GATESHEAD HEALTH AND WELLBEING BOARD
27 JANUARY 2023

TITLE OF REPORT: Health Protection Assurance Annual Report 2021/22

Purpose of the Report

1. Present an overview of the health protection system and outcomes for Gateshead as part of the Director of Public Health's responsibility to provide assurance to the Health and Wellbeing Board that the current arrangements for health protection are robust and equipped to meet the needs of the population.

Background

2. 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.

3. 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.

4. The attached report (Appendix 1) provides further detail of those arrangements and activity ranging from 2019 to 2022. The indicators use data from varying timeframes, in all cases the most recent data has been sought for the report although this can range from 2019 to 2022 due to publication schedules.

Conclusions

5. An analysis of the data and information 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 assurance priorities for next year 2022/23. These include

- Screening: Focusing on supporting screening programmes to resume to their normal delivery models after the pandemic; and reviewing the data in more detail to consider the health inequalities around access and coverage despite relatively high uptake levels across Gateshead as a whole.
- Immunisation: It is noted that Gateshead has high uptake rates of its immunisation programmes, further work could be considered to continue to push coverage rates up to the national targets of 95% and also review local variation in uptake to support targeted initiatives in areas with lower uptake rates.
- Further work to understand better the data around levels of Hepatitis C infection.
- EPRR: Embed the Health Protection Assurance Board
- Excess winter deaths: Review the data and consider possible causes for increased rates, work with stakeholders locally to support initiatives that protect the vulnerable and elderly.
- Air Quality: Implementing the Clean Air Zone to improve air quality in Gateshead.

6. Existing Health Protection Assurance arrangements remain in place with oversight through the Gateshead Health Protection Board and this annual report.

Proposal

7. It is proposed that Gateshead Health and Well-being Board notes the arrangements in place to assure the Board their responsibilities are being delivered.

Recommendation

8. The Health and Wellbeing Board is asked to consider the efficacy of existing arrangements and consider whether any improvement actions are necessary.

Contact: Alice Wiseman, Director of Public Health.

Appendix 1.

Health Protection Assurance Report 2021/22

Executive Summary

1. Gateshead 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 1.

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 indicate the priority areas for next year 2022/2023. These include:

- Screening: Focusing on supporting screening programmes to resume to their normal delivery models after the pandemic; and reviewing the data in more detail to consider the health inequalities around access and coverage despite relatively high uptake levels across Gateshead as a whole.
- Immunisation: It is noted that Gateshead has high uptake rates of its immunisation programmes, further work could be considered to continue to push coverage rates up to the national targets of 95% and also review local variation in uptake to support targeted initiatives in areas with lower uptake rates.
- Further work to understand better the data around levels of Hepatitis C infection.
- EPRR: Embed the Health Protection Assurance Board
- Excess winter deaths: Review the data and consider possible causes for increased rates, work with stakeholders locally to support initiatives that protect the vulnerable and elderly.
- Air Quality: Implementing the Clean Air Zone to improve air quality in Gateshead.

Introduction

3. The Director of Public Health (DPH) has a statutory responsibility for the strategic leadership of health protection for Gateshead Council[1]. 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. This report is to inform the Health and Wellbeing Board about arrangements and outcomes for health protection in Gateshead.

4. The most recent data available has been used in the analysis for this report. In circumstances where the data is not available, 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. We recognise this report covers the period including the Covid Pandemic where there were alterations to some service delivery and data collection methods. The data included in the report has also been captured over different time periods ranging from 2019 to 2022 so please refer to each dataset individually for detail and note any limitations.

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.

6. 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).

7. The DPH 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 a multi-agency function

8. Local Authorities are responsible for providing independent scrutiny and challenging the arrangements of NHS England (NHSE), UK Health Security Agency (UKHSA) and providers. The responsibility for the provision of the health protection function is spread across all the organisations.

9. Gateshead 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[2]. This leadership role relates mainly to functions where 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.

10. Screening and Immunisation Teams (SITs) employed by UKHSA 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.

11. UKHSA 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 other responsibilities relating to surveillance and planning.

12. All organisations have responsibility to protect their staff, customers and visitors etc. with appropriate infection control, staff vaccination and information programmes.

13. Gateshead Place (formerly NHS Newcastle Gateshead 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.

14. Emergency preparedness, resilience and response functions are provided by all category one responders; this includes the Local Authority, UKHSA, NHSE, Emergency Services and NHS Foundation Trusts. Those organisations form the Gateshead Multi-Agency Resilience and Emergency Planning Group.

Covid-19 (C19)

15. The pandemic was announced in March 2020. Since that time there has been a significant impact on the population, daily lives and service delivery especially within healthcare. We have seen significant case numbers and deaths in the elderly and vulnerable populations. The 2020/2021 DPH report focuses on Covid and recovery. Guidance remains in place for those living and working in care and health settings. We remain vigilant to the threat of increasing Covid case numbers and continue to work closely with our

partners including the local trust to gauge the level of community transmission across Gateshead. Currently there is no public testing offer meaning C19 prevalence is difficult to estimate. We are also supporting the Covid vaccination schemes throughout the winter months as this is one of our strongest lines of prevention and protection (page 10). A brief summary and timeline of Gateshead's Covid data is found in table 1.

Table 1: Covid Data highlights and timeline for Gateshead [3,4]

2020	Notification of the first confirmed case was 13/03/2020 The first wave was March 2020 – June 2020, with a daily case high of 50 (23rd April) and a 7 day rolling rate of 123.3 cases per 100,000 (10th April). The second wave was September 2020 – November 2020, with a daily case high of 176 (9th November) and a 7 day rolling rate of 476.4 cases per 100,000 (9th November). Hospital admissions – waves of admissions followed case waves by 1-2 weeks. Daily high of 38 admissions (1st April) and 29 admissions (4th November). 7-day average of patients in hospital peaked at 119.1 (11th April) and 129.6 (9th November). Deaths – very quickly followed the first wave, w/c 17th April saw highest point in wave 1 deaths=46; which declined quickly to almost 0 in July, then increased in wave 2 with a 2nd wave high w/c November 20th of 26
2021	The first wave of cases was from December 2020 throughout January 2021, The daily case high was 166 on 4th January 2021. The 7 day rolling rate peaked at 487.7 cases per 100,000 (4th January). The second wave was June – August 2021. The daily case high was 339 (12th July). The 7 day rolling rate peaked at 985.4 cases per 100,000. Hospital admissions – Daily high of 16 admissions (12th January). 7-day average of patients in hospital peaked at 85.4 (17th January). There were then a number of smaller peaks in hospital patients between July – December, not exceeding a 7-day average of 61.4 patients in hospital. Deaths – Remained relatively stable at approximately 15 per week until mid-March, whereby they declined to 0 until July and averaged approx 4 deaths per day for the rest of the year. .
2022	Cases – 1st wave December 2021 – February 2022; daily case high of 1150 (4th Jan – Omicron) / 2nd wave March – May; daily case high of 320 (21st March). The highest 7 day rolling rate was reached on 6th January 2022 at 2939.8 cases per 100,000. The March wave peaked at 823.5 cases per 100,000 on 26th March. A number of smaller waves have followed, with peaks of 101 cases (6th July) and 57 cases (27th September). COVID case numbers in N.B. A lack of testing means case numbers are underestimated. Hospital admissions and deaths can give us a more accurate picture and suggest that although case numbers appear much lower in the 'smaller waves' throughout summer/winter 2022 – hospital admissions are comparable to the January 2022 peak. Hospital admissions – daily high 23 (19th January). 7 day average of patients in hospital peaked at 101.6 (24th January); 93.6 (4th April); 74.9 (25th July); 79(25th October); currently approaching new peak (73.7 as of 8th January). Deaths continue at a low level at approx. 0-5 death per week throughout 2022 Gateshead Covid case numbers in the 7 days up until 7th January 2023 was 56 cases per 100,000.

As of 1st April 2022, the government no longer provided free tests for general public use in England. This means case numbers are likely underreported and underestimated after this time period. To maintain assurance in this area there is ongoing surveillance of healthcare data (hospital admissions and deaths)

and prevalence estimates produced from the ONS Coronavirus Infection Survey. (Coronavirus (COVID-19) Infection Survey, UK - Office for National Statistics)

COVID-19 highlighted how socioeconomics play a significant role in determining health inequalities, in this case the incidence and prevalence of the infection in different socioeconomic and occupational groups. The national COVID-19 inquiry hearings are ongoing and will, hopefully, identify areas for improvement around national preparedness.

Screening

16. Screening is 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, including a programme of visits by the UKHSA screening quality assurance service 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).

17. 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 programmes.

18. Data for the adult screening programmes are available for up to quarter 4 of 2022/22, table 2. Figures are subject to revision prior to the publication of the Q1-Q4 annual report, so may differ from reported Q4 figures.

19. Two key indicators can be used as measures of assurances alongside national uptake of screening programmes; these are:
    - National baseline indicators.
    - Clinical standards that are required to ensure patients safety and control disease.

20. Table 2 demonstrates that Gateshead has a general higher screening coverage than the England average. Some programmes are still below the national standard and further work to understand and increase these rates is needed.

21. Uptake of the AAA and cancer screening programmes in Gateshead continues to be either similar or above the national average. The table below present's coverage for the adult screening programmes.

22. 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 is below the England average and national standard. 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 2: Adult Screening Programme Coverage/Uptake Q4 2021/22[5]

Screening Programme	National Standard	% Coverage	
		England	Gateshead
Cervical Cancer (25-64 years) (50-64 years)	80%	68.0% 74.7%	74.6% 75.5%
Breast Cancer (53-70 years)	70%	53.3%	54.2 %

Bowel Cancer (60-69 years)**	No threshold recorded	70.3%	72.8%
AAA (men 65 years, 2020)	75%	59.5%	55.7%
Diabetic eye screening*	75%	78.4%	75.2%

*North of Tyne and Gateshead diabetic eye screening programme data

** Latest Bowel Cancer screening data is for Q3 2021/22.

Red: Below England coverage and national standard; Amber: Below national standard but above England coverage; Green: Above both national standard and England coverage

23. 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

24. Data on the coverage of the entire Ante-Natal and Newborn screening programme is not uniformly available at a Gateshead level. Some are available at Gateshead level, others are available at Newcastle Gateshead level, please see key and table 3 for further detail. Overall table 2 demonstrates high coverage for this screening programme.

Table 3: Antenatal and Newborn screening coverage Q4 2021/22[6]

Screening programme	National Standard	% Coverage 2021/22	
		England	Gateshead
Infectious Diseases in Pregnancy – HIV	95.0%	99.8%	99.8%
Sickle Cell and Thalassaemia	95.0%	99.7%	99.8%
Newborn Blood Spot Screening	95.0%	97.3%	98.1%*
Newborn Hearing Screening	98.0%	98.3%	99.2%**
Newborn and Infant Physical Examination Screening	95.0%	96.6%	97.0%

*Data is for NHS Newcastle/Gateshead. **Data is a combined Sunderland South Tyneside and Gateshead.

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. 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.

Routine childhood immunisation programme

27. Current coverage for routine childhood immunisation programme in Gateshead is presented in table 4 below. 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 4: Coverage routine childhood immunisation programme Gateshead 2021/22[7]

Vaccine and booster programme	Age cohorts					
	12 months		24 months		5 years	
	England	G'head	England	G'head	England	G'head
Diphtheria, tetanus, pertussis, polio, haemophilus influenza type b (DTaP/IPV/Hib)	91%	94.7%	93.3%	96.7%	94.7%	96.1%
DTap/IPV Booster					84.4%*	90.2%*
PVC	93.8%	95.7%	88.6%	93.4%		
Measles, mumps and rubella (MMR)			89.0%	94.2%	93.7% 85.8%**	96.0% 90.5%**
Hib/Men C booster			89.3%	94.1%	92.2%	95.7%
Rotavirus	90.1%	92.6%				
Meningitis B	91.8%	93.7%	88.3%*	93.6%*		

*Boosters ** 2 doses MMR 21/22

28. Gateshead achieves a higher uptake of childhood immunisation programmes than the England average, although does not always reach the target level of 95% or higher. Therefore, it is important we still strive to improve our rates to reach the target of 95% and understand any inequalities in access or uptake.

29. Of note during the pandemic many of the routine services including routine immunisations delivery were affected, therefore some figures may not truly reflect normal practice. This is important to note, as if uptake is low for particular cohorts then additional catch up considerations may be needed.

30. All girls and boys aged 12 to 13 are offered HPV (human papilloma virus) vaccination as part of the childhood vaccination programme. The vaccine protects against cervical cancer and some oropharyngeal cancers. It's usually given in year eight at schools in England with a second dose administered within 6 to 12 months.

31. 2020 to 2021 was the sixth year HPV vaccine coverage for the 2-dose schedule has been calculated in school Year 9 females (aged 13 to 14 years) in England. The HPV programme in 2020 to 2021 was disrupted due to school closures in response to C19. In addition, the continued commitment to deliver on the universal childhood flu vaccine programme (the programme has been extended to 7 school years from reception to year 7 during the 2020 to 2021 academic year) may also have impacted the capacity of school immunisation providers to deliver the HPV vaccination programme. Uptake of the first and second vaccine for boys and girls is generally higher in Gateshead than nationally.

Table 5: HPV Vaccine Coverage in Gateshead (2020/21)[8]

	Females cohort 18: 12- to 13-year-olds (Year 8) birth cohort: 1 Sep 2006 to 31 Aug 2007.	Males cohort 2: 12- to 13-year-olds (Year 8) birth cohort: 1 Sep 2006 to 31 Aug 2007	Females cohort 17: 13- to 14-year-olds (Year 9) birth cohort: 1 Sep 2005 to 31 Aug2006	Males cohort 1: 13- to 14-year-olds (Year 8) birth cohort: 1 Sep 2005 to 31 Aug 2006
Gateshead	80.3*	70.8*	96.0* 83.6**	86.9* 76.0**
England	76.7*	71.0*	81.8* 60.6**	17.3* 54.7**

*% Vaccinated with at least one dose by 31/08/2021 **% Vaccinated with 2 doses by 31/08/2021

32. Td/IPV (tetanus, diphtheria and polio) teenage booster is the final dose of the routine childhood immunisation programme. The national plan provides the Td/IPV booster in year 9 alongside the final MenC booster. Table 6 demonstrates high levels of uptake in Gateshead.

Table 6: Td/IPV Booster 2020/21[9] and Men ACWY 2020/21[10]

Vaccine and booster programmes	Age Cohorts			
	Year 9		Year 10	
	England	Gateshead	England	Gateshead
Td/IPV	76.4%	90.9%	80.3%	94.3%
MenACWY	76.5%	90.9%		

At risk immunisation programme

33. 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 7 Pneumococcal (PPV) and Shingles immunisation coverage[11, 12]

Vaccination	England	Gateshead
PPV 2020/21	70.6%	76.1%*
Shingles (70 years) 2021/22	40.6%	44.1%

* Only available at Newcastle Gateshead CCG level

34. The coverage rate for the at risk immunisation programme in Gateshead is higher than the England rate, although it is noted that the overall uptake rates remain low in Gateshead and could be an area for further improvement.

Seasonal flu vaccine programmes

35. In 2020/21 annual seasonal flu vaccine was offered to:
    - Those aged 2 and 3 years on 31 August 2021
    - School aged children (all primary school aged children and eligible secondary school aged children)
    - those aged 6 months to under 50 years in clinical risk groups
    - pregnant women
    - 50 to 64 year olds
    - all those aged 65 years and over
    - those in long-stay residential care homes
    - carers / in receipt of carer's allowance / or main carer of an older or disabled person
    - close contacts of immunocompromised individuals
    - frontline health and social care staff

Table 8: Seasonal flu Vaccination Coverage Gateshead 2021/22[13,14]

Indicator	Standard	Geography	2021/22
Population vaccination coverage - Flu (aged 65+) (%)	75	Gateshead England	85.4 82.3
Population vaccination coverage - Flu (at risk individuals) (%)	55	Gateshead England	60.5 52.9
Population vaccination coverage - Flu (Child) (%)	65	Gateshead England	69.2 57.4

Population vaccination coverage - Flu (2-3 years old) (%)	48	Gateshead	56.7
		England	50.1

36. Gateshead has higher coverage rate than England across the seasonal flu vaccination programme; both the adult and childhood age groups are also all above the standard.

37. The Gateshead Council Employee Winter Flu Vaccination programme for frontline staff 2020/21 used a voucher scheme which all eligible staff could use at local pharmacies. It is not possible to provide data on uptake.

Covid Vaccine Uptake

38. The Covid vaccination programme has been rolled out nationally, everyone aged 5 and over can get a 1st and 2nd dose of the COVID-19 vaccine. People aged 16 and over, and some children aged 12 to 15, can also get a booster dose. People aged 5 and over who had a severely weakened immune system when they had their first 2 doses, will be offered a 3rd dose before any booster doses. Some people, including those aged 50 years or over, those at higher risk or who are pregnant, and frontline health and social care workers, will be offered a seasonal booster (autumn booster).

39. In Gateshead, data from the 14th September 2022 reports 85% of the population has had their first dose and 81% have had a second dose.[15]

40. Data from the 31st July 2022 suggests of those eligible for a booster 81% have received this. Note: A booster is a third dose of the vaccine of whom only certain populations are eligible.[16]

41. There is still a gradient of deprivation, with 32% of residents remaining unvaccinated in the most deprived decile, compared to just 16% in the least deprived. Wards with the lowest Booster uptake are: Saltwell (71%), Bridges (74%), Deckham (76%), High Fell (76%), Lobley Hill and Bensham (76%). Ethnic minority groups also have higher percentages of people who are unvaccinated, with 54% of White and Asian ethnicities; 52% of White and Black Africans; 52% of Any Other Ethnic Group and 51% of Any other Black background remaining unvaccinated, compared to just 21% of White British Ethnicities.[16] Targeted work could be completed to support and increase uptake in these areas.

Surveillance and communicable diseases

42. Effective surveillance systems ensure the early detection and notification of specific communicable diseases. UKHSA 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.

43. Following the findings of poliovirus in sewage samples collected from the London Beckton Sewage Treatment Works, which covers parts of North and East London, earlier this year the UKHSA working with the Medicines and Healthcare product Regulatory Agency (MHRA) have expanded the surveillance of polio to a range of areas outside of the capital including parts of North Tyneside, Newcastle upon Tyne and Gateshead. This is on a precautionary basis to determine whether the virus is spreading to other areas. Additional areas have been chosen based on an assessment of risk, which takes into consideration several factors. This includes demographics – population groups living in the area with links to countries overseas where wild poliovirus is still found or where live oral polio vaccine is still used; areas with low

polio vaccination coverage; and areas with pockets of under-vaccinated communities. The sewage sampling strategy will continue to be reviewed and adapted as new evidence emerges.[17] Nationally, including in Gateshead, the overall risk of paralytic polio is considered low because most people are protected by vaccination. In some areas of London, the Joint Committee on Vaccination and Immunisations have suggested a polio vaccination booster programme for children, this has not been required for Gateshead. Gateshead's public health team are being proactive and working closely with NHSE SIT to identify areas of low vaccination coverage for polio and increase uptake with targeted initiatives.

Environmental health and food safety

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

45. The Environmental Health team received 567 food hygiene and food standards complaints (2021/22). All complaints were investigated in a timely manner and action taken where appropriate. These investigations identified the following issues:
    - 8 complaints about businesses not controlling allergens.
    - A food poisoning outbreak at a restaurant that was linked back to poor hygiene practices in the preparation and cooking of crispy duck. (Action: Advice given)
    - Possible food poisoning at a restaurant that was linked back to raw spring onion used in the dish. (Action: Advice given)

46. The team conducts a food sampling programme. In 2021/22 568 samples were obtained. The food sampling programme identified issues relating to hand washing, cleaning, incorrectly labelled products. All establishments which were unsatisfactory were given advice and resamples taken to monitor improvement.

47. Over the period the team investigated 459 cases of infectious disease including 348 cases of Campylobacter. UKHSA initiated an online questionnaire to try and ascertain if there was any common links with the large numbers of Campylobacter cases. The results did not show any links, but evaluation is ongoing.

48. The Environmental Health Team had all been seconded to Covid enforcement and operated on an emergency basis for food safety until September 2021. After returning to normal working, it was found that standards had declined, and officers are having to spend more time in premises providing help and advice to businesses. Officers also noted a large turnover in business ownership, with a lot of new food business operators. The team are following the Food Standards Agencies Recovery Program.

Control of specific diseases

49. Early diagnosis by clinicians, prompt treatment of cases and early reporting by microbiologists and clinicians to the UKHSA 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 sampling undertaken by local authority environmental health officers. The tables below present data on the notifications received for specific communicable diseases.

Table 9: Measles, mumps, meningococcal disease and whooping cough Notifications, 2021[18]

Area	Disease

	Measles		Mumps		Rubella*		Meningococcal disease		Whooping cough	
	No.	Rate per 100k	No.	Rate per 100K	No.	Rate per 100K	No.	Rate per 100K	No.	Rate per 100K
England and Wales	360	0.6	3214	5.4	67	0.1	58	0.1	527	0.9
North-East	36	1.4	360	13.6	1	0.04	3	0.1	59	2.2
Gateshead	2	1.0	32	16.3	0	0	1	0.5	3	1.5

All rates are per 100,000 population calculated using the mid-year population estimates from ONS.

Table 10: Foodborne and waterborne infectious disease Incidence rate, 2021[18]

Area	Disease									
	E. coli O157*		Salmonella		Campylobacter*		Cryptosporidium*		Legionellosis*	
	No.	Rate per 100K	No.	Rate per 100K	No.	Rate per 100K	No.	Rate per 100K	No.	Rate per 100K
England and Wales	17	0.03	402	0.7	3891	6.5	162	0.3	90	0.2
North-East	0	0	0	0	0	0	5	0.2	3	0.1
Gateshead	0	0	0	0	0	0	1	0.5	1	0.5

All rates are per 100,000 population calculated using the mid-year population estimates from ONS.

50. Gateshead has lower rates compared to the NE region for all main food and waterborne infections. For some infections, where no cases were ultimately confirmed, there have been multiple possible cases and incidents reported which still require investigation and public health action before diagnostic test results are available. Sometimes, prompt action is needed to protect population health whilst diagnostics are ongoing.

Table 11: Hepatitis and Tuberculosis notifications 2021[18]

Area	Disease									
	Hepatitis A		Hepatitis B		Hepatitis C		Hepatitis E		TB	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
England and Wales	5	0.01	82	0.1	23	0.04	42	0.07	4787	8
North-East	0	0	1	0.04	1	0.04	1	0.04	84	3.2
Gateshead	0	0	0	0	0	0	0	0	4	2

All rates are per 100,000 population calculated using the mid-year population estimates from ONS.

51. Rates for Hepatitis B and C are so small it is difficult to draw definitive conclusions. There is a suggestion that the published available figures for Hepatitis C may underrepresent actual case numbers.

The TB rate per 100,000 of the population is higher than the regional average but the actual case numbers remain low.

Table 12: Sexually transmitted infections (STI) and new HIV diagnosis notifications (2021)[19]

	Rate per 100,000 population						
	All new STI diagnosis	**Chlamydia**	**Genital herpes**	**Genital warts**	**Gonorrhoea**	**Syphilis**	**HIV (new diagnosis)**
England	551	282	38.3	50.0	9	13.3	4.8
NE	440	261	39.6	40.8	46	9.4	3.2
Gateshead	494	276	44.1	45.6	66	5.0	2.0

52. The rates of STIs in Gateshead are similar or lower than the England average for most of the above indicators, but often the Gateshead rates remain slightly above the NE average. STI rates saw a rapid decline nationally and locally in 2020, likely linked to the covid restrictions in place during this period. Therefore, it is important to consider trend data and future data before drawing clear conclusions relating to table 11.

53. Monkeypox is an emerging threat, there have been significant cases numbers in London and this is beginning to spread to other parts of the country. At present cases in the North East remain very low in Gateshead with only 5 confirmed cases since the outbreak began in May 2022. We are working with UKHSA and local health partners to ensure the prompt diagnosis and management of cases locally, with clear protocols in place for this and any required public health action as a result.

54. As a council we have also reviewed our Health Protection Incident/Outbreak Action Card to support prompt management of cases to help reduce spread. The team have also worked with the NHSE SIT to ensure a Monkeypox vaccination programme in line with the national guidance, this is a targeted programme for populations at risk. The criteria for eligibility has been agreed locally between key partners and led by the local sexual health service commissioned by the council delivered through South Tyneside and Sunderland NHS Foundation Trust. The programme is severely limited by a shortage of national vaccine supply. Continued close monitoring of the outbreak is required to ensure appropriate and timely responses in line with national guidance.

Healthcare associated infections (HCAIs)

55. Prevention of HCAIs in healthcare settings is a key responsibility of healthcare providers, with most employing or commissioning dedicated specialist infection control teams. Hospital Trusts each have a Director of Infection Prevention and Control providing assurance to the Trust Board on HCAI prevention. UKHSA provides infection control advice in non-healthcare community settings such as care homes and schools. Rates of HCAIs for Newcastle Gateshead CCG are given below:

Table 12: Rates of Healthcare Associated Infections 2021/22[20].

	Rates of Healthcare Associated Infections per 100,000 bed-days 2021/22**	
	England	**Gateshead Health NHS Foundation Trust**

MRSA	0.7	0.0
MSSA	11.3	9.6
E. coli	21.5	29.6
C. difficile	16.2	9.0

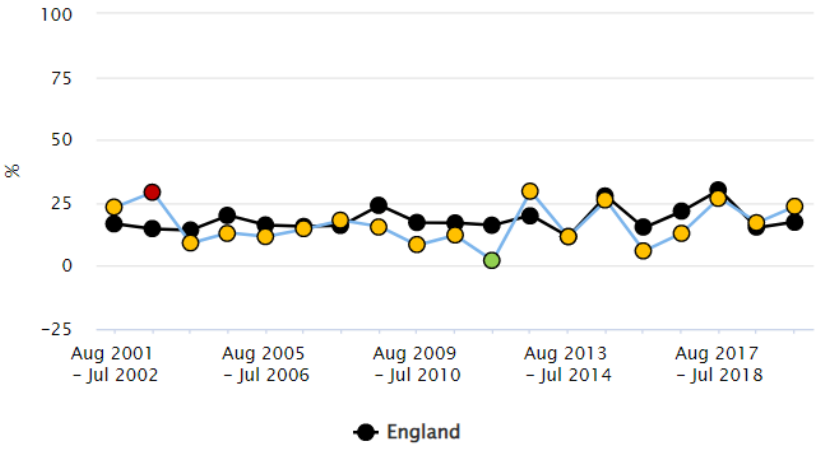
* These data do not provide a basis for decisions on the clinical effectiveness of infection control interventions in individual Trusts: further investigations considering potential confounders would need to be undertaken before this could be done.
Nor do these data provide a basis for comparisons between acute Trust or CCGs. Rate information, using rate calculations as currently defined, is not appropriate for comparison. The counts of infections have not been adjusted to give a standardised rate considering factors such as organisational demographics or case mix. Rate information is of use for comparison of an individual organisation over time.

** Bed-days are based on overnight occupancy from NHS Digital

Excess winter deaths[21]

56. In Gateshead there were 80 excess winter deaths from Aug 20-Jul 21 (latest data available), this has increased from 60 in 2019-2020 but is a reduction on 2017-18 figures (190 excess deaths). Most excess winter deaths at a national level are due to COVID-19, followed by circulatory diseases, dementia and Alzheimer's and respiratory diseases, and the majority occur amongst the elderly population. There is variation in the numbers of excess winter deaths between different years. It is not always apparent why this is the case but factors like seasonal flu outbreaks and temperature changes can have an impact. Excess Winter Deaths Index (EWD Index) is the excess winter deaths measured as the ratio of extra deaths from all causes that occur in the winter months compared with the expected number of deaths, based on the average of the number of non-winter deaths. In 2020-21 Gateshead saw 10.6% more people dying in the winter months compared to the non-winter months, compared to the England and NE average of 35.4% and 23.6% respectively. The figures suggest there were fewer excess winter deaths in Gateshead than the national average in 2020/21, with significant variation year on year. Note that the time period for this data includes deaths from COVID-19. The chart below presents the all-age excess winter deaths ratio and highlights the year on year variation from 2001-2020, both at a national and local level.

Chart 2: Excess winter deaths single year 2001 – 2020 (all ages)[20]



Emergency Preparedness Resilience and Response

57. Planning for emergency situations, such as extreme weather events, flooding, evacuations, police operations including modern slavery cases and outbreaks or terror incidents, takes place at regional and local levels.

58. The DPH is a member of the North East Health Resilience Partnership (NELHRP) which is responsible for ensuring that the arrangements for local health protection responses are robust and resilient. Work is directed through the Health and Social Care Resilience Group (H&SCRG) which is responsible for co-ordinating the development of health and health related social care resilience arrangements, capability and capacity to respond to emergencies and major incidents as part of a multi-agency response.

59. UKHSA 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.

60. The Gateshead Multi-Agency Resilience and Emergency Planning Group meets quarterly, has a remit to ensure that the council and partners are equipped to respond to an emergency in Gateshead. This includes reviewing and developing internal policies, providing shared awareness for issues concerning the Gateshead borough and Northumbria Local Resilience Forum area and engagement in and sharing the learning from exercises and reviewing and learning from local emergency situations e.g. flooding

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

62. Gateshead Council's Resilience and Emergency Planning Team represents the authority at Northumbria Local Resilience Forum (LRF) strategic and tactical board meetings and planning groups to ensure considerations for regional plans are incorporated into local plans, including identified risks and mitigations.

63. Gateshead Council's Emergency Response Team will provide strategic and tactical level representation at multi-agency coordination meetings during incident response. Representatives will make decisions on the Council's behalf, commit resources where required and liaise with internal command and control structures to ensure shared situational awareness.

64. Representatives from Gateshead's Resilience and Emergency Planning and Public Health Teams will attend Event Safety Advisory Groups (SAGs) when required to provide advice and guidance to event planners/management to strengthen security and public health arrangements.

Air Quality

65. There are various contributory factors to air pollution, including road transport, domestic and industrial sources. There are two pollutants associated with road transport that cause problems with health in Gateshead. 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. NO2 is a colourless gas released from motor vehicle exhaust systems when fuels are burned. PM2.5 is also linked to exhaust systems but is also released from braking systems and tyre wear.

66. There are two different arrangements in place for monitoring and reporting on air quality in the UK. Firstly, there is the national monitoring arrangement whereby the UK Government must report to the European Commission annually on its progress in meeting the requirements of the 2008 Ambient Air Quality Directive (2008/50/EC), which sets the UK legally binding limits of maximum permissible levels for roadside concentrations of pollutants that impact public health including NO2 and PM2.5. The Government operates an extensive national monitoring network which is supplemented by pollution control modelling. Secondly, there are requirements placed on local authorities like Gateshead Council under The Environment Act 1995. This is known as Local Air Quality Management (LAQM). LAQM is the statutory process by which local authorities monitor, assess and act to improve local air quality.

67. The Government has set specific LAQM air quality objective standards for pollutants that should not be exceeded. When pollutants are found to be close to or higher than these standards and where there is relevant exposure, local Councils are required to declare Air Quality Management Areas (AQMA) and take steps to reduce air pollution.

68. Due to measured levels of NO2 repeatedly exceeding the annual mean objective of 40 micrograms per cubic metre (µg/m3), Gateshead Council declared an AQMA in April 2005 within Gateshead Town Centre. This was extended to the south along Durham Road in April 2008.

69. In 2017 Gateshead and Newcastle City Councils were directed by central government to develop a plan that will address how to reduce NO2 exceedances on the Tyne Bridge and A167 in Newcastle that exceed legal limits set by the European Directive which is now part of UK law. Subsequently (2020, with an update in 2022) government have directed the local authorities to implement a Clean Air Zone (CAZ). Work on implementing a Clean Air Zone (CAZ) which would subject older, more polluting vehicles to a charge for using the road network, has been subject to lengthy delays due to the Covid pandemic, legal challenges and funding issues. In January 2023 a category C CAZ will be launched. This includes non-compliant buses, coaches, taxis, HGVs and LGVs, with the phased approach including LGVs from July 2023. The zone covers central Newcastle and the bridges between Newcastle and Gateshead in the central area.

70. Gateshead Council continues with its monitoring regime which was extended from 2018 to reflect additional monitoring requirements linked to the CAZ, using 5 automatic monitoring stations (3 of which are within the AQMA) to record real time concentrations of NO2, PM2.5. and PM10. NO2 is also measured across a network of 64 non – automatic sites using low cost passive diffusion tubes. 23 of these sites are located inside the AQMA. Every month 74 individual tubes are exposed (with 15 co – located at the 5 automatic monitoring stations).

71. For several years now, levels of NO2 have generally fallen and have remained consistently below the annual mean objective in these locations within the AQMA. The impact of Covid19 and the lockdowns during 2020 meant significantly lower traffic volumes on the road network. This had a positive impact on reducing the concentrations of NO2 and Particulate Matter during this period. The recovery from covid has generally seen concentrations of NO2 increase back towards, but not yet return to, pre-pandemic levels.

72. The maximum real time concentration of NO_2 within the AQMA during 2021 as an annual average was 34 µg/m^3 measured at the Tyne Bridge (compared to 44 µg/m^3 in 2019 and 32 µg/m^3 in 2020). However, there is no 'relevant exposure' in this location. The highest concentrations where there is relevant exposure were on Bottle Bank and Lychgate Court, both measuring 25 µg/m^3 (34 µg/m^3 and 27 µg/m^3 respectively in 2019 and 25 µg/m^3 and 21 µg/m^3 in 2020 respectively). The highest concentration measured using a bias adjusted diffusion tube within the AQMA was 36.2 µg/m^3. This was tube TB6 on the A167 Tyne Bridge, but again does not represent relevant exposure (41.9 µg/m3 in 2019 and 32.9 µg/m3 in 2020). The highest concentration where there is relevant exposure was seen at Lychgate Court with 27.5µg/m3, compared to 31.5 µg/m3 in 2019 and 24.1 µg/m3 at the same locality in 2020. The monitoring data also indicates that there were no exceedances of the annual mean objective level outside of the AQM

Conclusions

73. The Health Protection Arrangements across Gateshead are multi-agency. This report alongside an overview of the meeting and reporting structures, aims to provide the necessary assurance that the local health protection systems are robust and equipped to both prevent and suitably react to health protection situations.

74. There are clear limitations to the report in relation to the data, not all data sets are complete, and some vary in time period. Many of the data sources offer rates per 100,000 of the population but these are often not standardised so differing population demographics and factors such as socioeconomic status are not accounted for and skew the data when comparing to the north east and nationally. Therefore, in order to draw robust conclusions, the data should be triangulated with service reports, trend data and other qualitative data sources. Also, this report covers a unprecedented time period of the C19 pandemic which affected social interactions, daily living and healthcare services so a lot of normal service delivery was disrupted or paused; meaning comparison to previous years is difficult. It has also resulted in many ongoing changes in service delivery and behavioural factors which may affect the data and we are still very much in a phase of recovery.

75. The Gateshead response to the C19 pandemic was very positive with lots of partnership working across the system and positive relationships built which can be taken forward and further developed. The ongoing threats from Polio, Monkeypox, C19 and Avian Influenza also are important considerations for the future year.

76. From the limited conclusions we can draw it is apparent that Gateshead remain very strong in its screening and vaccination coverage across both adult and children services. Health protection incidents/outbreaks have a clear protocol and established multidisciplinary and multiorganizational partnerships have helped deal with issues promptly to reduce local spread.

Recommendations

- Screening: Focusing on supporting screening programmes to resume to their normal delivery models after the pandemic; and reviewing the data in more detail to consider the health inequalities around access and coverage despite relatively high uptake levels across Gateshead as a whole.
- Immunisation: It is noted that Gateshead has high uptake rates of its immunisation programmes, further work could be considered to continue to push coverage rates up to the national targets of 95% and also review local variation in uptake to support targeted initiatives in areas with lower uptake rates.
- Further work to understand better the data around levels of Hepatitis C infection.
- EPRR: Embed the Health Protection Assurance Board
- Excess winter deaths: Review the data and consider possible causes for increased rates, work with stakeholders locally to support initiatives that protect the vulnerable and elderly.
- Air Quality: Implementing the Clean Air Zone to improve air quality in Gateshead

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