT	
HPV (females)	**86.9%***	**NA**	**83.7%***	**79.8%****	**89.1%***	**83.8%****	**89.2%***	**92.8%****
Td/IPV	**85.5**		**91.1%**		**82.9**		**89.5%**	
MenACWY	**85.8%**		**92.9%**		**84.3%**		**90.0%**	

* 1 dose HPV
**2 doses HPV

30. All girls aged 12 to 13 are offered HPV (human papilloma virus) vaccination as part of the childhood vaccination programme. The vaccine protects against cervical cancer. It's usually given to girls in years 8 and 9 within schools in England with a second dose administered within 6 to 12 months (this can also occur in either year 8 or year 9). In North Tyneside the coverage for the full two doses at year 8 and 9 respectively was 79.8% and 92.8% compared to 89.2% (year 9 only) in England (2017/18). Coverage in North Tyneside is better than the England rate, and coverage rate at year 9 in North Tyneside is above the national standard of 90%.

31. In September 2019 the HPV vaccination programme will be extended to all pupils in year 8, including boys. It is important to highlight that any individual who missed their HPV vaccination in school Year 8 can continue to have the vaccine up to their 25th birthday.

32. Td/IPV (tetanus, diphtheria and polio) teenage booster is the final dose of the routine childhood immunisation programme. Nationally many areas give the Td/IVP booster in school year 10. The national plan is to provide the Td/IPV booster in year 9 alongside the final MenC booster. At present data is presented for both year 9 and year 10 to reflect the current system. North Tyneside has a higher coverage rate than England, at year 9 and 10, and year 10 coverage is above the national standard of 90%.

33. 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 in teenagers and young adults. Catch-up campaigns were arranged to reach older teenagers and “freshers” at university.

34. In North Tyneside, from September 2017 up to Aug 2018, 92.9% (85.8% England) of Year 9 students (aged 13-14) received the MenACWY vaccination and 90% of year 10 students (84.3% England)[9].

At risk immunisation programme

35. The at risk immunisation comprises the following:
- Pneumococcal (PPV) vaccine single dose at 65 years
- Shingles vaccine single dose at 70 years (catch up for 78 and 79 year olds)

Table 5: Pneumococcal (PPV) and Shingles immunisation coverage 2017/18[2]

Vaccination	National Standard	England	North Tyneside
PPV	68.8%	69.5%	70.9%
Shingles (70 years old)	NA	44.4%	42.6%
		Below min standard	Acceptable range

36. The coverage rate for the PVV adult immunisation programme in North Tyneside is similar to the England rate. Although there is no national standard for shingles vaccine coverage, only 42.6% of 70-year olds received this is in North Tyneside, this is similar to the England coverage (2017/18).

Seasonal flu vaccine programmes

37. In 2018/19 seasonal flu vaccine offered annually 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: reception to year 5
- Those in long-stay residential care homes or other long stay care facilities
- Carers
- Frontline health and social care workers

38. Targets for uptake in the adult population were 75% of the eligible population. Ambitions for uptake amongst children were 40-65% of those eligible. The table below presents the data that is available on the seasonal flu vaccine.

Table 6: Seasonal flu Vaccination Coverage North Tyneside 2018/19[10]

Adult Seasonal flu Vaccination			
	National Standard	England	North Tyneside
Aged 65+	75%	72.0%	73.9%
Clinical risk groups	75%	48.0%	49.2%
Pregnant women	55%	45.2%	49.1%
Front-line staff (NHS FT)	75%	70.3%	67.2%
Children Seasonal flu Vaccination – Not in a clinical risk group			
Age	National Standard	England	North Tyneside
2yrs	40 – 65%	43.6%	43.9%
3yrs		45.5%	47.2%
4 - 5yrs		63.9%	78.2%
5 - 6yrs		63.4%	79.2%
6 - 7yrs		61.4%	75.6%
7 - 8 yrs		60.2%	74.3%
8 – 9 yrs		58.0%	73.9%
9 – 10 yrs		56.2%	68.0%

Below min standard	Within standard range	Exceeds standard

39. North Tyneside has higher coverage rate than England across all aspects of the seasonal flu vaccination programme, with the exception of the NHS frontline staff vaccination programme. The adult programme falls below the expected minimum standard and the childhood programme provided in primary care is performing within the expected range, it is only the school based flu vaccination programme that consistently exceeds the national standard.

Surveillance and communicable diseases

40. Effective surveillance systems ensure the early detection and notification of particular communicable diseases. PHE Health Protection Team obtains data from a wide variety of sources, including healthcare staff, hospitals, microbiology laboratories, 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.

Environmental health and food safety

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

42. In 2018/19 there were 405 cases of foodborne and environmental infections which were notified to the Food Safety team during the year, these included cases of legionnaires disease, listeriosis and vibrio cholera, as well as more common food poisonings and parasitic infections.

43. The team also investigated an outbreak of gastroenteritis affecting guests at a wedding reception. The wedding was attended by over 80 friends and family and, of the 29 guests suffering from symptoms, 19 were found to be infected by Norovirus. Investigations at the wedding venue failed to identify a specific cause for the outbreak.

44. North Tyneside food safety team received 331 food hygiene and food standards complaints in the period 2018/19. All complaints were investigated in a timely manner and action taken where appropriate. Consumers concerns varied and related to discovery of extraneous material in food and hygiene issues reported after visits to food establishments. Complaints regarding food standards included labelling issues, false claims regarding the nature, substance or quality of food and the origin of ingredients as well as illegal health claims.

45. A complaint was made against a food business that allegedly served a meal containing nut powder which resulted in the customer having to be treated in a local hospital for an allergic reaction. Failings were identified in the way the business was handling its allergenic food ingredients. The matter is still under investigation.

46. Over 900 food businesses were inspected during the year as part of a programme of food hygiene and food standards interventions. The majority of businesses were found to be compliant with food safety legislation however deficiencies were reported on 5% of the premises visited. The non-compliances ranged from issues of cleanliness and structural defects to cross contamination risks. Enforcement action was taken against a proportion of the businesses to secure compliance, this included emergency closure of three businesses with water supply issues.

47. North Tyneside food safety team conducts a food sampling programme. In 2018/19 686 samples were obtained from 102 food establishments. The majority of samples are taken for microbiological examination and results are used to monitor the hygiene and food safety standards at food premises often in conjunction with programmed inspections. A significant number of microbiological samples are part of national and local coordinated studies. One particular study identified a problem with the hygiene of re-usable food containers at hot food take-away businesses with the potential for cross contamination of stored food ingredients. This highlighted the importance of providing separate containers for raw and cooked foods.

Control of specific diseases

48. Early diagnosis by clinicians, prompt treatment of cases and early reporting by microbiologists and clinicians to the PHE Health Protection Team are essential in enabling prompt public health action for diseases such as meningococcal infection. For other diseases such as gastrointestinal infections, initial reporting may be through local authority environmental health officers.

49. The tables below present data on the notifications received for specific communicable diseases. It is important to note that at a local authority level and at a regional level often the numbers of reported diseases are very low, and this can mean that there is significant variation from year to year as the rate is affected by a slight increase or decrease.

Table 7: Measles, mumps, meningococcal disease and whooping cough notifications 2018[11]

Area	Disease									
	Measles		Mumps		Rubella		Meningococcal disease		Whooping cough	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
England and Wales	2599	4.4	6735	11.5	284	0.5	268	0.5	2613	4.4
North East	193	7.3	507	19.2	15	0.6	67	2.5	177	6.7
North Tyneside	15	7.3	53	25.9	*	0.5	*	1.5	12	5.9

Rate per 100,000 population estimates 2017 (ONS) *data suppressed due to small numbers

50. In 2018 notifications for rubella and whooping cough in North Tyneside were similar to the England and North East rate. There were higher rates of notifications for measles, mumps and meningococcal for both North Tyneside and North East.

Table 8: Foodborne and waterborne infectious disease notifications 2018[13]

Area	Disease									
	E. coli O157		Salmonella		Campylobacter		Cryptosporidium		Legionellosis	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
England and Wales	555	1.0	9935	16.9	60109	102.3	5,201	8.9	373	0.6
North East	61	2.3	375	14.2	3361	127.1	376	14.2	30	1.1
North Tyneside	7	3.4	33	16.1	295	144.3	29	14.2	*	2.0

Rate per 100,000 population estimates 2017 (ONS) *data suppressed due to small numbers

51. North Tyneside has higher rates for E. coli O157, campylobacter and cryptosporidium when compared to England, however these rates are similar to the North East.

Table 9: Hepatitis and Tuberculosis notifications 2018[13]

Area	Disease									
	Hepatitis A		Hepatitis B		Hepatitis C		Hepatitis E		TB	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
England and Wales	741	1.3	4413	7.9	6057	10.9	1368	2.5	4668	8.4
North East	8	0.3	199	7.5	599	22.6	58	2.2	122	4.6
North Tyneside	0	0.0	11	5.4	32	15.6	9	4.4	9	4.4

Rate per 100,000 population estimates 2017 (ONS)

52. North Tyneside has lower rates of notification for hepatitis (A and B) and tuberculosis and this is similar for the North East region. However, in 2018 North Tyneside had higher hepatitis C and E notifications.

Table 10: Sexually transmitted infections (STI) and new HIV diagnosis notifications 2018 [13,12,13,14]

	Rate per 100,000 population						
	All new STIs diagnosis	Chlamydia	Genital herpes	Genital warts	Gonorrhoea	Syphilis	HIV (15+)
England	784	384	59.0	100.1	98.5	13.1	8.7
North East	639	330	60.5	93.2	66.5	9.3	4.8
North Tyneside	670	358	70.9	103.7	59.7	5.9	5.8

Rate per 100,000 population estimates 2017 (ONS)

53. The rates of STIs in North Tyneside are comparable with the North East and are better than the England average, particularly for gonorrhoea, syphilis and HIV.

Healthcare Associated Infections (HCAIs)

54. On behalf of NHSE, PHE uses routine surveillance programmes to collect data on the numbers of certain infections that occur in healthcare settings. Prevention of HCAIs in healthcare settings is a key responsibility of healthcare providers, with most employing or commissioning dedicated specialist infection control teams[15]. Hospital Trusts each have a Director of Infection Prevention and Control providing assurance to the Trust Board on HCAI prevention. PHE provides infection control advice in non-healthcare community settings such as care homes and schools.

55. PHE also monitors the spread of antibiotic resistant infections and advises healthcare professionals about controlling antimicrobial resistance (AMR). Rates of HCAIs for North Tyneside CCG are given below:

Table 11: Rates of Healthcare Associated Infections 2018/19[16]

	Rates of Healthcare Associated Infections per 100,000 population		
	England	North East and Cumbria	North Tyneside CCG
MRSA	1.4	1.0	0
MSSA	21.8	27.7	29.3
E. coli	77.7	104.7	101.2
C. difficile	22.0	28.8	21.5

Antimicrobial Resistance

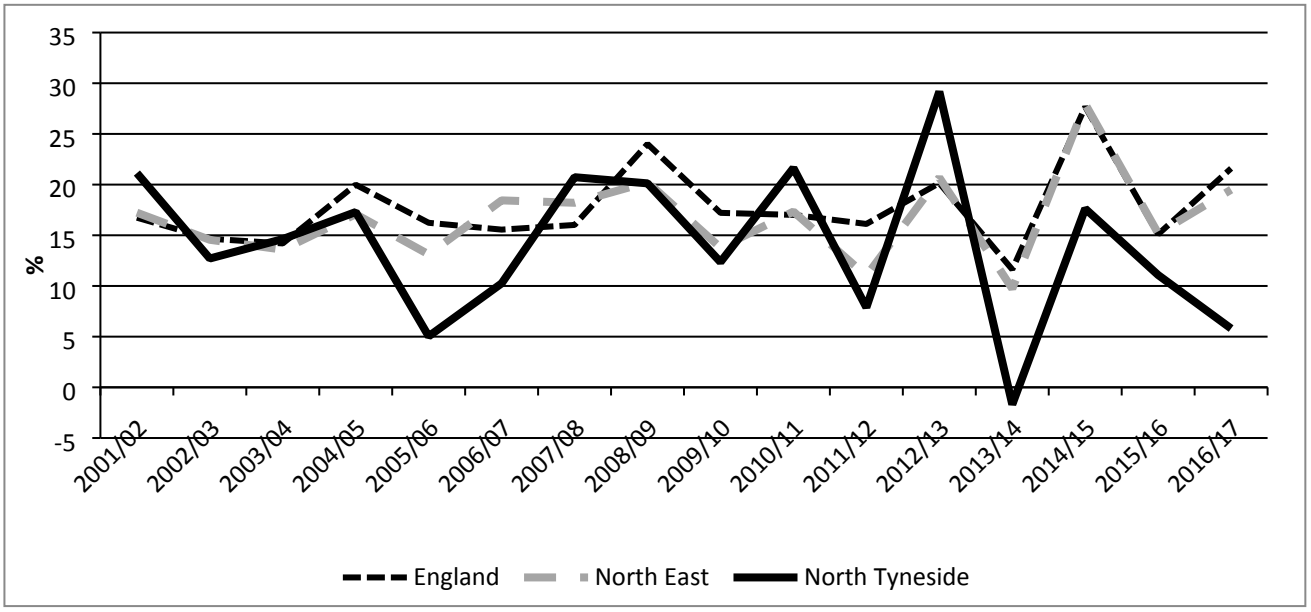
56. Preventing infections from occurring in the first place is one the best ways of reducing the need to prescribe antibiotics. There is an increasing global concern over the rise of AMR. It is well evidenced that the more we use antibiotics the less effective they become against their targeted organism (bacteria, virus, fungi and parasites). Therefore every infection prevented reduces the need for and use of antimicrobials, which in turn lessens the potential for development of resistance.

57. Currently in the UK, the greatest and increasing threat from drug resistant organisms is from Gram-negative bacteria, there is a target to reduce gram-negative HCAIs by 50% by 2021. The initial focus is on E.coli. In North Tyneside the rates of E.coli have been significantly higher than the England average for the last 7 years.

Excess winter deaths

58. In North Tyneside there were 42 excess winter deaths in 2016/17, compared to 75 in 2015/16. The majority of excess winter deaths occur in the over 85s (93%)[7]. 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 chart below presents the all age excess winter deaths and highlights the year on year variation, both at a national and local level.

Chart 1: Excess winter deaths single year 2001 - 2017 all ages[7]



Emergency Preparedness Resilience and Response

59. 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.

- PHE 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.

- In North Tyneside there is the Emergency Response Leadership Group (ERLG) that meets monthly, the role of this group is to ensure that the council and partners are equipped to respond to an emergency. This includes reviewing and developing internal policies, engagement in and sharing the learning from exercises and reviewing and learning from local emergency situations e.g. flooding. This group feeds into the LHRP and the LRF. The ERLG also attend three meetings each year which are with wider partners, including the NHS, utility companies and the voluntary and community sector. The multi-agency group ensures that North Tyneside is adequately prepared to respond to emergency incidents and that there is an appropriate level of engagement from all organisations

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

Port of Tyne Health

60. Port Health Services at the Port of Tyne are delivered by the Tyne Port Health Authority, a joint board constituted by the Tyne Port Health Authority Order 2010. The Authority is assigned a range of Public Health statutory duties that are largely regulatory and cover controls over infectious disease, imported food and pollution controls and crew welfare and wellbeing.

61. North Tyneside Council has representation on an operational board from each of the 4 riparian authorities; North Tyneside, Newcastle, Gateshead and South Tyneside. Each authority contributes in part to the funding of the port health services.

62. PHE is currently undertaking a review of arrangements for port health, this is to ensure that there is a consistent and standardise approach to port health protection.

63. Regional centres are now making quarterly submissions of port health action plans to the PHE national team. This includes proposed actions around:

- Clarifying the role of the port medical officer
- Ensuring there are regular meetings of all key port health stakeholders
- Ensuring port health plans are regularly updated and appropriately exercised
- Exploring the roll out of RING cards to assist port border staff with passenger assessment
- Undertaking local planning for implementation of new high consequence infectious disease (HCID) guidance

The operational activities routinely carried out by Port Health Officers include:

- **Routine boarding of vessels:** 146 vessels were boarded in 2017/18. Routine checks on the vessels' previous ports of call and ships' sanitation certification status are carried out on these visits together with verification of the ship's health declaration. In addition to spot checks on galley hygiene, port health officers will verify that there are sufficient food supplies provided for planned voyages.

- **Ships Inspections:** Port Health Authorities monitor and control for ship borne public health risks e.g. rodent infestation, Legionella risk from ships water distribution systems. Ship Sanitation Control Exemption Certificates are issued when no evidence of a public health risk is found on board and ship is free of infection and contamination. A Ship Sanitation Control Certificate is issued when evidence of a public health risk, including sources of infection and contamination, is detected on board. 40 Exemption Certificates were issued during 2018/2019. There were no conditions found on inspections warranting the issue of control certificates.

- **Food and Water Sampling:** Ships inspections are supplemented by routine microbiological sampling of food and drinking water. Of the 305 samples of drinking water taken from ships water distribution systems or hydrants supplying ships there were 39 failures where remedial action was taken.

- **Imported Food Controls:** Over 1000 consignments of food from third countries requiring port health checks arrived in the port in 2017. Official controls are carried out on consignments of tea imported from China to ensure that pesticide residues are not exceeded. A consignment of goods from China was detained and ultimately destroyed after an amount of peanut sauce and some plastic kitchenware was found not to comply with EU food safety import regulations.

Air Quality

64. North Tyneside Council has responsibility to regularly review and assess air quality. This is set out in Part IV of the Environment Act (1995) and requires a Local Air Quality Management (LAQM) process.

65. North Tyneside Council produces an annual report which provides an overview of air quality[17].

66. North Tyneside Council monitors the levels of two pollutants (nitrogen dioxide NO^2 and particulate matter PM10) at a number of locations across North Tyneside. The air quality monitoring carried out in North Tyneside in conjunction with our joint work with Newcastle and Gateshead in response to Governments UK Air Quality Plan 2017 has indicated no locations where NO^2 levels are predicted to exceed recommend levels (40µg). A review of the latest annual monitoring data for nitrogen dioxide and particulates shows that the levels have remained steady with localised improvements/reductions where major highway schemes have been delivered. To ensure our monitoring remains robust and accurate we have invested in real time continuous air quality monitors at several key locations across the Borough.

67. There have been a number of concerns from the public regarding the potential impact the planned road improvement schemes will have on congestion and subsequently air quality. In response passive nitrogen dioxide diffusion tubes have been installed at relevant sensitive receptors. These diffusion tubes have been installed at the 20 most congested locations across the borough for a period of almost 2 years, and those at junctions that have been subject to road improvements schemes have shown positive changes in recorded levels of NO^2.

68. Environmental Health is working to develop and implement an Air Quality Strategy and this will include an action plan to incorporate measures that will help minimise the two primary pollutants of concern, nitrogen dioxide and particulates. This strategy will be initiated and progressed through the use of a Steering Group, whose membership consists of all relevant partners including transport, public health, planning, and environmental health. Areas for action include:

- Traffic management measures
- Reduce emissions from new and existing developments
- Reduce emissions from road transport
- Promotion of alternative modes of travel

- Setting more stringent local targets for levels of NO^2 around Schools
- Facilitate transition to Electric Vehicles

Conclusions

69. The Health Protection Arrangements across North Tyneside are multi-agency. This report alongside an overview of the meeting and reporting structures (appendix 2), aims to provide the necessary assurance that the local health protection system are robust and equipped to both prevent and suitably react to health protection situations.

70. An assessment of the current health protection arrangements for North Tyneside has identified that these are working well to protect the population. However, this report has identified a number of areas where more could be done particularly around uptake of particular screening and immunisation programmes; and addressing the high rates of HCAIs.

71. Moving forward into 2019/2020, the anticipated UK departure from the European Community on the 31st October 2019 may present a significant challenge to Port Health services. It is currently unclear as to what changes will take place to the UK's EU customs status and what, if any changes, will be made to UK food law. An increased amount of work by the port health team to prepare for changes to the UK's border checks will be unavoidable.

Recommendations

72. An analysis of the data regarding health protection outcomes for screening, immunisation, communicable diseases and air quality has highlighted that there are areas that require improvement and these form the priorities for next year 2018/19. These include:

- Uptake of cancer screening programmes is generally very good. However, there is evidence of variation at a local level in uptake for all of the cancer screening programmes and a decline in uptake of the cervical screening programme.

- Childhood immunisation programme in North Tyneside performs better than the regional and England average; however there has been a decline in the number of five-year olds who receive two doses of the measles, mumps and rubella (MMR) vaccination with 93.6% in 17/18 compared to 98.6% in 15/16 and the WHO target of >95% population coverage is not being achieved. Whilst recent quarterly data suggests that coverage has improved, this requires continuous monitoring.

- From September 2019 the HPV vaccination programme will be extended to boys in year eight, coverage will need to be monitored.

- The uptake of the influenza vaccination for clinical risk groups, pregnant women and frontline staff requires improvement. The school-based element of the childhood seasonal influenza vaccination programme is achieving significantly higher coverage in North Tyneside compared to the England Average and exceeds the national standard.

- Improving and monitoring air quality in North Tyneside will continue to bring public health, environment health and transport together.

- Local and national planning for Brexit will need to consider the implications for environmental health and port health functions.

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